openreach

Openreach's response to Ofcom's consultation

"Wholesale Local Access Market Review: Consultation on pricing proposals for Duct and Pole Access remedies"

NON-CONFIDENTIAL VERSION

20 September 2017

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Foreword

On 1 August 2017, Ofcom published its consultation on Duct and Pole Access (DPA) remedies, also known as Physical Infrastructure Access (PIA), as part of its Wholesale Local Access (WLA) Market Review.

This response is provided by Openreach, a functionally separate line of business within British Telecommunications plc ("BT"),[1] in response to proposals related to Openreach's business. This document should be read in conjunction with Openreach's other related responses to the WLA Market Review.

Any comments on this response should be sent to Mark Shurmer, Managing Director Regulatory Affairs, Openreach, at mark.2.shurmer@openreach.co.uk.

[1] As part of BT's implementation of its formal notification dated 10 March 2017 under section 89C of the Communications Act 2003 ("the Act"), the Openreach business will be operated by Openreach Limited, which was incorporated as a separate legal entity on 24 March 2017, following the fulfilment of certain conditions set out in the notification.

1 Executive Summary

1.1 Key points

1. Openreach fully supports Ofcom's objectives of promoting investment in ultrafast networks. We intend to play a major part in enabling the UK to retain its position as a world leader in both superfast and ultrafast broadband. We are committed to providing access to our existing physical infrastructure as long as it is on fair terms which ensure we can recover the costs incurred and in a way that does not expose Openreach and its customers to excessive risks.

2. Whilst we support Ofcom's development and clarification of its proposals set out in the previous PIA consultations,[2] we remain seriously concerned that despite positive changes, we cannot support some of the pricing proposals if imposed in their current form. The key points in our response are summarised below.

   - **Ofcom's proposal for a rental charge cap**. We support Ofcom's use of our pricing model and the majority of its key assumptions as the basis of the calculation, although we believe this supports an obligation for cost orientation rather than a charge cap. It is important that the PIA rental price recovers an appropriate allocation of existing asset costs as this is key to a sustainable pricing framework. However, as set out in our responses to earlier consultations, we do not agree that PIA productisation costs should be recovered across all SMP products: this means that PIA productisation will be funded by Openreach customers that will not benefit from it. Our view remains that Ofcom's proposals conflict with its own cost recovery principles (in particular, cost causality) and its obligation to ensure it promotes "regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods".[3] As a result, our view remains that such costs should be recovered through PIA rental charges alone.

   - **Ofcom's proposal for a financial limit for network adjustments.** We recognise that Ofcom has made changes since its earlier consultation. However, we remain concerned about Ofcom's cost recovery proposals and its relegation of the principle of cost causality, in addition to the concerns outlined below:

     - Openreach should only have to fund adjustments where there are clear and demonstrable material benefits to our infrastructure and our customers in general. In Section 1.4 of this response, we re-iterate the proposed framework for achieving this that we set out in our response to Ofcom's April 2017 DPA consultation. We are disappointed that Ofcom does not appear to have taken proper account of our proposal.

     - We support Ofcom's aim of limiting Openreach's financial exposure, however the limits calculated by Ofcom are excessive and disproportionate, as the evidence that we set out in paragraphs 114 to 158 of this response demonstrates. We have benchmarked against our actual deployment costs and PIA costs to date, and the proposed range of £4-6k per km is many times higher than it should be.

     - Ofcom's analysis of pole space issues and estimates of the financial and operational impacts on Openreach are incomplete and not based on robust evidence. Openreach would like to work with Ofcom to ensure that all the relevant factors are identified and taken into account, in particular overhead solutions which may need to be developed.

   - **Ofcom's proposals for ancillary charges.** We agree that charges for ancillary items should continue to be set on a cost orientation basis. The key items, related to duct build and clearance, are

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[2] Ofcom, "Wholesale Local Access Market Review: Initial proposals to develop an effective PIA remedy", December 2016 ("December 216 DPA consultation") le and "Wholesale Local Access Market Review: duct and pole access remedies", April 2017 ("April 2017 DPA consultation")

[3] Framework Directive, Article 8(5)(a)

provided by contractors. We have clear incentives to keep the relevant costs – and therefore charges to our customers – as low as possible.

- **Ofcom's proposed implementation timescales**
    - Ofcom's April 2017 DPA consultation stated that the new framework for network adjustments would be set out in the PIA reference offer that will be brought into force one year after the WLA Market Review Statement has been published.[4] However, from the proposed SMP conditions in the current consultation it is not clear when the obligations relating to PIA Adjustment Services will come into effect. We would welcome clarification from Ofcom that any obligations relating to PIA Adjustment Services will only come into effect at the same time as the final Openreach reference offer, and we suggest that Condition 7D.4 in the current consultation is amended to reflect this.
    - This lead time for the coming into force of the new framework for network adjustments is required because changes to our reference offer must be discussed and agreed with industry prior to coming into effect. It also gives Ofcom sufficient time to address the problems we have identified with its network adjustment calculations and to develop and consult on revised proposals. We strongly urge Ofcom to limit the amount and type of information relating to PIA Adjustment Services which are the subject of an SMP obligation when the WLA Statement comes into force in order to avoid a scenario where Openreach and industry may wish to reach an agreement on certain issues which Ofcom has already precluded in its WLA Statement.
- **Process for developing a revised PIA reference offer**
    - The reference offer will need to reflect the operational and financial controls necessary for Openreach to run its business, for example controls on the deployment of scarce engineering resource and capital expenditure. As they stand, Ofcom's proposals are not consistent with the operation of effective controls: we would expect detailed assessment of controls to take place as part of the process for developing the reference offer.
    - Notwithstanding the fact we consider further controls are required (as summarised in section 1.4 of this response), at the very least, and in order to reflect Ofcom's stated intention, the definitions of PIA Adjustment Services and PIA Pole Adjustment Services should be amended to explicitly exclude works that do not relate to Openreach's current network footprint, works requesting long lengths of new duct and works for large amounts of new capacity.[5]
    - We continue to believe that in view of the complexities involved, the timescale for publication of the final Reference Offer should be eighteen rather than twelve months after Ofcom publishes its WLA Statement. We also consider that six rather than four months would be a reasonable timeframe for the publication of the draft Reference Offer.
- **Distortions of competition**. Ofcom has not yet addressed our arguments that its proposals are likely to materially distort competition in various markets, including the impacts of the additional costs added to copper services, the negative impact on Openreach's competitive position with regard to Virgin Media, the reduction in Openreach's capital availability to invest in its own fibre programmes and the potential lack of wholesale access to alternative networks.
- **Mixed usage**. The issues relating to mixed usage of PIA, i.e. to provide business connectivity as well as consumer services, have been exacerbated by the Competition Appeal Tribunal's (CAT's) recent ruling on BT's Business Connectivity Market Review (BCMR) appeal. We believe that further products and areas are likely to become deregulated following a new or revised market review. This significantly raises the threshold that Ofcom needs to meet when considering whether its proposed

[4] April 2017 DPA consultation, paragraph 1.25 and draft condition 8.9(b)

[5] Ibid, paragraphs 4.38 and 4.42

mixed usage rule (which would apply indiscriminately to both regulated and deregulated products and areas) is proportionate. We expand on this point in section 2.3 of this response.

- **Ofcom's proposals for regulatory financial reporting.** Our key concern in this area relates to Ofcom's proposal for accounting for 'PIA adjustment services above PIA adjustments limit'. Ofcom's proposal to recognise revenue and cost immediately conflicts with accounting standards, and we will therefore not adopt this treatment in our statutory accounts. It would be disproportionate to require us to account for this service differently in the regulatory accounts than in the statutory accounts, and doing so would reduce transparency.

3. Moreover, we are concerned that in a number of areas (in particular the calculation of the financial limit for network adjustments and its cost recovery proposals for overhead lead-ins), Ofcom has not used correct, reliable and up-to-date information and has not taken into account all the appropriate considerations. As a result, we consider Ofcom's analysis to be materially flawed in a number of areas such that had the appropriate considerations been taken into account, Ofcom would almost certainly have reached a different conclusion.

4. Openreach would be pleased to meet Ofcom to discuss these points in more detail following the submission of this response. It is important to us and also our customers that a workable and pragmatic framework is developed and agreed between the parties which can support new ultrafast investment in line with Ofcom's policy objective, and not undermine it through misuse and/or by placing excessive risks and costs on Openreach, its non-PIA customers and ultimately consumers. The sections below expand on these key points and they are discussed in detail in the remainder of our response.

1.2 Rental charges

5. We welcome Ofcom's acknowledgement that it will use the current pricing methodology as a starting point for its calculations, although we believe this supports an obligation for cost orientation rather than a charge cap. It is important that the PIA rental price recovers an appropriate allocation of existing asset costs: this is key to a sustainable PIA pricing framework. We also agree broadly with Ofcom's proposed cost orientation approach for ancillary charges.

6. However, we do not agree with Ofcom's approach to network adjustment ancillaries or productisation costs as set out in this and previous consultations. Openreach should retain the ability to recover its efficiently incurred costs from the PIA customers who are the beneficiaries. Purchasers of PIA should be making forward-looking judgements on the merits of differing technological options and on how they will face and finance the construction costs in their business cases. Fair access to Openreach's existing assets can positively benefit these investments, but Openreach and its non-PIA customers should not be paying for a PIA customer's network build or inefficient deployment decisions.

7. Ofcom set out in the Digital Communications Review (DCR) that the existing pricing of PIA was in line with international comparisons and that this conclusion had had been supported in stakeholder submissions, citing a DCR submission to Ofcom made by Vodafone.[6] Our international benchmarking also supports this view. We worked extensively and openly with Ofcom in the lead-up to this consultation regarding the PIA pricing model and no major errors in approach were identified. We believe our pricing is fully compliant with cost orientation obligations and is a fair representation of the costs of providing the service. We cannot support the aim of lower PIA prices without a guarantee that Openreach can recover its efficiently incurred costs. Ofcom's proposal that costs can be recovered through other regulated charges is one option, but it still leaves Openreach facing significant long term risks. For this reason, we continue to stress the importance of developing a comprehensive new reference offer and supporting business processes to enable us to exert standard commercial controls over such risks and financial exposure.

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6 Ofcom, Digital Communications Review – Initial Conclusions, February 2016, paragraph 4.30

1.3 Network adjustments

8. We support Ofcom's clarifications of its earlier proposals. The expectation that Openreach's obligations with regard to network adjustments should be primarily to 'free up' existing capacity rather than create new passive infrastructure is helpful, as is the proposal in this consultation for a limit to Openreach's financial exposure. However, this remains the area where we still have the most concerns. We think Ofcom's proposed financial limits are significantly flawed and we explain in our response to Question 4.1 an approach to calculating limits that we consider to be objectively justified and proportionate.

9. We also consider that further clarification of the network adjustment proposals themselves is required to ensure that Openreach's regulatory obligations to carry out civil engineering works only relate to adjustments where there are clear and demonstrable material benefits to the Openreach infrastructure and its customers. In this respect we set out a positive proposal in our last consultation response[7] in June 2017, and for ease of reference we have summarised that proposal again in section 1.4 of this response. We believe we can support a more developed version of Ofcom's approach. However, further work is required as part of the reference offer process to ensure that Openreach has the ability to exert strong financial and contractual controls on individual PIA orders and overall for the PIA product. We are looking to Ofcom to facilitate agreement of an offer that incorporates effective controls.

10. For the avoidance of doubt we also note that Ofcom's proposed publication date[8] for the new PIA Reference Offer is approximately twelve months later than the implementation date for its proposed changes to PIA rental tariffs, which is set out in this consultation as 1 April 2018. Different implementation dates will be essential, as it is not possible to offer 'PIA Adjustment Services' as specified in this pricing consultation until the new PIA reference offer has been agreed with industry and implemented. We set out the challenges of agreeing such a framework in our response to the April 2017 DPA consultation.[9] The new reference offer process is essential to agree the necessary business, legal and financial controls which will need to apply to such a regime (including volume and capital expenditure forecasting, budgetary and authorisation controls etc) and any knock-on effects on Openreach's civil contractors and related contracts.

11. We expect those discussions to be extensive and time-consuming and would recommend that Ofcom considers extending the timescales for publication of the new offer to eighteen months rather than the twelve months proposed in the April 2017 DPA consultation. For the same reason, we also think it would be prudent to set a six month target for publication of the draft reference offer rather than the four months currently proposed.

12. For the avoidance of doubt we note that Ofcom's proposal of financial limits is not in conflict with the network adjustment proposals we made in our last response and summarised again in section 1.4 of this response. We support the concept of limits, however the process by which they are calculated and implemented is very important, and as we set out in this document, Ofcom's current approach is not robust: for example, the limit may or may not be reached depending on the way that different pieces of work are grouped together into orders. We also note that the use of financial limits still requires that the correct controls are put in place as part of the new reference offer development and that appropriate control mechanisms are operated before, during and after adjustments are ordered.[10]

13. We also raise a number of other points of detail in response to Ofcom's questions including comments on unclimbable poles, on issues affecting pole space, and on the likely incidence of new infrastructure capacity being required.

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[7] See https://www.ofcom.org.uk/__data/assets/pdf_file/0017/104714/Openreach.pdf

[8] As set out in the April 2017 DPA consultation.

[9] See https://www.ofcom.org.uk/__data/assets/pdf_file/0017/104714/Openreach.pdf, in particular section 1 and the response to Question 4.1.

[10] For example just because Ofcom's financial limit calculation may include an estimated cost for a blockage, that does not imply that any individual order for a blockage clearance is valid; for example an alternative and suitable route may be available or the PIA customer may be able to deploy by an alternative method.

1.4 Process for developing a revised PIA reference offer

14. We consider that Ofcom has not taken sufficient account of our response to the April 2017 DPA consultation.[11] We assume this is because of the approach Ofcom has taken in consulting separately and in parallel on PIA pricing.

15. Our previous response set out principles which we consider to be essential to the development of a realistic and workable PIA offer, and we therefore refer Ofcom to Sections 1 and 2 of that response[12] where we summarise our major legal, financial and operational concerns. The key principles centre around the requirements to underpin a new reference offer with the financial controls and processes that would need to be put in place to protect Openreach, its non-PIA customers and consumers from excessive risks and costs driven by PIA customers.

16. Ofcom's proposals for PIA rely heavily on important details being resolved with industry as part of the reference offer development process. We support that approach. However, if Ofcom's current proposals are not revised prior to its final WLA statement (following further careful analysis and discussion with relevant stakeholders), the proposals pose a high risk of distorting investment decisions and competition in downstream and related markets, and could undermine, rather than support, opportunities for large scale deployment and efficient investment in ultrafast networks.

17. The reference offer discussions will have to reflect the operational and financial controls required by Openreach to run its business, ensuring strict budgetary, financial and contractual controls are in place. We will require controls for projected capex, for example at a total Openreach level and a total PIA level, as well as an authorisation process for individual network adjustment orders. Openreach requires mechanisms that allow it to plan for and control its overall exposure to PIA customer-generated adjustment requests and to assess whether any individual request is invalid, or properly falls within the PIA obligation and can be defined as providing a clear and demonstrable material benefit to the Openreach network. We would expect further detailed assessment of the required controls to take place as part of the reference offer development process, and we would expect Ofcom to support us in developing additional controls.

18. In our response we also noted that the impact on Openreach finances, resources and external contractors is likely to be highly significant, and that Ofcom's proposals, as they stand, do not provide any limitation on the numbers of PIA customers which might request such services concurrently from Openreach. This is set against a backdrop where there are, and remain, serious skills shortages in the civil engineering sector.

19. In addition, we set out that where i) a network adjustment order relates to the creation of a fibre asset owned by a third party PIA customer, ii) there is no clear and demonstrable material benefit to the Openreach network and its customers, and iii) it is possible for the PIA customer to carry out the work, there is no rational case to be made that Openreach and its non-PIA customers should contribute towards the construction of the asset, especially when the PIA customer may not even offer wholesale access to its network. By way of example, this category could include enabling works such as, but not limited to, duct blockage clearance, desilting, cable installation, drop wire swap-out and the removal of obstructive trees, branches and roots.

20. In contrast, we accepted that there may be some circumstances where Openreach would be prepared to carry out and fund work on infrastructure identified by PIA customers for adjustment, and which could be considered a potentially useful asset improvement. This is where the PIA customer request provides a clear and demonstrable material benefit to the Openreach network and its customer, for example, because it coincides with a known adjustment that Openreach plans to make, or following an assessment by Openreach it is supported by an associated business case to enhance the network.

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[11] https://www.ofcom.org.uk/__data/assets/pdf_file/0017/104714/Openreach.pdf

[12] In particular paragraphs 26 to 33.

21. Therefore we set out a positive response to these concerns and a framework we could support looking forward. Our proposal is summarised again for ease of reference below in Table 1 below.

Table 1

Provision/Funding Mechanism	**Type of work** *[to be to be more precisely defined, working closely with industry and the OTA]*
Openreach provides/Openreach funds up to per order cap and PIA customer pays above cap (subject to annual industry wide cap based on PIA customer forecasts)	Openreach funds (subject to caps) provided: • The works relate to Openreach's current network footprint; • There is a clear and demonstrable material benefit to the Openreach network and its customers; • The works are directly linked to accurate forecasting required a minimum of 12 months in advance; • The works pass a financial assessment of the cost/benefit analysis; and • The works do not involve providing large amounts of new capacity or long lengths of new duct. By way of example, this category could include network build works we propose to carry out or new duct, pole or joint/footway box capacity relief.
Openreach provides/PIA customer pays	Where there is no clear and demonstrable material benefit to the Openreach network and its customers but the PIA customer cannot carry out the work itself, Openreach provides and the PIA customer pays up-front, provided: • The works relate to Openreach's current network footprint; • The works are directly linked to accurate forecasting required a minimum of 12 months in advance; and • The works do not involve providing large amounts of new capacity or long lengths of new duct. By way of example, this category could include works in a sensitive/secure area and augmentation works that only Openreach can carry out such as constructing new ducts and joint/footway boxes, and erecting new poles.
PIA customer provides/PIA customer funds	This category could include: • Works outside of the current Openreach network footprint; • Works that involve providing large amounts of new capacity or long lengths of new duct; • Works which will only benefit a single PIA customer because, for example, we have no demand from any other CP; • Works which only provide a temporary solution without improving the Openreach network; and • Enabling works including but not limited to duct blockage clearance, desilting, cable installation, drop wire swap out and removal of obstructive trees, branches, roots.

22. In summary Openreach needs the ability to exert strong financial and contractual controls, both overall for the PIA service and on an individual adjustment order basis, to ensure the remedy is not misapplied; that only necessary and beneficial works orders are raised; and that such infrastructure is occupied and paid for on a long term basis via long term contracts and including mechanisms such as early termination charges to enforce such arrangements.

23. We would look to Ofcom to support these types of controls to protect Openreach and its customers. All these aspects and the details relating to the supporting processes will need to be resolved comprehensively as part of the development of the new PIA reference offer, and where appropriate

reflected in regulatory guidance). In light of the extensive discussions Openreach will need to have with industry as part of the revised reference offer process, it is possible that Openreach and industry could reach an agreement on certain issues which Ofcom had already set in stone in its WLA Statement.

24. As a result, we strongly urge Ofcom to limit the amount and type of information relating to PIA Adjustment Services and PIA Pole Adjustment Services which are the subject of an SMP obligation when the WLA Statement comes into force. It is important that Ofcom retains sufficient flexibility to amend and/or interpret its proposals following the conclusion of the reference offer process, and that its WLA Statement does not unnecessarily constrain legitimate negotiations as part of the reference offer process.

1.5 Regulatory financial reporting

25. Our key concern in this area is with Ofcom's proposal to account for the revenues and costs of 'network adjustments services above the financial limit' by requiring that both are recognised immediately. The additional network elements delivered by this service will be indistinguishable from any other network elements and should be recognised over time, with the costs capitalised, in line with the statutory accounts, which must align with accounting standards.

26. The relevant accounting standard is IAS 16 "Property, Plant and Equipment".[13] On recognition of the asset, the standard states that "it is probable that future economic benefits will flow to the entity and the cost of the asset can be measured reliably". With regard to measurement of the value of the asset, IAS 16 specifies that this should reflect "all costs necessary to bring the asset to working condition for its intended use".

27. Ofcom's proposal therefore conflicts with IAS 16. It would oblige BT to adopt a different policy with regard to the relevant costs for regulatory financial reporting to that applied in BT's statutory accounts, which is aligned to IAS 16. This would reduce the comparability of the regulatory and statutory accounts and thereby transparency. Further, the additional effort of complying with this obligation would be disproportionate in light of the likely revenues and costs of those services in the next review period.

1.6 Conclusion

28. Whilst we acknowledge that this consultation sets out proposals for financial limits for Ofcom's proposed obligations, and we welcome this, the proposals as they stand still require further work, and the PIA remedy overall still requires significant refinement as part of the reference offer process to ensure that any obligations are properly justified and proportionate.

29. In our review of the consultation proposals, we have found that Ofcom's methodology for setting the proposed adjustment thresholds does not set realistic financial limits, and that Ofcom's analysis of overhead network issues is incomplete. We request that Ofcom takes more time to properly assess the information we have put forward, including our estimates based on our actual costs. As the network adjustment products will not be fully specified until early 2019, there is scope for Ofcom to do this. Openreach therefore strongly urges Ofcom to consider how to further limit the obligations placed on Openreach, to ensure that any resulting remedy is proportionate.

30. More broadly, and in order to address our key concerns around financial risk and cost recovery, we put forward a positive proposal in our last response[14] whereby Openreach would fund works where there was a clear and demonstrable material benefit to the Openreach network and its customers. Where there is no such benefit, any requirement for Openreach to fund upfront costs is unjustified and disproportionate.

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[13] See https://www.iasplus.com/en/standards/ias/ias16

[14] Also summarised in section 1.4 of this response.

31. We hope that Ofcom gives our concerns proper consideration, particularly given the extent to which Openreach is already actively investing in its PIA service and systems. Openreach has also provided access to much of its proprietary 'know how' and engineering principles to support PIA customers to build their networks, and we will also be moving to a semi-automated ordering system very shortly to enhance the PIA service. PIA customers now have all the relevant on-line information they need to plan and build their ultrafast broadband networks, in the way they choose, and with the same flexibility that Openreach does.

32. We believe our proposals set out a positive and pro-competitive framework for potential PIA customers and also provide protection for Openreach, its non-PIA customers and consumers. We urge Ofcom to support them.

2 Relevant legal obligations and key concerns

33. In this section we summarise our position on key legal, regulatory and process concerns, including:

    (i) issues raised in our previous responses;

    (ii) the potential impact of the recent CAT BCMR appeal decision; and

    (iii) the critical factors and dependencies to be addressed for a successful implementation of a new PIA reference offer in 2019.

2.1 Our response to Ofcom's April DPA Consultation

34. We refer Ofcom to Section 2 of our response to its April 2017 DPA Consultation.[15]

35. In that response we set out our view of Ofcom's statutory duties and requirements to provide a framework for evaluating Ofcom's PIA proposals.

36. We note that Ofcom has not addressed the legal issues we raised in our response in this latest pricing consultation. In our response we set out that:

- Whilst we accept that BT has an existing SMP obligation to relieve congested infrastructure and construct new infrastructure, the Access Directive strongly suggests that where there is no capacity available, it is not feasible for an operator to provide network access or at least any access obligation should be strictly limited.

- Ofcom has significantly overstated the perceived harm in the absence of intervention and significantly underestimated the risks of intervention. As a result, the conditions imposed by Ofcom are not considered proportionate or objectively justified, looking at:

    a) PIA in light of parallel regulation on Openreach's 40/10 Mbps FTTC product limiting CP's incentives to invest; limited evidence of scale PIA use; improvements made to product processes and systems from January 2017; and the presence of the Access to Infrastructure (ATI) Regulations.

    b) A fuller analysis of potential unintended consequences and the impact on all stakeholders, given the highly intrusive nature of its proposals; in particular:

        i) The impact on Openreach and on its customers of being required to cross-subsidise PIA customers;

        ii) Distortions of competition:

            (1) between network providers;

            (2) in downstream markets;

            (3) in adjacent markets (including any market for the supply of civil engineering and construction services and any BDUK bidding markets)

        iii) The impact on stakeholders including suppliers of civil engineering and construction services, owners of physical infrastructure and local authorities.

[15] https://www.ofcom.org.uk/__data/assets/pdf_file/0017/104714/Openreach.pdf

iv) Issues relating to information sharing between network competitors.

37. We further note that Ofcom has not addressed the following points we raised in Section 2 of our response to the April 2017 DPA consultation:

- Ofcom's relegation of the cost causality principle is incompatible with its own cost recovery principles and appears inconsistent with Ofcom's requirement to ensure a consistent regulatory approach. In light of the fact Ofcom recently set out its principles of cost recovery in its consultation on recovering the costs of a broadband universal service,[16] we expand on this further below.

- Ofcom's proposal to extend the PIA remedy to mixed use conflicts with its findings in the BCMR, and Ofcom has not conducted a thorough assessment of the interplay between PIA and the dark fibre remedy. These risks have been exacerbated by the ruling of the CAT in the recent BCMR appeal which we consider significantly raises the threshold Ofcom would need to satisfy when considering whether its proposed mixed usage rule is proportionate. We expand on this further below.

- Ofcom fails to properly consider whether the ATI Regulations could be used to achieve its policy objectives, including, for example, the obligation on access providers to provide information on planned works. Ofcom's proposals also conflict with and/or undermine certain provisions of the ATI Regulations and do not reflect the safeguards enshrined in those Regulations including, for example, obligations of confidence which may exist to a third party, issues of national security and other sensitive sites.

2.2 Principles of Cost Recovery

38. Openreach remains concerned that Ofcom’s proposals are inconsistent with its statutory duties and requirements, as identified in Section 2 of our response to Ofcom’s April 2017 DPA consultation, in particular Ofcom’s obligation to ensure it promotes "regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods".[17]

39. We view Ofcom’s proposals for Openreach to fund upfront costs for PIA customers as de facto incompatible with the principle of cost causality, which is one of the Regulatory Accounting Principles BT is required to comply with.[18] Principle 5 (Causality) requires BT to ensure that revenues, costs, assets and liabilities “are attributed in accordance with the activities which cause the revenues to be earned, or costs to be incurred, or assets to be acquired, or liabilities to be incurred respectively”. Ofcom’s proposals in this consultation are inconsistent with the Causality principle.

40. Further, Ofcom’s proposals are not compatible with its principles of cost recovery, as set out in its recent consultation on recovering the costs of BT’s proposed investment in extending broadband coverage:[19]

    a) Effective competition - the mechanism for cost recovery should not undermine or weaken the pressures for effective competition.

    b) Cost causation - costs should be recovered from those whose actions cause the costs to be incurred at the margin.

[16] See paragraphs 6.10 to 6.12 of Ofcom’s WLA MR consultation on ‘Recovering the costs of investment in network expansion’ issued on 9 August 2017.

[17] Framework Directive, Article 8(5)(a)

[18] Direction specifying the Regulatory Accounting Principles (Directions for Regulatory Financial Reporting Statement, 30 March 2015, p.97).

[19] See paragraphs 6.10 to 6.12 of Ofcom’s WLA MR consultation on ‘Recovering the costs of investment in network expansion’ issued on 9 August 2017.

c) Cost minimisation - the mechanism for cost recovery should ensure that there are strong incentives to minimise costs.

d) Distribution of benefits - costs should be recovered from the beneficiaries especially where there are externalities.

e) Practicability - the mechanism for cost recovery needs to be practicable and relatively easy to implement.

f) Reciprocity - where services are provided reciprocally, charges should also be reciprocal.

41. Ofcom's PIA network adjustment and productisation cost proposals would appear to conflict with Ofcom's own principles:

- Cost causation - the network adjustment costs would not be recoverable from the PIA customer which causes the costs to be incurred and which would be the direct beneficiary of the work carried out.

- Cost minimisation – under Ofcom's proposals, there would be no incentive for the PIA customer to minimise expenditure if it does not incur any costs (presuming works fall below Ofcom's proposed financial cap). Setting the limits significantly above Openreach's typical costs will exacerbate this problem and even incentivise such behaviour.

- Effective competition – in our response to Ofcom's April 2017 DPA Consultation, we set out why Ofcom's proposals are likely to materially distort competition in various markets including the impacts of the additional costs added to copper services, the negative impact on Openreach's competitive position with regard to Virgin, the reduction in Openreach's capital availability to invest in its own fibre programmes and the potential lack of wholesale access to an alternative network.

- Distribution of benefits – Ofcom's proposal does not require there to be any clear and demonstrable evidence or even likelihood that there will be a wider distribution of benefits. The PIA customer has no obligation to offer wholesale access and is therefore rewarded with the end-to-end commercial benefits of the Openreach funding through potentially little competition with their retail operation. Secondly, there is no link between the CPs/end-users funding the PIA customer's network build and the network adjustments carried out, and/or the likely areas where such new networks might be deployed. There could also be significant unintended consequences arising if Ofcom's proposed remedy is imposed in the absence of proper cost benefit analysis, strict financial controls and forecasting obligations.

- Practicability – Ofcom's proposals will be complex to implement (compared to recovering these costs through PIA charges), and we set out some examples of these challenges in response to Question 4.1 of this document.

- Reciprocity – although Openreach could in principle make use of other physical infrastructure in the UK, Ofcom has not supported the implementation of the ATI Regulations in the UK in a way which would be beneficial to Openreach or indeed, as far as we are aware, other investors. Also, with regard to Ofcom's network adjustment proposals, we note that Openreach is required to fully fund all upfront costs for its own network build, compared to PIA customers that will not incur any costs up to the financial limits imposed by Ofcom (now proposed at above average Openreach cost).

42. Further, we remain seriously concerned about the time and costs required to audit, check and review work done on our network by PIA customers. These checks are important to help reduce the risks of serious damage to our network or services and the safety of the public and our engineers. We have witnessed, over the last 12 months on PIA, an increase in cases of damage, poor workmanship, dangerous installations and builds which are completely different to the plans and reservations submitted under PIA. In the circumstances, it is important that we are able to develop and recover the costs of checks and systems to reduce the risks of damage and harm. Those costs should be recovered as part of PIA product pricing.

43. Moreover, whilst we accept that Ofcom's regulatory duty to promote regulatory predictability by ensuring a consistent regulatory approach should not preclude it from making policy changes, we do consider it to limit Ofcom's ability to set-aside its regulatory principles in the absence of any robust evidence justifying such an approach.

These problems can be resolved with our network adjustments proposal

44. We believe if Ofcom was to consider a full and proper assessment of the effects of its proposals on all relevant stakeholders in the value chain and all potential distortive effects on competition, it could come to a more balanced decision.

45. In our view, such an assessment would highlight the need for adjustments to Ofcom's proposals in order to ensure they are objectively justifiable and proportionate and do not inadvertently distort the competitive dynamics at play in a number of markets. We propose that Openreach should only be required to fund upfront adjustment costs where:

- The adjustments relates to Openreach's current network footprint (e.g. existing ducts, poles and chambers etc);
- There is a clear and demonstrable material benefit to the Openreach network and its customers;
- The adjustments are directly linked to accurate forecasting required a minimum of 12 months in advance.

46. Adjustments would pass a cost/benefit analysis where:

- They do not involve providing large amounts of new capacity for underground or overhead infrastructure (e.g. long stretches of duct); and
- PIA customers have demonstrated they have deployed efficiently (e.g. rerouted where possible when encountering a blockage etc).

47. Further, any requests requiring Openreach funding would need to be controlled on a per order financial limit (set at a reasonable level) and an annual industry wide control based on PIA customer forecasts. Forecasts provided well enough in advance are vital to secure the necessary resource from our contractors all of which are seriously strained. In our response to Question 4.1 below, we also propose a number of other safeguards in order to prevent CPs undermining the cap. The scenarios in which adjustment works provide a clear and demonstrable material benefit to the Openreach network and its customers will need to be precisely defined and we would work with industry and the OTA to agree acceptable parameters to the obligation.

48. In light of our concerns, and notwithstanding the fact that we do not consider Ofcom's proposed intervention to be justified or proportionate, we put forward a positive proposal in our last response which we considered to be consistent with Ofcom's rationale for imposing an obligation on Openreach to fund capacity build/enabling works, namely that PIA customers currently have to pay to improve the Openreach network and then have to 'gift these improved assets to Openreach'.[20] We have included a summary of the proposal in section 1.4 of this response for ease of reference and fuller details can also be found in our response to Ofcom's April consultation.

49. We believe this proposal is a positive and pro-competitive framework for potential PIA customers and also provides protection for Openreach and its non-PIA customers and consumers. We consider that the proposal mitigates some major risks of distorting competition by minimising the requirement on CPs which do not purchase PIA to cross-subsidise work from which they will derive no benefit. This should help promote efficient and sustainable long-term investment. In particular, because PIA customers will

[20] April 2017 DPA consultation, paragraph 5.17.4.

be required to carry out non-complex enabling works themselves at their own cost, they will not be incentivised to request Openreach to carry out and non-PIA customers to pay for the work simply because there is no up-front cost.

50. PIA customers already benefit significantly from regulated cost-based access to Openreach's shared infrastructure which generates significant cost savings for their deployment plans. However, it seems to us that this point is often forgotten when the debate becomes unduly focussed on Openreach being required to de-risk PIA customers' investments in their own fibre assets. Standing back from the debate it is obvious that a properly justified and proportionate regulatory obligation for Openreach to fund infrastructure costs generated by PIA customers should be based on an assessment of a clear and demonstrable material benefit to Openreach infrastructure and its customers, and subject to a reasonable cost benefit criteria and other financial controls.

51. We request that Ofcom properly considers all relevant considerations, including correct, reliable and up-to date information (as identified in this response and our previous responses to Ofcom's DPA consultations) and conducts a detailed analysis of the potential risks of adverse effects and unintended negative consequences of its proposed regulation and the significant impact of its proposals on all relevant stakeholders in the value chain.

2.3 Ofcom's proposals for mixed usage are disproportionate, in particular in light of the CAT's BCMR ruling

52. We refer Ofcom to paragraphs 90 to 95 of Section 2 and our response to Question 4.2 of Ofcom's 2017 DPA consultation where we set out our concerns over Ofcom's extension of the usage rules for PIA to include 'mixed usage'.

53. In particular, we explained our concern that prior to imposing a mixed usage PIA remedy in the WLA market which impacts on the remedies imposed (or not imposed) in the business connectivity market, Ofcom should, at the very least, have carried out a thorough assessment of the interplay between the remedies imposed in the two separate markets in order to determine whether its proposals are proportionate.

54. Since our last submission, on 26 July 2017, the CAT found a number of failings in Ofcom's most recent BCMR. In summary the tribunal found that:

    1. Ofcom erred in concluding that it was appropriate to define a single product market for CISBO services of all bandwidths;

    2. Ofcom erred in concluding that the RoUK comprises a single geographic market; and

    3. Ofcom erred in its determination of the boundary between the competitive core segments and the terminating segments of BT's network.

55. As at the submission date of this response, the CAT has not yet issued any order disposing of BT's appeal. We expect that the CAT will quash Ofcom's decision to require BT to grant dark fibre access and remit the matter back to Ofcom for re-consideration. The fact that Ofcom will need to revisit its BCMR, in particular its product and geographic market definitions, means that, at the very least, Ofcom will need to revisit its analysis of the potential adverse effects of relaxing usage restrictions of the PIA remedy on BT's ability to recover costs from regulated services in the business connectivity markets (see Annex 5 of Ofcom's April DPA Consultation,

56. In our response to Ofcom's April DPA Consultation, we explained that if CPs make extensive use of PIA in a mixed use scenario, the direct result is that we will sell less Ethernet products and potentially less Dark Fibre than Ofcom envisaged in its BCMR Final Statement. This would have an impact on the LLCC (if we sell less Ethernet services) but also on the feasible pattern of cost recovery. Ofcom will now need to consider how changes to common costs recovery and relative prices between the different products will impact Openreach, its customers and infrastructure providers, in light of the CAT's ruling.

57. The CAT's ruling also exacerbates the risk that Ofcom's proposed mixed usage rule will apply in areas found by Ofcom to be competitive because a revised market definition is likely to result in other areas (in addition to the Central London Area) and other services (in addition to CCTV, broadcast and Street Access) being found competitive and therefore deregulated. We consider that this outcome would be perverse and contrary to the EU Framework and Access Directives, because it would re-introduce regulation through the back door in relation to an activity that has been recognised to be competitive by Ofcom. This outcome would also be contrary to the EU Framework and Access Directives because Ofcom has a legal obligation to ensure that any remedy it imposes is necessary and proportionate to the competition issues it (Ofcom) has identified. This cannot be the case in relation to business connectivity in relation to any areas and services that have been found competitive (for example, the deregulated areas).

58. We also note that in the current consultation Ofcom does not consider the range of unregulated/non-SMP services through which Openreach recovers a share of its common costs and the associated impact of Ofcom's proposed mixed usage rule on our ability to recover our costs in BCMR. Again, at the very least, Ofcom should take into account the fact that further areas and services may be deregulated following a revised or new market review and Annex 5 of Ofcom's April DPA Consultation should also analyse the impact on BT's ability to recover its costs in deregulated areas and services.

59. Overall, we consider that the CAT's ruling raises additional concerns that Ofcom's proposals for a mixed usage rule are not proportionate. Ofcom should consider the impact of the CAT's decision and ensure that it carries out a thorough assessment of the interplay between a mixed usage rule and any remedies imposed in the business connectivity markets, in order to determine whether its proposals are proportionate. In the absence of a proper assessment of the impact of Ofcom's proposals on BCMR markets, we consider Ofcom's proposal for a mixed use rule to be a disproportionate and unjustified intervention which is inconsistent with Ofcom's statutory duties and requirements.

60. We set out our detailed responses to each of Ofcom's four questions below in Section 3.

3 Responses to questions in Ofcom's consultation document: *"Wholesale Local Access Market Review – Consultation on Duct and Pole access remedies"*

Question 3.1 – Rental charge cap

Question 3.1: Do you agree with our proposals for setting the level of the cap on PIA rental charges? Please provide reasons and evidence in support of your views.

Ofcom's reasons for setting a price cap

61. Openreach maintains its view that the current pricing methodology and cost orientation obligation is fit for purpose and already addresses the risks posed by Ofcom in the consultation at paragraph 3.3:

- With respect to the risk of Openreach setting excessive prices, our view is that the cost orientation obligation already prevents excessive pricing and is in addition to the restrictions which apply under competition law.

- With respect to pricing certainty, we note that Openreach's pricing has been stable since the launch of PIA in 2011, and Ofcom has not evidenced why this would not continue to be the case going forward.

    - Ofcom has based its forward looking proposals on the existing pricing methodology and the consistency of approach could be ensured by a clause in the PIA charge control legal instrument that any change in pricing methodology needs to be agreed with Ofcom prior to implementation;

    - Additionally, we note that all methodology changes in Openreach's regulated accounts are already change controlled by Ofcom; and

    - Ofcom has set out its intentions to revise the regulatory financial statements (RFS) to show greater transparency of duct and pole costs in detail in Section 5 of the consultation.

62. In view of this, there is little incentive or opportunity for Openreach to game such a situation. Ofcom has the ability and legal powers to intervene at any point should it be required; either via an own initiative compliance investigation or arising from a PIA customer complaint or dispute.

63. Therefore, we do not believe that Ofcom has evidenced the case for additional price regulation on PIA. Consequently, we consider Ofcom's proposals to be unjustified and disproportionate. We maintain that the current cost orientation obligation, with further guidance on how costs should be treated, remains a suitable approach.

Ofcom's use of the existing pricing methodology

64. We welcome Ofcom's support of the existing pricing methodology, although we believe this supports a cost orientation obligation as opposed to a charge cap. The methodology is grounded in key Openreach financial and engineering data, and it has been shared in detail with Ofcom[21]. Ofcom has not raised any material objections with Openreach on the data or the approach currently in use.

65. We agree with Ofcom's conclusion in paragraph 3.35 that the minimum diameter increment of 25mm results in a minimum appropriate share of overall duct costs to be recovered from PIA users for the next

[21] Also with CPs at the time of PIA launch in 2011 and at two recent industry meetings on 24 October 2016 and 25 January 2017.

control period, and that setting lower prices for smaller cables or sub-duct could result in a much smaller and unsustainable level of pricing in the long run.

66. In our view, if key input assumptions related to the PIA cost model were changed significantly, it would be necessary to carry out a full assessment of the risks and benefits of any new output prices to ensure that there are no unintended consequences or long term negative impacts for investors and Openreach. This would include a full analysis of pricing methodologies, cost recovery and market impact assessments from starting principles rather than adjustments to single variables in the existing pricing model. The strength of the existing methodology is that it was intended to set a broadly fair and stable allocation of costs to users of PIA given the uncertainties associated with future take-up.

67. The approach also recognised that a significant risk to the long term viability of PIA customers' business cases could come from setting a low start price that encouraged investment, but which became unsustainable in the medium to long term (i.e. future PIA price rises could undermine the success of the PIA customer's initial investment case and also damage Openreach).

68. The risk is particularly relevant at this time with a transition to new local access network technologies taking place which have vastly different technical capabilities and hence different abilities to generate value in the market. Further, such new technologies/smaller cables etc. could provide sufficient fibre network capacity to disincentivise any other fibre provider (including Openreach) from having a business case to utilise the infrastructure further and invest in parallel network in the area. This would destroy the value of the remaining duct, which in the current pricing approach contributes to Openreach's cost recovery.

How charges should apply to multiple cables or sub-duct

69. Following revisions to our PIA product earlier in 2017, Openreach now allows cables to be placed within our duct directly, and no longer requires the cables to be within separate sub-duct.

70. Ofcom's current proposal is that if a CP installs multiple cables with total dimensions of less than 25mm, they should only be charged for a single "25mm duct", even where no sub duct is used. We understand Ofcom's aim here, and as presented by Ofcom in paragraphs 3.36 to 3.38, this is a reasonable requirement. However, the detail needs to be considered and understood. Firstly, while it can be mathematically demonstrated that the total area taken by the cables would be less than the space taken by a 25 mm sub-duct, this does not mean that in reality only 25mm of duct space is taken. The issue of cables knotting, twisting and taking more space is a well understood issue. The cables could easily take more than the 25mm space allotted. Secondly, there are practical issues on how this could be tracked. Even if CPs disclosed the diameter of each piece of cable, there would need to be significant developments to the PIPeR system to track this information, and then an interface to check back the total space taken by cables per CP to ensure correct billing.

71. On these grounds we think that Ofcom's proposal needs to be understood in more detail, and could probably be considered as part of the reference offer. We also note that a CP would be able to access significant capacity in each cable, and so the scenario where one CP has multiple cables on the same route could be unusual.

Issues with Ofcom's proposed price cap

72. In general, our position is that any pricing approach adopted should allow Openreach to recover efficiently incurred costs, including upfront costs, and should recognise that many of the activities underpinning PIA prices are based on costs that do increase each year such as labour rates, whether for direct labour or work undertaken using our civils contractors.

73. We believe that a cost orientation obligation would be more appropriate as it would always allow Openreach the opportunity to set its prices such that its costs could be recovered. This has been the regulation in force since the products have been launched, and there have no issues with price instability or uncertainty.

Calculation of the productisation adjustment costs component

74. As we have set out previously, we do not agree with Ofcom's proposals to remove productisation costs (upfront costs, product management costs and set-up costs already incurred by Openreach) from PIA rental tariffs. Openreach should retain the ability to recover its efficiently incurred costs (network or productisation) from the CPs who are the beneficiaries. Efficient investment decisions should be based on forward-looking judgements on the merits of differing technological options, on customer willingness to pay, and the consequential costs generated, amongst other things. This issue was addressed in our response to question 7.3 in the April 2017 DPA consultation.

Assumption on FTTP build in this review period

75. Ofcom assumes 1.5 million FTTP homes built in their calculations, based on 500,000 using PIA (the base case for the WLA) and 1 million Openreach-built FTTP homes. The figure of 1 million for Openreach-built homes is based on an assumption that the 2 million homes passed that have previously been announced will consist of 1 million on 'brownfield' sites where duct already exists and 1 million on 'greenfield' sites where there is no duct infrastructure currently.[22] This 'greenfield' scenario is FTTP to new build homes, and 1 million is a significant overestimate of the homes that will be built with no network adjustment. This can clearly be understood given that total annual new home builds have historically been less than 250,000 households (and fewer premises), not all will be built to by Openreach and not all are suitable for FTTP (e.g. smaller developments). Even in Ofcom's own forecasting (using the households measure that Openreach do not agree with) there would only be 773,000 new households in the market review period.[23]

76. We would request that Ofcom consider the volume assumptions for 'brownfield' FTTP build as part of the WLA consultation review.

Commencement of rental charges

77. We agree with Ofcom's proposal that Openreach and industry should work together to agree the specific requirements relating to the commencement of rental charges as part of the development of the new PIA reference offer (paragraph 3.69). We also support Ofcom's view that it is inappropriate to impose a strict requirement on Openreach in all circumstances to only commence rental charging relating to any part of an order for an area served by an Optical Local Exchange (OLE) when all build works for that order are complete (paragraph 3.68).

78. This statement also clarifies that the restriction was intended to be based on an individual order within an OLE area (and not intended to apply across all orders placed in an OLE area), which was one of the concerns we raised in our previous response. We also note that when a PIA customer is self-providing build work, and as Ofcom set out in the first PIA consultation, then it is not appropriate to defer rental charges.

79. These are all helpful clarifications. We will need to discuss detailed and specific scenarios with PIA customers as part of the development of the new reference offer. The reality is that the complexity and scale of build orders will vary, and in some cases these could take considerable time to complete with timescales which are not under the control of Openreach or our civil contractors (e.g. street works permissions). There is also a risk of moral hazard that needs to be addressed in how and when PIA customers might place adjustment orders.

80. For any large scale project envisaged by a PIA customer, Openreach, its customer and the civil contractors would all need to agree, prioritise and plan major civil works in advance, backing off plans with suppliers and even with local planning/traffic management authorities. As we noted previously, a

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[22] DPA Pricing Consultation, 1 August 2017, footnote 65

[23] Between 2005 and 2014 the number of households build per year varied between 200,000 and 250,000 (source: Department of Communities and Local Government)

pragmatic approach would be to allow charging to commence once routes of a certain length (or a defined area) are completed and are usable by the PIA customer. A notification process would need to be agreed as part of the reference offer but would provide both PIA customers and Openreach the opportunity to start network build and recover charges when useful sections of infrastructure become ready for use and progress is not delayed by having to wait for large and unrelated/non-impacting jobs to complete.

Duration of minimum term

81. We agree with Ofcom that the issues of minimum term should form part of the new PIA reference offer discussions.

82. Openreach needs the ability to exert strong financial and contractual controls and ensure that PIA infrastructure is occupied and paid for on a long-term basis via long term contracts - including mechanisms such as early termination charges to enforce such arrangements. Such charges would be needed to cover the exposure of Openreach and its non-PIA customers who are paying for new network adjustments and would need to be supported by some form of bond or guarantee. We would look to Ofcom to support such controls to protect Openreach and its customers.

83. Openreach would expect that the minimum term should be extended beyond the current five year period. A change is required at this time to reflect the additional commercial risk that Ofcom's proposals introduce and to ensure those risks are mitigated at least in part. Previously network adjustment costs would have been recovered when incurred, but are now to be recovered over the 40 year asset life of duct. A longer minimum term on products such as PIA will mitigate the risk that network adjustment costs will not be recovered. Given that the policy objective for the PIA remedy is to support long term investments by PIA customers in new fibre infrastructure, we do not believe a longer minimum term period should be an issue for such investors.

Question 4.1 – Setting a financial limit for network adjustments

Question 4.1: Do you agree with our proposals for setting a financial limit for network adjustments? Please provide reasons and evidence in support of your views.

84. We support Ofcom's proposal that a financial limit should be set for network adjustments. However Ofcom limits are too high and its associated analysis does not justify the limits it has calculated. Ofcom itself states the limitations of the analysis in the consultation at paragraph 4.15 noting 'it is not possible to estimate the incidence of all network adjustments with any degree of precision'.

85. We agree that Ofcom's estimation process lacks precision, and are therefore further concerned by Ofcom's approach of increasing the uncertainty in the estimate by the addition of significant and unsupported mark-ups and roundings into the calculation. Given the very large financial and operational exposure that Ofcom's proposals represent to Openreach and its customers, our view is that a more cautious (and better evidenced) approach is required in order for Ofcom's proposals to be considered objectively justified and proportionate. Ofcom's view is that it does not expect large scale PIA take-up in the next control period but that does not justify setting an excessively high limit in the first instance. It would be far less damaging to all involved to set a reasonable starting point, and if necessary correct upwards over time, than have to redress out of control costs and unnecessary civils works in retrospect.

86. By setting an artificially high limit, significantly above Openreach's average costs, there is no incentive for PIA customers to maintain cost controls on network adjustments and operate efficiently. This exacerbates the risk that Ofcom's proposals are not compliant with the EU Access Directive or the Communications Act as well as the risk of distortions of competition. Ultimately, Openreach's non-PIA customers would be required to cross-subsidise PIA CPs and Openreach would be left in a very weak control position, as all requests below the threshold will be expected to be provided for free unless Openreach can prove otherwise.

87. Therefore Ofcom's pricing proposals have four significant problems as they stand:

i) The baseline costs in the proposal have been calculated incorrectly, because they are built up with an inaccurate 'shopping list' of tasks in the baseline estimate.

ii) The costs have been marked up in a way which further exacerbates the error, by taking the baseline costs and adding a poorly evidenced 50% mark-up which is also increased by Ofcom's rounding up of circa 9%.[24]

iii) Ofcom's intention that the mark-up should cover a range of costs above the average is understood but there is no discussion or proposal of how the overall expenditure can be controlled from being excessive and hence prevented from driving up average Openreach costs towards the limit rather than driving costs down to an efficient level (i.e. normal business practice).

iv) The limits as they are set out in this consultation do nothing to help resolve the issues of unnecessary network adjustment requests. Even with use of limits, the correct contractual and procedural controls need to be put in place as part of the new reference offer development[25] so that unnecessary and invalid network adjustments are not ordered or progressed in the first place.[26]

88. As things stand, Ofcom's proposals, even if the calculations are corrected, still remain largely open-ended and the fundamental issue is not addressed: namely that under Ofcom's proposals as framed, an individual PIA customer is able to drive and spend Openreach capex virtually without limit, and any number of PIA customers can do the same. This is why the development of the new reference offer is so important. It will need at minimum to:

i) Define and implement the additional financial/budgetary controls and authorisation processes that need to be put in place for network adjustments from 2019. We believe Ofcom needs to explicitly support this approach as part of its final statement to protect Openreach and its customers, and also help promote a balanced dialogue as the reference offer is developed.[27]

ii) Define and implement the required recording of the relevant network adjustment information, and billing and agreement of excess charges.

iii) Specify the applicable range of network adjustments which fall within the scope of PIA and how they can be assessed as necessary, cost justifiable and beneficial Openreach asset adjustments, and not simply cabling/fibre build tasks.

iv) Specify which activities and in which scenarios tasks are faster and more economically carried out and funded by the PIA customer to the benefit of all parties.

v) Specify how adjustments are controlled to within the Openreach infrastructure footprint and the expectation that Openreach networks adjustment should primarily be to 'free up' existing capacity rather than create new infrastructure. For the record we note that we support Ofcom's clarification of these points.[28]

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[24] As an indication of impact and using Ofcom's figures in paragraph 4.50, these adjustments could account for circa 40% or £[✂]m of Openreach's estimated financial exposure, with a risk of significantly more if take up was higher.

[25] As we set out in Section 2 of our previous consultation response.

[26] Although Ofcom's financial limit, if imposed, may include an allowance for the cost of clearing a duct blockage that does not mean that any individual order for a blockage clearance is valid as suitable alternative routings may be available or the PIA customer may be able to deploy by an alternative method. Also as set out in our previous response Ofcom's proposals as currently framed, still appear to capture activities where the only beneficiary is the PIA purchaser, for example by effectively including a PIA customers fibre build/cable installation activities (e.g. trimming trees etc). In these cases there is no improved Openreach asset and PIA customers would be obtaining free fibre build at the expense of Openreach and its non-PIA customers.

[27] [✂].

[28] See Ofcom's April 2017 consultation document, paragraph 1.13: "…For example, where there are congested sections of BT's duct network, it may be necessary to repair or enhance the infrastructure to realise the benefits of sharing BT's infrastructure over a much

89. This type of framework underpins the proposal we outlined in our previous response (and in section 1.4 of this response) that in certain circumstances Openreach would be prepared to fund and adjust infrastructure identified by PIA customers if the adjustment requests are necessary, cost justified and there is a clear and demonstrable material benefit to the Openreach network and its customers.

90. As we set out in the Executive Summary of this response, we think that Ofcom has sufficient time to rectify the problems we have identified in relation to its network adjustment calculations and to carry out the requisite analysis before the limits come into operation in 2019. Our detailed comments on Ofcom's consultation are set out below and broadly align to the structure of Section 4 of the consultation document.

Network adjustment costs and a financial limit

91. Ofcom sets out some key points in Section 4 of its consultation in paragraphs 4.6 to 4.8.

92. Firstly, Ofcom notes that its proposed obligation is for Openreach to make certain adjustments to its physical infrastructure where this is 'necessary' for telecoms providers to deploy their own networks. Ofcom's limits as set out in the consultation do not address how such adjustments are classified as necessary for this purpose. Significant further analysis and agreement between Openreach and its PIA customers will be required as part of the new reference offer process before any adjustment request can be deemed to be necessary and hence authorised by Openreach.

93. Secondly, Ofcom acknowledges that its proposed approach may lead to a degree of uncertainty around the costs Openreach will be required to recover across SMP products (including PIA), and hence that a financial limit is required to '*mitigate these risks*'. We would agree that Ofcom's limits as set out in the consultation offer some mitigation of the total network adjustment risk for any individual order (though we believe this limit is set too high in the consultation) but the limits do not control the total exposure for Openreach and its non-PIA customers in terms of total capex, the total number of CPs to be supported or Openreach's exposure to inefficient and unnecessary works orders. Further controls are required to mitigate and control these risks (e.g. budgets, authorisation processes etc) and Ofcom does not address these controls in this consultation.

Scope of PIA network adjustments

94. In analysing the scope of the PIA network adjustments requirement Ofcom has set out three classifications of adjustments (see paragraph 4.11):

- those adjustments that Ofcom consider are clearly in scope, e.g. repair of blocked duct so it is 'ready for use' ("category A adjustments");

- those adjustments which Ofcom consider may or may not be in scope depending on case specifics, e.g. addressing insufficient capacity up to the final distribution point ("category B adjustments"); and

- those adjustments that Ofcom consider are clearly out of scope, e.g. extension of the existing duct network footprint ("category C adjustments").

95. Our comments on these categories are as set out below.

Category A adjustments

96. As we set out in our previous consultation response, significant further analysis is required to establish which adjustments fall within the scope of the PIA remedy (i.e. that they constitute a necessary

wider area. However, this requirement should be limited to situations where the adjustment is necessary to facilitate access to BT's existing physical infrastructure network."

adjustment, that they are beneficial adjustments to Openreach assets, and whether they fall within the financial control and authorisation limits).

97. As we set out in our proposal in section 1.4 of this response, we believe there will be adjustments that fall into this 'category A' classification and therefore that it is appropriate for Openreach to carry out and fund. However there are also likely to be adjustment requests that appear to be 'category A' at face value, but which do not qualify for this classification and will be not be approved. An example would be if a PIA customer requested a duct repair on a duct section when there was a suitable alternative route which could be used without network adjustment (i.e. following the same rerouting process as Openreach). In these circumstances, such a request would not be 'necessary' for the deployment of the PIA customer's network.

98. Even for 'category A' jobs, our experience to date of PIA suggests that Ofcom's proposed limits are far too high and therefore will drive the wrong behaviours. Looking at the requests over the past year for over [✂] kilometres of reserved duct, we estimate approximate average blockage clearance costs of between £[✂] and £[✂] per kilometre. We recognise that this is a sample but it is indicative of the possible huge difference in scale between a level of adjustments which might be considered to be 'necessary' compared to the potential level of unnecessary jobs triggered by a 'free' civil engineering works limit of £4-6k per kilometre. Clearly if the limit was set far too high as in this illustration, it might never be breached and hence would not act as a control mechanism. The problem that might arise may not even be excessively high costs but rather the operational and resource issues generated as unnecessary civils requests escalate, with no incentives on PIA customers to control them.

Category B adjustments

99. We agree with Ofcom's category B description and for us it actually more accurately describes the types of activity in Ofcom's category A to some degree. Adjustment requests may or may not be in scope depending on case specifics as Ofcom notes in paragraph 4.16.[29] An example would be if a PIA customer requested an adjustment where it was not physically possible to add additional capacity, or where it could only be added at an excessively high cost.

Category C adjustments

100. We agree that category C items as described by Ofcom are out of scope of the PIA remedy and that it would not be justified or proportionate, for example, for Openreach to have to extend its existing duct or pole networks on demand. As previously noted, as part of the development of the new reference offer, rules for categorising which adjustment scenarios fall within the scope of the PIA remedy and which fall outside will need to be specified and agreed. We think this will be particularly important with regard to the Openreach overhead network where it may be possible to relieve capacity in specific scenarios at reasonable cost but not in others. Therefore there will be circumstances when Openreach overhead capacity is fully exhausted and the only viable solution will be for PIA customers to arrange their own pole construction (a category C adjustment) as new and additional overhead infrastructure is required.

<u>Objectives of applying a financial limit</u>

101. Ofcom states in paragraph 4.13 of the consultation that it has two reasons for setting a financial limit for network adjustment costs:

    i) to ensure greater certainty of upfront costs and possible negative impacts on Openreach and consumers; and

    ii) to expose access seekers to costs on more expensive routes so that they will have an incentive to look for alternative approaches to optimise their deployments. For example Ofcom notes that

[29] Verification of whether a request is valid or not does present significant challenges. In the extreme it could lead to the need for Openreach to survey each job (or category of jobs) in advance, rather than retrospectively dispute the requirement with the CP. This will add incremental time and cost to each request.

> "*telecoms providers encountering capacity constrained spine duct may be less inclined to seek out alternative routes, or look for ways to make more efficient use of the existing capacity available. Accordingly, we considered it desirable that access seekers bear some of the costs of network adjustments in circumstances where these were likely to be particularly costly*".

102. We strongly agree with Ofcom's concerns and note the alignment with concerns that we have raised in earlier consultation responses and in this response. However we see Ofcom's proposals, as set out in this and the earlier consultations, as not rigorous enough to incentivise the correct behaviours.

103. Our view is that the range being consulted on does not support Ofcom's objectives. The limits are set too high, and further controls will also be required as part of the new reference offer and the business processes required to support the new PIA proposals. As things stand, there is no overall limit to the infrastructure spend that Openreach could be required to bear, and therefore the proposed limits do not on their own address Ofcom's intention to give greater certainty on upfront costs to Openreach and its customers.

104. We maintain that there will need to be an overall annual budget for network adjustment capex across all PIA customers and potentially on an individual customer basis for large forecasts. Given the proposals enable a PIA customer (or customers) to directly drive Openreach cashflow, such customers will need to demonstrate control of capex in the same way as Openreach does. In the first instance, PIA capex budgets will need to be forecast, prioritised and agreed[30] in advance as part of Openreach's overall capital planning process. Following that, expenditure will need to be monitored, large variances from expected costs explained and reforecast, and budgets adjusted if necessary, all within the available Openreach capital envelope.

105. In summary, we maintain that our preferred choice, and the best way to ensure that productively efficient build takes place, is for the party with the revenue benefit to also bear the full costs of the network build. However, if Ofcom is intent on imposing its changes, then we agree that there needs to be a threshold limiting the Openreach obligations. Such a limit needs to be set at an appropriate and prudent level to control the extent of inefficient build and to protect Openreach from excessive cash costs. We currently view Ofcom's calculation of the financial limits as inaccurate and significantly out of alignment with average levels of actual costs incurred by Openreach. It is clear that the proposals as they stand, even after the limits are corrected, need to be enhanced and developed further so that Ofcom's proposed change in charging approach for network adjustments does not incentivise inefficient build and poor cost control by PIA customers on the basis that it is funded by Openreach, its non-PIA customers and consumers.

106. Based on the above, we consider Ofcom has not taken proper account of the appropriate considerations and/or has disregarded relevant considerations. As a result, we consider Ofcom's analysis to be materially flawed in a number of areas such that had the appropriate considerations been taken into account, Ofcom would almost certainly have reached a different conclusion.

<u>Approach for identifying the appropriate limit</u>

107. In calculating the limit we agree that a sensible starting point is to work from the published prices for network adjustments on the Openreach PIA price list. This will ensure alignment between the charges and the threshold limit and ensure that they are calculated on a consistent basis.

108. We agree with Ofcom's comments made in paragraphs 4.15 to 4.16, that it is "not possible to estimate the incidence of all network adjustments with any degree of precision…" and that Ofcom recognise that "even for category A adjustments, ultimately whether or not they fall within the scope of PIA will depend on the specific facts". As we have noted above this is a significant problem with Ofcom's approach to calculating reasonable estimates and therefore points to the need to adopt a cautious approach to setting

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[30] For financial and cost control purposes this would be likely to be based on something less than the Ofcom limit as Ofcom's stated intention is for the limit to cover a 'typical or normal' range of network activities (see paragraph 4.18). It would not be consistent with this principle if the budget was based on the upper limit for 'free' adjustments.

the threshold, rather than risk overinflating the limit and cash and operational impacts on Openreach and its customers.

109. The position as set out by Ofcom in paragraphs 4.14 to 4.20 is key to our concerns. Ofcom acknowledges that:

    i) it is unable to calculate an accurate limit;[31]

    ii) it is unable to define *a priori* whether any individual adjustment works order would fall within the scope of the PIA product[32] and that the case specifics are more important in determining whether the adjustment falls within the scope of the product;[33] and

    iii) there is a risk that PIA customers will request unnecessary adjustments because they do not face the full costs of network adjustments.[34]

110. For the avoidance of doubt, we do not see our proposals as conflicting with Ofcom's framework for financial limits. It is that the financial limits are a necessary but not sufficient condition. There are two other pieces of the jigsaw which need to be put in place:

    - first, a properly constituted reference offer (as we set out in paragraph 88 above) which specifies the scope and all rules and processes applicable to the new PIA service; and

    - second, the required additional business processes and control mechanisms which incentivise efficient behaviour by PIA customers - including appropriate incentives to control their own deployment costs and therefore the burden which is placed on Openreach, its non-PIA customers and consumers[35] to fund their capex requirements.

111. We note and support Ofcom's comment in footnote 91, where Ofcom explains that even where a network adjustment might fall within the scope of the category of jobs that Openreach is expected to fund, the financial limit may mean that the costs would be recovered from PIA customers upfront.

112. We agree with Ofcom's comment in footnote 93 that Openreach should have incentives to make efficient use of its existing capacity. In this regard Openreach already has extensive and hard incentives in place to control its infrastructure costs due to Ofcom imposed charge controls which cover the vast majority of the product portfolio including copper and Ethernet, and a new fibre charge control to be introduced from April 2018.

113. Additionally we note that if the limit set by Ofcom is too high it will be ineffectual and be highly unlikely to generate network efficiency. A limit which is set too high will mean that:

    - Openreach is more likely to be required to make excessive adjustments to its network. PIA customers with the ability to order free civils have no significant incentive to control costs or the number of adjustments they request, and as such are far more likely to generate cost and operational inefficiencies for Openreach than help minimise them.

    - Openreach will be exposed to high levels of uncontrollable costs driven by third parties, and this is not a financially rational approach or 'equivalent'. Without the types of budget controls we have outlined above, Openreach will be required to control its own overall costs to its budgeted levels based on typical/average costs and within existing charge controls, but external PIA customers would have

[31] DPA Pricing Consultation, 1 August 2017, paragraph 4.15

[32] Ibid, paragraph 4.16

[33] Ibid, paragraph 4.19

[34] Ibid, paragraph 4.13

[35] For example the budget process discussed above but also other controls may need to be considered carefully as part of the new reference offer and supporting business processes. An example might be the need to implement pre-adjustment surveys, and if suitable alternative routes are identified costs incurred to date charged to the CP.

no incentive to control costs within the limits set by Ofcom (i.e. which are currently proposed to be above the Openreach average level). Leaving aside the actual value of the limit, which we look at more closely below, using the limit as a control by itself is not mathematically robust if it is intended to reflect the typical or normal range of network adjustments experienced by Openreach. In our view that is why the budget and capital allocation process will need to reflect average or expected costs rather than being based on the above average Ofcom calculated limit.

114. We set out our comments on each stage of Ofcom's estimation of the financial limits below.

Analysis to inform an appropriate financial limit

115. In our view, Ofcom's supporting analysis for the financial limits calculation is incomplete. In particular:

i) Ofcom has not carried out a comprehensive review of the full range of possible tasks and their likely incidence which may be required to adjust the duct network.

ii) Ofcom does not take account of the full complexity of operations and health and safety (H&S) regulation which apply to the overhead network.

iii) Ofcom's calculations take no account of the likely control mechanisms that will be required as part of the reference offer to prevent misapplication of the financial limit rule – broadly all adjustments are of a certain type are deemed to be necessary.

116. We review each element of Ofcom's calculation below.

Ofcom's financial limit calculation

Repair of blocked or damaged duct (excluding ducted lead-ins)

117. We agree that based on the actuals data provided to Ofcom, there are between one and two blockages per kilometre after the extreme outlier is removed.

118. Ofcom's calculation assumes a rate of £490 per blockage based on an average of the charge for a first and subsequent blockage. Please note we assess this over a duct section (rather than having a lower charge for subsequent blockages over an entire order). We believe that this assumption appears to be materially reasonable but believe that a more accurate assessment could be made by using actual data rather than assumptions.

Addressing insufficient capacity up to the distribution point

119. We note and agree with Ofcom's assumption of a medium footway box as the basis of the calculation and that the price is taken from the PIA product price list. However as set below we believe the resulting threshold has been calculated inappropriately.

120. Ofcom's calculation assumes that between 0.5 and 1 new joint box is required per kilometre of network deployment based on a modelling assumption used by Openreach. However whether this is a reasonable assumption may depend on other factors. Our initial view is that this is not representative of PIA customer's requirements. Over the past year for over [✂] kilometres of PIA duct usage and reservation we have had [✂] requests to date.[36] This leads to an average of approximately [✂] footway boxes being required per kilometre.

121. If the same footway box specification and cost is used but a range of [✂] to [✂] boxes per kilometre is assumed this would reduce this element of the estimated financial limit from £1,350 per kilometre, the average used in the Ofcom calculation, to less than £30 per kilometre (the average of the range [✂] to

[36] Openreach manages and installs all requests from PIA customers for new joint boxes which are laid over Openreach duct.

[✂] boxes per kilometre.) This demonstrates how sensitive the financial limit calculation is to the use of such assumptions.

122. We would agree that our illustration is based on a small sample, but it has the major benefit of being based on actual PIA data. A calculation which pays due regard to actuals is also far less likely to distort the appropriate level for the threshold and consequential CP behaviours. The huge discrepancy between the Ofcom assumptions and the actuals also potentially points to other implicit issues with Ofcom's assumptions i.e. (i) when is a network adjustment a necessary requirement for a PIA customer, and (ii) how do the assumptions take account of Openreach's need to operate its infrastructure to provide multiple commercial, regulated and publically funded services across copper, fibre and business markets. This means therefore that any PIA adjustment request will need to be assessed against Openreach's wider requirements and responsibilities (e.g. can the box be constructed in the location requested by the customer). The new reference offer and supporting business processes will need to deal with these types of detailed issues.

Addressing insufficient capacity in underground leads-ins: new footway boxes

123. We agree with Ofcom's conclusion that Openreach should not be required to relieve congestion where premises are served by lead-ins which are directly buried or installed in ducts which are too small to accommodate an additional cable. We agree that such adjustments would be classified as category C adjustments and excluded from the financial limit calculation.

124. We have previously set out our position with regard to Ofcom's proposals in its April consultation for Openreach to fund and install new footway boxes[37] outside premises with directly buried or congested lead-ins. We disagreed with the necessary of such adjustments and noted the potential for disproportionate levels of costs being incurred by Openreach.

125. With regard to this consultation we have focussed our response on the assumptions that Ofcom uses in its calculation to estimate the financial limits for the network adjustments obligation. In this respect and in this consultation Ofcom sets out its logic in paragraphs 4.29 to 4.32 that footway box capacity may be expected to be an issue where new fibre lead-ins are installed creating 'pinch points' in the network.

126. In the first instance, and if this scenario was to occur, we would not agree that any requested adjustment is definitively a category A adjustment. In these circumstances, there is no fundamental fault with the existing Openreach infrastructure design or capacity rather the need to build new infrastructure is being driven by a PIA customers choice of network architecture and technology. Arguably this is a highly inefficient choice if substantial levels of new infrastructure build is required.[38]

127. However, focussing in on Ofcom's calculation of this element of the financial limit, our view is that the requirement to build new joint boxes in the way that Ofcom describes in paragraphs 4.29 to 4.32 (and in Figure 4.1) is likely to be very rare and certainly not of the frequency assumed by Ofcom for the estimate of the financial limits.

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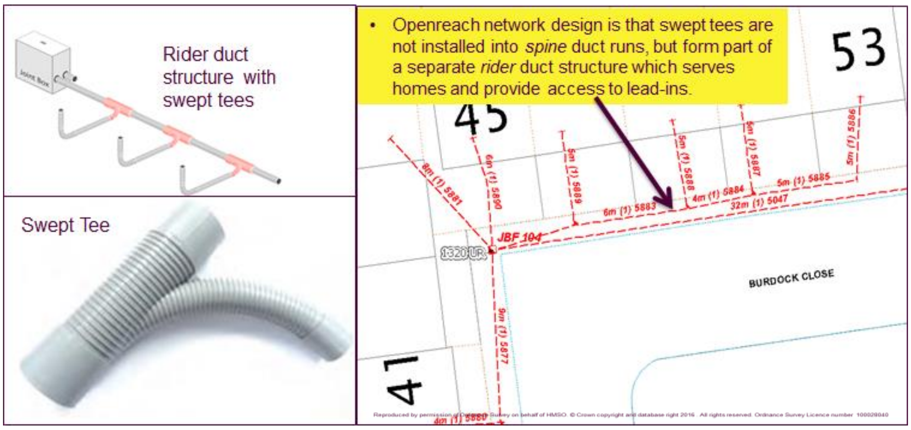
[37] In paragraphs 137 and 281 of our response to the April 2017 DPA consultation we set out that this could be extremely costly if required in large volumes (in the context of Ofcom's statements regarding directly buried and congested lead-ins). The cost, time and resource to deploy new joint boxes in those scenarios could be vastly disproportionate compared to the number of customers served by the PIA customer. The disparity in terms of the share of investment costs to serve the premises could also be vastly disproportionate. A new directly buried cable (or lead-in) for a premise might be measured in tens of pounds whereas joint box construction could be hundreds/thousands of pounds by comparison. In these circumstances Openreach's network footprint and design capacity is fully utilised and the CP is requesting Openreach to build it a new infrastructure component which is not required by Openreach or its non-PIA customers. PIA CPs would also have options for other design decisions which would not require new boxes to be constructed and can already break in and out of existing Openreach joint boxes with their own duct thereby connect their new lead-ins to the Openreach network. We would also argue this is new infrastructure which is driven by a PIA customer's choice of which premises to serve and with which technology to serve them. A new joint box would not be required if the PIA customer chose a suitable and efficient technology for the circumstances (e.g. G.fast) which would not necessitate additional infrastructure to be constructed. In this scenario Openreach's network footprint and design capacity has been fully utilised and the CP is requesting Openreach to build it a new infrastructure component.

[38] Ofcom discusses some related points in its April 2017 consultation. See, for example, footnotes 66 and 207.

128. The Openreach network is not typically designed in the way that Ofcom portrays in Figure 4.1. Please see Figure 1 below which illustrates the standard Openreach topology. This layout is typical of that on a new housing development. Premises in older suburban areas are likely to be underground fed with overhead distribution, underground duct fed with buried lead-ins or all buried.

Figure 1



129. Premises which utilise swept tees to provide service are linked to a parallel ‘rider’ duct (shown by the arrow in Figure 1). The rider duct is linked to the main spine duct by a junction box. Typically these ducts would comprise circa 50mm diameter duct for the lead-in and 100mm for the rider and spine. We consider the likelihood of significant congestion in these scenarios to be very low, and hence the probability that it would result in a requirement for a new joint box also to be very low.

130. If we have understood Ofcom’s estimate correctly, Ofcom’s calculation assumes that for every 6.2 premises in the UK served by underground network, Openreach will need to construct on average half a footway box, or perhaps this more easily stated as one new box to be constructed for every 12 premises served by underground network in the UK.

131. We would agree that the estimate of new boxes likely to be required is necessarily greater than zero per underground network DP, but it will be nowhere near an average of 0.5. As an illustration, if it was closer to 0.1 then that would reduce Ofcom’s limits by more than £800 per kilometre, a material correction. However as we have previously noted in this response the average actual PIA requirement may be materially less than this (i.e. of the order of [✂] per kilometre) given recent PIA experience. Therefore we consider Ofcom’s estimate of £17 per premise passed (or circa £1,100 per kilometre) to be significantly overstated and as a result consider Ofcom’s proposals to be unjustified and disproportionate.

132. We also note for the record that we estimate this to equate to a theoretical obligation of approaching [✂] pounds of new construction costs[39] which is being incorrectly built into the financial limits estimate.

133. In the limited time available to respond to the consultation, we have reviewed Ofcom’s more detailed assumptions and would be pleased to discuss further with Ofcom,[40] but we consider the point discussed above materially affects the validity of the Ofcom estimate in its own right.

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39 [✂].

40 We agree that a small footway box is a reasonable base assumption at approximately £880. We note Ofcom’s use of the assumption of 6.2 homes per distribution point. The calculation of the threshold will be sensitive to this assumption and further review is required. Assumptions related to 24% of premises having a ducted underground lead in, number of underground lead-ins at 7.6 million, underground distribution points at 1.2 million, direct buried lead-ins at 11% of underground lead-ins and 28m premises nationally should all be reviewed.

134. Finally, it is also our firm view that a PIA customer deciding to utilise ducted lead-ins and swept tees to serve premises would follow a similar design to us, as it is the most cost effective deployment method i.e. they would construct a rider duct with swept tees rather than the architecture illustrated in Ofcom's Figure 4.1 which shows swept tees serving premises from a spine duct.

Addressing insufficient capacity in underground leads-ins: new chambers for passive components

135. Ofcom sets out its assumptions in paragraphs 4.33 to 4.36 for the element in the financial limits calculation which is related to additional capacity being required for passive network components.

136. As Ofcom has acknowledged, "even for category A adjustments, ultimately whether or not they fall within the scope of PIA will depend on the specific facts". Hence as part of the development of the reference offer, rules for the use and adjustment of chambers will need to be specified and implemented. Certainly the expectation would be that in any particular deployment scenario the PIA customer would be required to minimise the exposure of Openreach to unnecessary and additional costs. The reference offer processes by which PIA customers can order additional chamber capacity will need to be developed with this in mind. For example, PIA customers would be able to help to minimise costs by utilising different planning options and using the smallest and most efficient network components.

137. Our view of the most likely options that would actually be used should a PIA customer require additional chamber space to deploy distribution equipment are as follows:

- Re-locate to another joint box – most likely and preferred. A GPON's technical capabilities are very flexible and offer far more design and architectural options than for a copper network. Components can be located much further away from the served premises and network nodes for example. Therefore this scenario would not contribute to the financial limit calculation.

- Demolish and re-build an enlarged joint box - however this is not always possible due to other services, for example gas, electric and water, particularly on housing estates where the service strip is only as wide as the footpath. We note that there is no fault or pinch point in the Openreach network in this case, it is simply that the design capacity of the box has been fully utilised. Arguably this scenario would only contribute to the financial limit calculation to the extent that such an adjustment is justified and is beneficial and usable by Openreach (i.e. in line with reference offer rules).

- Build a new and adjacent joint box and link the two – this is an extension of the Openreach footprint and would classify as new infrastructure not an adjustment to existing Openreach infrastructure. Should a PIA customer want to break into the Openreach network then this is permitted by the PIA product. In this scenario the PIA customer is requesting Openreach to build it a new infrastructure component for its use. Therefore this scenario would not contribute to the financial limit calculation.

138. The options outlined above suggest that PIA customers are very likely to use alternative deployment options than request adjustments to Openreach's infrastructure. We also note that Ofcom has not used Openreach's current version (V13) of its 'Modelling Rules & Costs' which sets out a 'Connectorised single split FTTP design', and not the 'Blown Fibre Dual Spilt' design cited by Ofcom in the consultation. This raises a further question on the validity of Ofcom's estimate i.e. basing a binding SMP condition on Openreach which may have significant financial implications on the basis of an out of date network design document cannot be justified. We note for the record that Ofcom's calculation of £8.40 per premise passed according to Ofcom's own estimates sets a theoretical exposure of an additional £[✂] pounds of additional capex for Openreach.

139. Therefore we find Ofcom's assumptions in respect of this element of the calculation to be overstated. They may be a starting point for estimating a potential financial impact on Openreach but are not sufficiently robust to use for the financial limit calculation. Further, Openreach has already considered many of these deployment challenges as part of its future network plans, and has a large scale ultrafast deployment programme in place. Openreach's investment programmes build on significant innovation in the standards and equipment being used and the mix of technology (G.fast or FTTP) is selected on the basis of optimising coverage, cost and performance and efficient use of physical infrastructure.

140. In this respect, we consider it would be disproportionate and unjustified for a PIA customer to expose Openreach to substantial cash costs and resource impacts with requirements for large scale infrastructure construction without due regard to normal commercial and efficiency considerations. As they stand Openreach's ultrafast deployments already represent a highly challenging business case, and it is very important that Ofcom does not tilt the playing field to such an extent that they become non-viable operationally or financially.

Ofcom's conversion of per premises passed based costs to a per kilometre cost

141. In this section we briefly raise concerns in relation to the conversion of the per premise passed costs into per kilometre costs. We note some discrepancies that we have noticed in the translation process with Openreach actual deployment data, and also possible misalignment of the limits with the activities they are intended to control. However, we refer Ofcom to the points we have already made in paragraphs 115 et seq. above which we believe are likely to be more significant and indicate that the base adjustment costs are materially overstated in the first instance.

142. Ofcom has chosen to convert the per premise passed costs it has estimated for the financial limit calculation into per kilometre limits. We see a strong case for Ofcom keeping the limits separate as a per kilometre threshold for the access network and a per premise threshold for the final distribution elements. The potential benefits to this approach are:

- The appropriate thresholds will be matched against the activities they are intended to control. For example a PIA customer may place an order for a network adjustment in the access network, but later place a separate order to a particular residential street once potential demand is more certain. The first order could be controlled by the appropriate per kilometre limits, while the second order could be controlled by per premise type limits matching the likely network adjustment activities required by the different orders.

- The financial limits calculation is less likely to be distorted by assumptions related to the length of duct required per premise passed. In the limited time available to respond to the consultation we have made an assessment of the reasonableness of the overall financial limits proposed by Ofcom (which we explain further below) and we believe that Ofcom's conversion process may contribute an additional discrepancy which puts the financial limit estimation further out of line with our analysis of actual costs incurred. However we have not fully bottomed out the issue at this time.

- Broadly the potential difference arises as Ofcom take the per premise passed costs related to additional footway boxes and chambers in paragraphs 4.32 and 4.36 and convert them into a per kilometre charge on the grounds that there is an average of 16 metres of duct used per premise passed. This does not agree with Openreach's estimate of likely average duct use to serve a premise via the underground network which we estimate to be [✂] to [✂] metres per premises passed depending on the building density (ranging from [✂] metres per premise passed in urban areas to [✂] metres in rural areas).

- Our understanding of Ofcom's calculation is that it is based on an estimate of the total length of duct in the UK at 451,000km divided by the number of premises in the UK at 28 million, which results in an average of 16 metres of duct per premise passed. For illustration we note that a different 'average' figure can be obtained by using 451,000km divided by 6.8 million homes served by ducted lead-ins. This gives a figure of circa 68 metres of duct per home served by the duct network. We also note that in Ofcom's estimate, premises served by overhead network would not incur the per premises costs cited by Ofcom and that none of the per premises costs would flex with an increased average length of duct used to pass a premise (i.e. the unit cost would be lower the higher the average duct requirement).

- We estimate that if Openreach average values are used then the translation of the 'per premise' element of the threshold in a per km value would reduce significantly by over 50% (from c.£1,600 to c.£ [✂]).

- Finally although we do think that maintaining the separation of the limits into the relevant per premises and per kilometre elements may be the technically superior approach we do recognise the practical challenges. Such a system could become very complex to track, as orders would need to be split into “spine” and “final drop” elements. Additionally this would need to be taken into account in the development of the new PIA product reference offer that Ofcom proposes to be developed during 2018.

Ofcom’s 50% uplift of modelling estimates

143. Up to this point in Ofcom’s base calculation, the threshold limits are largely based on an assessment of the likely incidence of the network adjustment tasks listed in paragraphs 4.23 to 4.36 of the consultation. Ofcom then explains in paragraph 4.45 that to allow for a distribution of costs they use ‘regulatory judgement’ to increase the cost calculation by an additional 50% across all the tasks included in the base estimate. Whereas a specific 50% mark-up on a particular task type might be supportable with specific data, Ofcom offers no argument as to why it is a reasonable judgement to apply across the board. Certainly some of the items in the estimate would not be obvious candidates to flex in this way at all (e.g. the per premise costs), and others may have already been vastly overstated in the base case in the first place (e.g. new footway boxes).

144. Ofcom notes that the 50% mark-up is based on an analysis of the distribution of Openreach costs. However we would expect Ofcom to present their analysis for each task used within the threshold limit as the distribution and variation for each item will not be uniform across the board. Without further detail from Ofcom it is not possible to understand if their proposal is valid but our initial view is that it is not. From the information provided, we can only conclude that the proposed 50% increase assumption is far too simplistic and risks setting an unreasonably high threshold which would allow for an inefficient level of adjustment requests and would potentially stimulate inefficient network build.

145. Ofcom’s intention that the mark-up should cover a range of costs above the average is understood. Ofcom suggests that an increase in the average network adjustment costs of 50% would be appropriate for “typical or normal costs”.[41] However there is no discussion or proposal of how the overall expenditure can be controlled from being excessive and hence prevented from driving up average Openreach costs towards the limit rather than driving costs down to an efficient level (i.e. normal business practice). In order to control build costs in Openreach’s own deployments, any build in excess of [✂]% of the planned cost are referred back for re-approval based on the difference between planned and actual costs (and such differences may be significantly influenced by network adjustments). As Ofcom has used Openreach internal modelling assumptions to calculate the threshold, and if Ofcom remains wedded to the use of an uplift then it might be an appropriate and conservative approach to align with Openreach and use a [✂]% uplift assumption in the first instance, given there is no strong evidence to support a 50% uplift.

146. We find that the evidence offered in support of the 50% overall uplift is highly questionable, and as we have discussed previously in this response there are already very large questions over the validity of the base calculation in its own right. In addition to this, Ofcom already acknowledges that they do not know which tasks are likely to constitute the base case or their incidence.[42] Given this background, we cannot support the use of the methodology to set hard financial limits in an SMP condition which could have such a material impact on Openreach resources. There are better ways of making estimates of likely costs and we briefly discuss an approach based on actuals below which produces estimates significantly below Ofcom’s modelled calculation.

147. Ofcom has set out an approach which increases the uncertainty in the estimate by the addition of significant mark-ups and roundings to the calculation, when our view would be that a more cautious (and better evidenced) approach is more reasonable and proportionate in the first instance. It would be far

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[41] DPA Pricing Consultation, 1 August 2017, paragraph 4.45

[42] Ibid, paragraphs 4.15 and 4.16.

less damaging to all involved to set a reasonable starting point, and if necessary correct upwards over time, than have to redress out of control costs and unnecessary civils works in retrospect.

148. We also note for completeness that an approach which operated on an annual budgeted basis rather than fundamentally on an individual kilometre, route or order assessment would allow extra flexibility without necessarily driving up overall costs. It would also enable spend on some routes to be above the average whilst other routes would be below average – meaning that no 50% increase is required to allow build above the average to take place. CPs could submit their deployment plan for the year ahead, with total forecast network adjustments being set in line with expected or average costs. This would meet Ofcom's requirement to allow normal or typical variation on individual orders as long as costs were controlled overall. In any case should demand for PIA increase substantially it would be an operational and financial necessity. As the scale of PIA increased Openreach would not be able to deliver the requirements on a piecemeal route or order basis. We would need advance notice of the scale of deployment for the coming year in order to secure the capital funds for the network investment as well as backing off the necessary civil contractor and internal operational resources. This is in-line with how our own network deployments for NGA operate. It would simply not possible to resource network adjustments for hundreds of thousands of homes passed each year on an ad hoc basis, such upgrades would need to be planned geographically and significantly ahead of time.

Rounding up

149. Ofcom generally consults on a range which is above and below the base case position. This means that if assumptions change as part of the consultation process, the final answer is still likely to be within the range that has been consulted on.

150. In this case Ofcom has reached an average cost of around £3,700[43] and then set up upper range of £5,600 based on a 50% mark-up above the expected average. Ofcom then rounds up both these figures in order to set the consultation range of £4,000 to £6,000. This means the average Ofcom has itself calculated at £3,700 is already outside the consultation range. This strikes us as without precedent. The degree of rounding up is also striking at approximately 9% and entirely unjustified. This in itself exposes Openreach and its non-PIA customers to potentially millions of pounds of extra funding requirements.

151. We also cannot accept that Ofcom would be able to justify that an extra 9% rounding is required given the already highly speculative base case numbers and the excessive across the board 50% mark-up. All the evidence points to an inherent bias towards over-estimation within Ofcom's assumptions rather than a balance of under- and over-estimation. Given that these are new proposals, the effects are not yet fully understood and Ofcom's data by its own admission lacks 'precision', rounding down would seem a much more prudent step especially given the significant damage that could be done by overestimation. Ofcom has further increased the uncertainty in the estimate by the significant rounding up when a more cautious approach would have been more reasonable and proportionate in the first instance. As we noted above it is far less damaging to correct upwards over time, than have to redress out of control costs and unnecessary civils works in retrospect.

152. We cannot see any rationale set out by Ofcom to justify the rounding up of the ranges. Notwithstanding our arguments against the base calculations made above, the final network adjustment figures for this consultation should have been presented as £3,700 to £5,600.

Practical issues associated with the implementation a network adjustment threshold

153. While Ofcom has suggested there should be a threshold above which CPs would pay for network adjustments, more detail is required on how this would be practically implemented. It is not clear at this time how the limit would be applied in practice (e.g. how changes to an order would be managed, how disproportionately large excess charges would be managed, how limits would apply to very small orders etc). Ofcom's wording in the draft legal instrument (condition 7D.6) implies that the threshold is to be

[43] A figure of £3,668 is calculated when we re-create Ofcom's calculations, so in itself this figure of £3,700 is already rounded up.

applied to the total order (i.e. the total network adjustment cost applicable to the full order is compared to the £4-6k per kilometre limit multiplied by the total kilometres in the order). This raises questions about the ability of CPs to manipulate the per order cap in order to minimise PIA customer costs and maximise Openreach costs and this will need to be prevented. We have outlined one possible option in paragraph 148 above although other options may also be viable. We strongly urge Ofcom to amend Condition 7D.6 in order to incorporate additional safeguards and retain sufficient flexibility to amend and/or interpret its proposals following the conclusion of the reference offer process, and that its WLA Statement does not unnecessarily constrain legitimate negotiations as part of the reference offer process.

154. Fundamentally the proposal by Ofcom for uplifting the network does not align to the way the product is currently consumed. Orders are placed by route or area with any enablement/ancillary work being requested, as they are encountered, against a section/or sections of a route that has been reserved. In order to practically match network adjustment spend against the threshold, we see four options for implementing the network adjustments limit:

- Per Kilometre: PIA customers change their reservation ordering process for PIA to order by the kilometre – this is unlikely to be practical as PIA customers will invariably order part kilometres or multiple kilometres and their request is unlikely to ever end with an exact rounded kilometre request. The threshold could be pro-rated, but the threshold would be compared to the costs of each individual kilometre of route. This would be administratively onerous, allow each kilometre to be assessed against the threshold, which avoids the risk that average costs viewed across an order could undermine the per order cap, as discussed further below.

- Per Route: The cap could be based against a route that the CP requires, which has the simplicity of being aligned with how the product tends to be ordered today. As this is an end to end route that is required, there is less risk that a large order will result in the per order cap being undermined by a low average cost being compared against the threshold, as discussed below.

- Per Order: PIA customers change their ordering process for network enhancements – and place a number of blockages against a given number of kilometres of duct. This would potentially be more straightforward for Openreach as we could potentially schedule the work more effectively. The issue here would be how we define the given number of kilometres. Costs will vary (with geotype a significant driver of costs) and PIA customers may place orders in such a way that the limit is never exceeded by scattering orders geographically and distorting the average cost per kilometre, thereby maximising the level of network adjustments Openreach could need to fund. (For example, having surveyed routes, an order could be composed of routes with above average costs balanced with below average costs which would keep the average cost per kilometre for the order within the threshold, therefore undermining Ofcom's proposed per order cap.) Also, such a process would be unworkable if PIA customers sit on orders whilst they build up network adjustment requests and assess how the orders interact with their financial limits; or alternatively trigger adjustment orders piecemeal making tracking highly complex. The three options discussed so far will create an issue for a CP looking to deploy fibre build at scale with an understanding of costs in advance. Our experience is that CPs want to understand the costs of a discrete phase of their deployment before proceeding and committing spend. Calculating the threshold by kilometre, route or order is likely to see orders placed on hold until all remaining routes/orders in the deployment phase have all been calculated and assessed. This could delay network adjustments being built and backlog work into significant peaks.

- Per time period (quarter/year): Alternatively a more stable process might involve tracking the kilometres consumed by the PIA customer on a per quarter/per annum basis and also track the cost associated with the network adjustments. The cost per kilometre could then be calculated and the financial limits applied. As indicated earlier this may have some significant benefits if the limit is set correctly and is reflective of average or expected costs, rather than at a significant mark-up to Openreach cost levels. It could allow some flexibility by geography but without allowing costs to run out of control. PIA customers would need to track their own costs and agree any incremental costs/charges upfront. We believe a CP looking to make a large scale investment would find this method more workable. Where an approach like this is adopted, we believe it would be more appropriate to set the threshold closer to the expected average level of network adjustment costs (£4,000 in Ofcom's proposal) rather than above the average level (£6,000 in Ofcom's proposal) notwithstanding the fact we do not agree with these values. This is because when operated over a larger scale, a threshold set at average costs would still allow routes with above average costs to be built as lower than average cost routes would keep the total spend within threshold.

Review of overall level of proposed financial limit

155. We have set out above a detailed assessment of Ofcom's assumptions which feed into its financial limits calculations. We have found four significant problems as they stand:

i) The baseline costs in the proposal have been calculated incorrectly, because they are built up with an inaccurate 'shopping list' of tasks in the baseline estimate.

ii) The costs have been marked up in a way which further exacerbates the error, by taking the baseline costs and adding a poorly evidenced 50% mark-up which is also increased by Ofcom's rounding up of circa 9%.[44]

iii) Ofcom's intention that the mark-up should cover a range of costs above the average is understood but there is no discussion or proposal of how the overall expenditure can be controlled from being excessive and hence prevented from driving up average Openreach costs towards the limit rather than driving costs down to an efficient level (i.e. normal business practice).

iv) The limits as they are set out in this consultation do nothing to help resolve the issues of unnecessary network adjustment requests. Even with the use of limits, the correct contractual and procedural controls need to be put in place as part of the new reference offer development[45] so that unnecessary and invalid network adjustments are not ordered or progressed in the first place.[46]

156. All this leads to a conclusion that Ofcom's calculation significantly overstates what would be a reasonable estimate of a financial limit and is not fit for purpose. We believe the limit has been set too high. In addition to the comments made above on the specific assumptions made by Ofcom in its estimates, we have also tried to test the overall reasonableness of the threshold. We cross checked in three different ways:

- Firstly, after working through and adjusting Ofcom's calculations and methodology based on some of the points raised in the paragraph above, we reach a figure of £1,400.[47] This is significantly below the consultation range.

- Secondly, we have reviewed actual infrastructure costs incurred on the PIA product over the past year. Very broadly this results in a cost estimate between £[✂] and £[✂] per kilometre for an inventory of over [✂]km of duct being rented and reserved.[48] As we noted previously this is an

[44] As an indication of impact and using Ofcom's figures in paragraph 4.50, these adjustments could account for circa 40% or £[✂]m pounds of Openreach's estimated financial exposure, with a risk of significantly more if take up was higher.

[45] As we set out in Section 2 of our previous consultation response.

[46] Although Ofcom's financial limit, if imposed, may include an allowance for the cost of clearing a duct blockage that does not mean that any individual order for a blockage clearance is valid as suitable alternative routings may be available or the PIA customer may be able to deploy by an alternative method. Also as set out in our previous response Ofcom's proposals as currently framed, still appear to capture activities where the only beneficiary is the PIA purchaser, for example by effectively including a PIA customers fibre build/cable installation activities (e.g. trimming trees etc). In these cases there is no improved Openreach asset and PIA customers would be obtaining free fibre build at the expense of Openreach and its non-PIA customers.

[47] This adjusts for the number of joint boxes required to address insufficient capacity, the metres of duct per premise, and not rounding up or inflating by 50%.

[48] Note that this is based on costs incurred by Openreach and not any network adjustments that could have been undertaken directly by the CP, however this is expected to be low value.

estimate based on a moderate sample but it is highly indicative of Ofcom's consultation range being excessively high.

- Thirdly, in the time permitted for the consultation we have carried out a short analysis of analogous network adjustment costs for a major Openreach fibre programme. The key finding is that the average cost per kilometre was calculated at approximately £[✂]. This is significantly below Ofcom's consultation range. We recognise that we may not have mapped exactly to Ofcom's model, but again it is highly indicative of the Ofcom range being significantly overstated and therefore unjustified. The methodology we used is summarised below:
    - We extracted synthetic level cost data for the NGA Commercial programme in 14/15 and 15/16 (this is the third party cost rather than the charge on the PIA price list).
    - We validated with the Chief Information Officer's team the synthetics likely to be included under the umbrella of "network adjustments" – broadly speaking this included pole provision, constructing jointing chambers, clearing duct blockages and laying new duct. We note this is likely to result in a higher cost per km compared to Ofcom's model as it also includes pole provision, laying of new duct, joint boxes to allow connections to cabinets and tie cable duct between GEA cabinets and existing copper cabinets, which would not be relevant to PIA network adjustments.
    - We obtained the cabling metres logged for the programme and calculated an actual cost of network adjustment per kilometre.
    - Network adjustment costs from this exercise over the two years were £[✂]m and cabling km were [✂] so average cost per km was calculated at £[✂].
    - We are continuing to review the calculation and will need to add further adjustments which may raise costs, for example to reflect the sub-contractor price increases agreed when new contracts were signed at the start of 2017.

157. We believe Ofcom needs to reconsider its approach to its financial limits calculation. The evidence from a number of sources suggests that a significant revision will be required and that a reasonable limit is likely to fall below the range in the current consultation.

Review of Ofcom's proposals for Pole infrastructure

Addressing insufficient capacity for overhead lead-ins

Enabling capacity on poles

158. We do not believe Ofcom has carried out sufficient analysis on overhead lead-ins to reach a robust conclusion on the financial and operational exposure for Openreach arising from this consultation. This is a particularly important and serious omission in the light of its proposals that the overhead obligations on Openreach should be 'without limitation'.[49] As a result, we consider Ofcom has failed to take proper account of the appropriate considerations and/or not taken into account or disregarded relevant considerations. Accordingly, we consider Ofcom's analysis to be materially flawed in a number of areas such that had the appropriate considerations been taken into account, Ofcom would almost certainly have reached a different conclusion.

159. On this basis, we request that Ofcom gives further consideration to how best to place reasonable limits on the obligations related to overhead networks; and to support Openreach's development of a new PIA

[49] DPA Pricing Consultation, 1 August 2017, paragraph 4.39

reference offer and supporting business processes that enables us to exert reasonable financial and budgetary controls over such obligations.

160. Openreach has already considered many of these overhead deployment challenges as part of its future network plans, and has a large scale ultrafast deployment programme in place. Openreach's investment programmes build on significant innovation in the standards and equipment being used and the mix of technology (G.fast or FTTP) is selected on the basis of optimising coverage, cost and performance and efficient use of physical infrastructure. Therefore we would consider it disproportionate and unjustified for a PIA customer to expose Openreach to substantial cash costs and resource impacts due to large scale overhead infrastructure construction without due regard to normal commercial practice and efficiency considerations.

161. As we have noted in our previous submissions, the assessment of available capacity on a pole is a much more complex task than for a duct, in particular:

- Due to the requirement to assess pole space issues, drop wire loadings and radial distribution of loadings amongst a variety of other factors.
- There are also significant health and safety issues associated with overhead plant, both when working on it and from in-life ownership. Openreach operates large scale pole testing and replacement programmes to maintain employee and public safety and ensure its compliance with H&S law.
- There are many different classifications and functions of poles (including distribution and carrier, climbable, unclimbable, defective etc).
- There are many different ways of creating space or strengthening poles (including drop wire replacement/rearrangement, equipment rearrangement, adding stays etc).
- There may also be significant impacts on the pole survey process given Ofcom's proposal that Openreach is required to assess and enable pole capacity where viable. In these cases, Openreach may need to survey the pole to understand any reasonable/cost justifiable options which may be available to provide capacity relief.
- These complexities are compounded when a pole requires work to be carried out that needs co-ordination across multiple CPs representing all the end users affected by that pole due to end customer service impacts.

162. Ofcom's consultation does not factor in any of this complexity into the assessment of its financial and operation impact or the proposed legal instrument. Similarly to Ofcom's modelled estimate of the network adjustment limit of £4-6k, Ofcom's 'shopping list' of pole adjustment tasks has not been properly considered and do not address the potential negative impact on Openreach.

163. Ofcom's estimate of the financial and operational liabilities associated with its proposed PIA Pole Adjustment Service obligation appears to bear little similarity to what may actually be possible or required by the industry. The estimate of the scale of the obligation and the proposed Openreach obligations centres on two example activities neither of which we think are robust examples. Ofcom discusses the replacement of (A) unclimbable poles in paragraph 4.37 and (B) pole capacity in paragraph 4.38.

A. Unclimbable Poles

164. Openreach has many poles which are not climbable but are safe to use (e.g. when accessed by a platform or cherry picker). Such poles may have the required capacity (drop wire and/or equipment space) but both Openreach and PIA customers need to access the pole using the correct specialist equipment. Therefore there is no need for a costly and disproportionate requirement to make such a pole climbable. In the context of Ofcom's proposals in this consultation we note that the vast majority of unclimbable poles, even when marked as defective, are usable by Openreach and PIA customers. We

also note that the majority of poles marked as defective are usable and many are even climbable. The key issue is whether a pole is usable.

165. In any case, Openreach already manages the whole area of pole safety and usability. We have a pro-active ongoing Pole Testing programme through which we assess and identify poles to be added to our Pole Replacement programme (if required). Openreach's Pole Replacement programme replaces poles according to H&S risk assessments by deploying pole replacement gangs in a co-ordinated and efficient way, typically on area by area basis, not pole by pole (unless there is imminent danger).

166. Therefore we are very concerned with the proposals as they stand in relation to 'unclimbable' poles in paragraph 4.37 of the consultation. As we note above the vast majority of such poles are usable by Openreach and CPs and therefore it is not necessary to replace them as proposed in the consultation and the legal instrument at condition 7D.5 (b), and in fact this would be an inefficient use of capital investment. We suggest that any SMP obligation is linked to unusable poles rather than defective poles and have suggested an alternative definition in Section 4 below.

B. Pole Capacity

167. Ofcom's discussion of pole capacity in the consultation and as referenced in the legal instrument at condition 7D.5 is incomplete and inaccurate. In our view Ofcom incorrectly assess the pole capacity issue in a number of ways:

- Available pole capacity is function of what is being attached to a pole (for example adding drop wires and/or equipment) and hence may be influenced by the number of drop wires attached to a pole, the radial distribution of such wires and/or the location and extent of equipment located on the pole. However, Ofcom only discusses drop wires in the consultation. All consideration of the operational and potential financial impacts of other possible scenarios are omitted from the consultation.

- We also note Ofcom's acknowledgement in its April consultation[50] that its dropwire proposals represented "a new form of network access". The example scenario that Ofcom set out in this consultation for swapping out a drop wire does not represent access to existing Openreach duct or pole infrastructure but rather forms part of the construction of a new FTTP network. As such the service is not Duct and Pole Access and does not represent part of the Openreach Physical Infrastructure Access portfolio.

- Ofcom assumes that the costs associated with replacing a drop wire in the context of a PIA service are similar to a simple drop wire replacement task. This is not the case given the likely end-customer service impact and its required coordination with the PIA customers order journey. We think Ofcom understates the survey, planning, and coordination costs associated with its proposed solution (i.e. Openreach replacement of drop wires). We would also note that there are no agreed standards at this time for what cable specification would replace the Openreach dropwire or how the process would interface with the PIA customer's end customer connection process.

- This leads to a further layer of detail. A PIA customer will deploy its network as close to a customer premise as possible and wait for an order before they provision the 'final drop'. These orders could take a number of months or even years to materialise, and there will also be customer churn between CPs during this time. Given end customer expectations of lead times to provide a new broadband connection are measured in days, a process where a CP comes across a congested pole and then requires Openreach to provide relief look challenging if the aim is to produce a good quality end customer experience.

- We consider that in some scenarios (perhaps the majority) the task of swapping out a drop wire (if required) may be more efficiently carried out by PIA customers as part of their installation. This would resolve many of the order journey issues. In this scenario a PIA customer may want the Openreach

[50] DPA Pricing Consultation, 1 August 2017, paragraph 5.71.

dropwire to still be in place when it installs its new connection so that it can pull the new fibre cable into position using the Openreach wire and facilitate immediate connection of its customer. In this case it would make little sense that the work is either carried out or funded by Openreach and hence Ofcom's assignment of responsibilities and consequential estimate of costs looks incorrect.

168. With regard to the situation where there is insufficient pole capacity for equipment or dropwire capacity, there is a hierarchy of actions which it may be reasonable for Openreach to carry out (e.g. rearrangement of pole top equipment, removing pole steps etc.) to facilitate or free up capacity. However the devil is in the detail – for example:

- A pole may be able to be uplifted to provide space for a PIA customer's block (e.g. by using a new block and tail to rationalise the number of blocks at the pole top) and this may be a reasonable option to free up existing capacity. However, if pole space was available for the PIA customers block terminal then it would seem reasonable that dropwires be replaced on a one for one basis by the PIA customer (as discussed above) and under their control as consumers move from an existing CP provider to the PIA customers service.

- In another scenario the solution may be significantly more complex involving the requirement for an Openreach survey of the site, followed by a requirement to plan the re-engineering of the overhead infrastructure in that location, followed by site visits by Openreach engineers and/or contractors to carry out the adjustment, and potentially if any service interruption was anticipated then the work would need to be co-ordinated with multiple retail CPs communicating with their end-customers at that site. Clearly this type of adjustment would need to be reviewed in great detail before any agreement to progress would be made.

- In another example a pole may have no spare capacity for equipment because it is full and there is no way to rearrange to free up existing capacity.[51] Where the only option to create capacity is the building of new infrastructure (e.g. additional poles and DPs) then such a request would stray beyond facilitating the use of Openreach existing physical infrastructure, and this would be an example of where a PIA customer would need to build and fund the new infrastructure it requires. The PIA customer can much more straightforwardly add and fund its own new pole infrastructure as required and in line with its business case and forecast demand in that location than Openreach.

Summary of pole related issues

169. These few simple examples illustrate the range of complex activities and solutions that may be required when working with overhead plant. Therefore it is our strong view that such detailed operational issues need to be reviewed very carefully before firm conclusions can be drawn as Ofcom appear to have done in this consultation. We propose that these issues are taken forward into the industry group as part of the reference offer development, where a full analysis of new processes, potential risks and responsibilities and health and safety implications can be examined in detail. As a result, we strongly urge Ofcom to limit the amount and type of information relating to PIA Pole Adjustment Services which are the subject of an SMP obligation when the WLA Statement comes into force. It is important that Ofcom retains sufficient flexibility to amend and/or interpret its proposals following the conclusion of the reference offer process, and that its WLA Statement does not unnecessarily constrain legitimate negotiations as part of the reference offer process.

170. We are willing to consider pragmatic and efficient options, but such options should not expose Openreach and its non-PIA customers to unreasonable and uncontrollable costs and/or unrealistic and disproportionate SLA/SLG arrangements, or any detrimental impact to end-user services. We support the idea that Openreach should have the flexibility to decide on the best way to provide overhead lead in capacity if viable (subject to relevant financial controls and cost benefit analysis).

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[51] As opposed to a situation where a pole may be at capacity due to mechanical loading of drop wires, which might be resolvable by either a PIA customer or Openreach removing a drop wire.

171. All processes and responsibilities related to pole capacity surveying and relief will have to be worked through in detail to ensure that (i) any pole adjustment order can be verified as necessary, that (ii) they are beneficial and cost justified adjustments to existing Openreach assets, that (iii) Openreach resources are not used inefficiently and (iv) that impact to other service providers services are understood. As things stand Ofcom's proposals have not taken these complexities into account in regard of the legal instrument or in its impact assessment.

172. We have not critiqued Ofcom's calculations and associated assumptions with regard to Openreach's financial exposure to pole adjustments in detail, because as stated we believe them to be based on inaccurate and incomplete scenarios. As we noted previously, it would be appropriate that all fundamental assumptions regarding network and financial statistics are cross-checked prior to any final statement, and we would be happy to support Ofcom on such matters.

Question 4.2 – Ancillary charges

Question 4.2: Do you agree with our proposals for ancillary charges? Please provide reasons and evidence in support of your views.

Exclusions from the setting of the threshold

173. In paragraph 4.53 Ofcom states that costs should not be included within the calculation of network adjustments for comparison with the threshold where it relates to (i) capacity for overhead lead ins or (ii) unclimbable poles. We disagree with this position, and have explained this fully in the response to question 4.1 above.

Self Provision

174. We note that in paragraph 4.56 Ofcom suggests industry work together to determine the recharge of self provision to Openreach. We will work with industry as part of setting the reference offer to agree the rates payable to telecoms providers for completing network adjustments themselves. Until we have further progressed this debate we do not intend to comment here on the appropriate rates to use for this. However we can see that it would not be appropriate to re-imburse a CP more than the charges for network adjustments on the Openreach price list, as this could encourage CPs to undertake work less efficiently or at a higher rate than if Openreach had completed the work directly. Further, Openreach may be able to propose an alternative route which would result in a lower build cost. CPs should not have a 'blank cheque' to fund network build at rates higher than Openreach would incur. This may mean that the process will need a step where Openreach signs off the spend before a CP can proceed with the work.

Productisation related ancillaries

175. Ofcom has proposed that a number of items within the ancillary price list today should not be charged going forward. We agree that the overhead network data report is a service that should not be required moving forward with the Openreach PIA Digital Map Tool in place. We also agree that it could be reasonable not to raise the admin charge for joint box break through once the new product and processes have been agreed in the reference offer as it may not be required in the future. However to remove any items from the price list in advance of the new reference offer seems to us to be premature.

176. Route plan provision, network records admin and technical validation are all activities that we envisage will be required in the future. However these will be influenced by the extent of the development of the current system (NGWFMT) development, plus the potential development of a fully automated solution whereby reservations can be secured on PIPeR via the PIA map tool. We are surprised that Ofcom can be sure that they have set the charge controls across the WLA at the correct level to recover these 'productisation' costs, given that the discussions on the product reference offer and associated system development has yet to begin. Given this uncertainty, we believe it would be more appropriate to continue charging for these items as incurred, until the final reference offer is agreed. At this point the validity, and

expected volume, of these items going forward will be better understood and an alternative pricing approach can be agreed if needed.

Basis of Charges approach for ancillary items

177. We agree with Ofcom that the ancillary charges should remain under a cost orientation pricing basis. We note that we have provided Ofcom with the basis of calculating the current prices, and given that Ofcom has not proposed any price changes we take this as agreement on our current prices and pricing approach.

178. The key items, related to duct build and clearance, are driven by Openreach's contracts with civil contractors, and we therefore already have an incentive to keep these as low as possible as they underpin our general network build and maintenance cost base.

179. We note that if SLGs are added to PIA then this is highly likely to need to be negotiated into contracts Openreach has with contractors who deliver network adjustments. This will increase the costs charged to Openreach and passed on either directly to PIA CPs, or indirectly in the prices of SMP products.

180. Where items are reasonably required for the provision of PIA, we agree that a basis of charges obligation is suitable for the ancillary items. Where items are optional and not reasonably required, we believe that price regulation should not be applied. Maintaining the linkage of PIA ancillary prices to costs will ensure the right economic signals are given to the market.

Systems

181. These are changes we have carried out to improve the customer order journey absent of explicit regulation by Ofcom. We continue to invest in developments, and do not therefore believe it is objectively justifiable and proportionate for Ofcom to introduce further regulation in this area. In this regard, we welcome Ofcom's overall approach on future systems developments, namely that they should be taken forward by industry and Openreach through the Passive Industry Working Group. Systems developments can then be aligned with CPs priorities and in parallel with the development of the reference offer. Investments in systems will need to be proportionate to the scale of actual demand and the efficiencies achieved. Therefore, any proposals made by CPs and/or contained in the Mott MacDonald report will need to be carefully considered and prioritised with CPs and in-line with known/committed demand. We included some initial comments on the recent Mott MacDonald report at Annex B of our April consultation.

182. We made points on the validity of the proposed approach to the recovery of network adjustment costs in our April consultation:

- We appreciate that as PIA becomes a more established product it could be treated as with any other SMP product in terms of picking up allocations of system development spend and SG&A costs as other products do. However Ofcom should note:

- This may not lead to a reduction in SG&A costs for PIA given that the current staffing assumed is modest, particularly in relation to the expanded product line activity required to execute the proposals in this consultation.

- This principle should work symmetrically. Therefore PIA should pick up an allocation of all system development costs that are allocated to SMP products.

- Where a development cost is specific only to PIA we believe it should only be recovered against PIA. For example, the spend of circa £[✂]m on digital maps is specific to PIA. Planners do not access the system for Openreach product planning, and it is not reasonable for this spend to be spread across other products.

183. With further points on the mechanics of recovery:

- We consider the extent to which other products and non-PIA CPs will benefit from development of the system/planning tools for PIA to be highly debateable.

- We note Ofcom's acknowledgement of the costs we have already incurred to date to set up the PIA service and to operate it for the past five years. An objectively justified and proportionate remedy should ensure that such costs incurred by Openreach can be fully recovered through its charges.

- Given the small scale of the existing PIA product, we are already incentivised to deliver efficient systems developments (e.g. the new systems have been built on the back of the existing ID system minimising development costs).

- As noted previously, we have no objection to considering further developments as long as they are justified and proportionate and that CPs have shown evidence of using the new enhanced systems and processes at scale.

- We agree with Ofcom's proposal that PIA digital map developments are already in progress and should be managed through the Passives Infrastructure Working Group.

- We also strongly disagree with Ofcom's position on the treatment of PIA SG&A costs.

- When making systems development decisions for its own operational purposes Openreach has to assess the full costs, benefits, resource implications and priority of any investment decision and face the full up-front costs of the investment. In Ofcom's proposal, CPs have no incentive to be efficient or reasonable in their requirements.

- Openreach does not believe the costs of processing a PIA order should be recovered across all orders for all products and do not consider Ofcom's proposal to be objectively justified and proportionate. We also note that Article 13(2) of the Access Directive requires that any cost recovery mechanism must serve to promote efficiency and competition and maximise consumer benefits.

- As set out in Section 2 above, we have serious concerns about Ofcom's proposals to prevent Openreach charging in line with cost causation principles and the incentives this creates to promote inefficient and unsustainable market entry with no widespread customer benefits.

184. In the light of Ofcom's proposals and to the extent that costs are currently being recovered in charges, and Ofcom removes those elements, we would expect to be able to fully recover the costs elsewhere and for such mechanisms to be given due consideration in this pricing consultation.

Question 5.1 – Regulatory Financial Reporting

Question 5.1: Do you agree with our proposals for BT's regulatory financial reporting in relation to PIA services? Please provide reasons and evidence in support of your views.

Introduction

185. We set out below in detail our views on Ofcom's proposals for regulatory financial reporting in relation to PIA, including our reasons and evidence in support of our views. Notwithstanding the fact we do not agree with Ofcom's proposed remedies on cost recovery (as set out above), our response to Ofcom's proposals for regulatory reporting assumes Ofcom's other proposals will be imposed.

186. Ofcom's proposals relating to specific regulatory financial reporting requirements to support the proposed PIA remedy, are set out in section 5 of the PIA Consultation. In particular, Ofcom proposes the following, "[to] ensure that the RFS is consistent with [its] regulatory policy:[52]

   a. Network adjustments below the financial limit are separately identified and recorded from those above the financial limit in BT's Regulatory Financial Reporting system.

   b. Network adjustments below the financial limit (including those in relation to supporting BT's own downstream services such as FTTP and G.fast beyond the cabinet) are capitalised within the existing asset base and recovered over all products in which BT has SMP in the WLA market and which use BT's physical infrastructure (including PIA).

   c. Network adjustment costs that exceed the financial limit will be recovered directly from the customer requesting the network adjustment. In the case of other telecoms providers using PIA these should be recovered through ancillary charges. In the case of BT's own downstream services these should be recovered from unregulated products and services.

   d. BT must ensure that the costs are recovered over PIA and other WLA products on the same basis that we set the charge control, as set out in paragraph 7.60 of the April 2017 DPA Consultation. This said that "we would include an allowance for a proportion of the costs of making network adjustments (appropriately capitalised) over all lines in the WLA charge control".

187. Ofcom's specific proposals for the financial information that BT would be required to provide for PIA services both in the RFS and confidentially to Ofcom, are set out in paragraphs 5.10-5.25 of the Consultation.

188. Our key concern relates to Ofcom's proposal relating to "network adjustment costs that exceed the financial limits".

189. We set out below the reasons underlying our concerns. In summary, our concern is that it is disproportionate to require BT to adopt a different accounting policy for the costs and revenues for regulatory financial reporting, than that applied in BT's statutory accounts, which must align with accounting standards.[53] Ofcom's proposal breaches the relevant accounting standard.

190. We also note that at paragraph 5.5 (third bullet) of the consultation, Ofcom appears to envisage downstream BT consuming PIA from Openreach, in effect becoming an active network access provider. This would be a significant departure from how downstream BT operates today and we would welcome clarification from Ofcom as to what is envisaged by the wording in sub-para. (c) above. We are also concerned that reporting downstream BT's figures (should they exist) separately to external CPs figures would disclose commercially sensitive information which would give BT's competitors an unfair insight into BT's commercial activities and would require BT to share confidential strategic information with competitors which would reduce uncertainty on the downstream market and could restrict competition.

Consistency with regulatory decisions

<u>Adjustments below the financial limit</u>

191. Ofcom proposes that the costs of network adjustments below the financial limit are recovered from products for which BT has SMP, which are in the WLA market and which use the physical infrastructure[54].

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[52] DPA Pricing Consultation, 1 August 2017, paragraph 5.5.

[53] Our significant accounting policies are set out in BT Group plc Annual Report & Form 20-F 2017 pages 176 to 181. The relevant accounting standard is IAS 16 "Property, Plant and Equipment". On recognition of the asset, the standard states that "it is probable that future economic benefits will flow to the entity and the cost of the asset can be measured reliably". With regard to measurement of the value of the asset, IAS 16 specifies that this should reflect "all costs necessary to bring the asset to working condition for its intended use".

[54] DPA Pricing Consultation, 1 August 2017, paragraph 5.5.

In responding to this consultation, we have assumed that this also means that Ofcom is proposing that these costs should be attributed in this way for regulatory financial reporting.

192. We agree that the costs should be recovered from the products which Ofcom has identified, but we do not agree that recovery of costs should be limited to these products, given that, for example, this would mean recovering costs from MPF Rentals in the WLA market, but not from WLR Rentals in the WFAEL market. We note that Ofcom proposes elsewhere in the consultation that network adjustment costs should be recovered from WLR.[55]

193. Ofcom's proposal would therefore mean that the service FAC for WLR and MPF would not be comparable, even though Ofcom's reason for proposing that BT should publish service level FAC for WLR was to enable a comparison between the FAC for the two products.[56]

<u>Adjustments above the financial limit</u>

194. We do not agree with Ofcom's proposals in relation to recovery of the costs for network adjustments above the financial limit and the recognition of the associated revenue. Ofcom proposes that "Network adjustment costs that exceed the financial limit will be recovered directly from the customer requesting the network adjustment. In the case of other telecoms providers using PIA these should be recovered through ancillary charges.[57] That means that:

    a. The cost of creating an asset which BT will own, potentially be able to generate additional future revenue from and need to maintain, will be immediately expensed instead of being capitalised; and

    b. The charge to the CP will be recovered as an ancillary charge, which we assume means immediate recognition in line with the proposal for recognition of the cost, rather than being spread over the life of the contract in line with the benefit to the CP and BT's obligation to provide a service.

195. The above would be disproportionate because:

    a. The proposed accounting policy differs from that used for BT's statutory accounts which reflect applicable accounting standards; and

    b. In addition, the value of costs and revenues associated with network adjustments above the financial limit is not likely to be material, given the range Ofcom is consulting on for the financial limit of £4,000 to £6,000.[58]

196. Further, we note that the network elements created by the network adjustments by a CP can subsequently or simultaneously, capacity permitting, be used by BT to deliver network services to BT or any other CP, leading to the generation of further revenue by BT. This makes Ofcom's proposal to expense the cost of these network elements inappropriate.

197. We recognise that consistency with regulatory decisions is one of the regulatory accounting principles.[59] These regulatory accounting principles were developed to reflect four attributes of effective regulatory financial reporting: relevance, reliability, transparency and proportionality.[60] Ofcom's proposal for reporting the cost of network adjustments above the financial limit fails to deliver reporting with these

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55 DPA Pricing Consultation, 1 August 2017, paragraph 3.55.

56 Ofcom, Narrowband Market Review Consultation, 1 December 2016, paragraph 19.44.

57 DPA Pricing Consultation, 1 August 2017, paragraph 5.5.

58 Ibid, Table 4.3 page 43.

59 WLA Market Review, 31 March 2017, Annex 23, page 121.

60 Regulatory Financial Reporting Final Statement 20 May 2014 paragraph 2.42

attributes by disproportionately creating a specific and onerous treatment for what is expected to be an immaterial cost of building assets.

198. We therefore propose that Ofcom removes the distinction in accounting treatment between network adjustment costs below and above the financial limit and treats both the same, in line with its proposal for network adjustment costs below the financial limit (subject to our comments above). This would need to be reflected in the proposed legal instrument including in the proposed direction on page 93 of the consultation.

199. In addition, we request clarification of Ofcom's proposal that the costs of network adjustments above the financial limit should be recovered from unregulated products and services, where the costs relate to BT rather than a CP.[61] Ofcom should specify which products and services these are and which market they are included in. We note that inclusion in the WLA market would enable consistent treatment for costs related to BT and CPs. Recovery from unregulated products and services suggests inclusion in either Wholesale Residual or Retail Residual.

200. Ofcom does not refer to the need to bring the treatment of historic costs into line with its proposed approach to the recovery of the cost of network adjustments. The final statement should confirm this is not a requirement and that restatement of the prior year, expected to be 2017/18, will also not be required.

Public information

201. Ofcom states that public information includes information at the market level and network component cost level for reported services.[62] However, we note that Ofcom makes no proposals at these levels and we assume that Ofcom has no amendments to its proposals in the WLA Consultation 2017.

202. We welcome Ofcom's proposal that published services should not be at the level of individual prices, but should be grouped into:[63]

    a. PIA Rentals;

    b. PIA Ancillary Charges; and

    c. PIA Adjustment Services above the PIA Adjustments Limit per kilometre.

203. Given that the volumes would have different units, for example kilometres of duct and number of manholes, which would make the reported figures meaningless, we understand that Ofcom will not require volumes and average prices to be reported for these services, in line with the restriction that this should be 'where practical', and seek confirmation to that effect in the final Statement.[64]

204. Ofcom proposes that service level FAC information will not be required to be published as this is not appropriate until wider reporting issues have been resolved.[65] However, we note that the publication of service level FAC information is referred to as a requirement in a number of places in the consultation.[66] We have therefore assumed that Ofcom intended to propose that, although the publication of service level FAC information is required, the publication of the calculation of service FAC by component is not. This is consistent with Ofcom's proposal in the WLA consultation to work with us on defining suitable components.[67] In line with this, Ofcom's proposed amendment to the draft legal instruments in the WLA

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61 DPA Pricing Consultation, 1 August 2017, paragraph 5.5.

62 Ibid, paragraph 5.9.

63 Ibid, paragraph 5.11 and Annex 6 page 93

64 Ibid, paragraph 5.10

65 Ibid, paragraph 5.12

66 Ibid, paragraph 5.14, Annex 6 page 94 and WLA Consultation 31 March 2017, Annex 23 pages 189-193

67 WLA Consultation 31 March 2017, paragraph 10.57

consultation should make it clear that the publication of the calculation of service level FAC by component for the PIA services is not required.[68]

205. Ofcom has proposed two additional notes to be published with the WLA Market Summary in the RFS.[69]

206. Note 1 consists of three rows:

    a. Gross PIA Adjustment Services within the WLA market, which includes the revenue and cost of all network adjustment services, both above and below the financial limit,

    b. Less Gross PIA Adjustment Services within the WLA market, which is equal to the row in the main body of the Market Summary with the same description; and

    c. Net PIA Adjustment Services Adjustment Services and equal to the sum of the first two rows.

207. Ofcom proposes that we publish the above information to address two concerns.[70] The first, is to demonstrate that we are not capitalising costs of network adjustments above the financial limit. As noted above, we do not agree that the costs of network adjustments above the financial limit should be expensed (that is, not capitalised). However, even assuming Ofcom's proposed accounting treatment, as Note 1 does not disclose capital and current costs separately, Ofcom's proposal does not appear to address this concern. Further, as noted above, we do not believe that the cost of network adjustments above the financial limit will be material and publication of this note would therefore be disproportionate.

208. The second, is to demonstrate that the costs of network adjustments in relation to our own network deployments are recovered on the same basis as CPs using PIA. However, as Note 1 does not disclose the costs recovered from PIA services separately from costs recovered from other services, Ofcom's proposal does not appear to address this concern.

209. Ofcom's concerns, can be addressed via the separate publication of internal and external service level revenue and FAC. Accordingly, as this information does not provide any significant value to stakeholders, there should not be a requirement to publish it.

210. Note 2 consists of two rows:

    a. Net PIA Adjustment Services included in PIA products; and

    b. Net PIA Adjustment Services included in Other WLA Products.

211. Our understanding is that the sum of these two rows is equal to the total of network adjustments below the financial limit.

212. We understand that Note 2 is intended to address Ofcom's concern that the cost of network adjustments below the financial limit, should be recovered on a similar basis between PIA services and other services, given the mix of services taken by BT and other CPs will vary significantly. In particular, as BT does not currently consume PIA services and Ofcom makes no proposal that we should.[71] However, Ofcom's proposal for Note 2 does not include a measure of the quantity of network adjustments below the financial limit recovered from PIA services and other services and, therefore, does not enable any comparison to provide stakeholder with reassurance. As the information is of limited value to stakeholders, we do not agree that we should be required to publish it.

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[68] DPA Pricing Consultation, 1 August 2017, Annex 6 page 93 and the table on page 94 of the DPA Pricing Consultation 1 August 2017

[69] Ibid, paragraph 5.15 and 5.17

[70] Ibid, paragraph 5.15

[71] Ibid, footnote 142

213. Accordingly, we consider that paragraph 4 (including the table) of the proposed direction on pages 93 and 94 should be deleted.

Confidential information

214. Ofcom proposes that we should provide two further Additional Financial Information Schedules (AFIs):[72]

   a. Revenue and volume information for PIA services; and

   b. Inputs for PIA pricing model.

215. We welcome Ofcom's proposal that services listed in the first additional AFI should be limited to those where annual revenue exceeds £1m. We seek confirmation in the final Statement that services within each service group for which the revenue falls below £1m can be added together into a single 'other' service and no volume information needs to be provided for this 'other' service, given that the sum of a number of different volumes will not be meaningful. As Ofcom noted in the WLA consultation, "the SMP condition that imposes the requirement for BT to provide additional financial information does not specify the format of that information. It could therefore be provided within the Data File rather than as a separate AFI".[73] We would therefore expect not to be required to provide a separate AFI if the information is readily identifiable within the 'Data File'.

216. Ofcom proposes that a second AFI includes, in addition to other items, the requirement to provide, CCA costs for Class of Work Local Distribution Duct, based on RAV adjusted values. This information is already provided as part of an existing AFI, AFI-A13 and we should therefore not be required to duplicate the provision of this information. We seek confirmation to that effect in the final statement.

217. We seek confirmation in the final statement that the remaining information required for the second AFI is in line with the information provided in our response of 26 June 2017 to the S135 request related to the WLA Market Review: DPA of 12 June 2017. In particular, this information will be based on BT's PIA pricing model.

Compliance information

218. We agree with Ofcom's proposal that compliance information need not be published, given that stakeholders will be able to refer to our price list.[74]

219. This is an important principle which should be applied in the WLA market and other markets in which BT has been found to have SMP.

[72] DPA Pricing Consultation, 1 August 2017, paragraph 5.21 and Annex 6 page 94

[73] WLA Consultation 31 March 2017 Volume 1 paragraph 10.103

[74] DPA Pricing Consultation, 1 August 2017, paragraph 5.28

4 Comments on Ofcom's draft Legal Instrument

220. Where we have proposed amendments to the legal instrument, our proposals should not be interpreted as an acceptance by BT that it agrees with the particular PIA remedy proposed by Ofcom. We reserve our right to make further comments on the legal instrument should Ofcom's issue further WLA MR consultations or draft statements.

221. Prior to commenting on some of the specific SMP conditions Ofcom intends to impose, we have a significant concern around the reference offer process and when some of Ofcom's proposals may come into effect. Condition 8.3B of Ofcom's April DPA Consultation confirms that the new requirements for Openreach's reference offer (including requirements relating to relieving congested Physical Infrastructure, referred to as PIA Adjustment Services in the current consultation) will not come into effect until one year after the date on which Ofcom's WLA Statement will come into force. Notwithstanding the fact that, in light of the complexities involved in implementing Ofcom's proposals, we do not consider 12 months to be long enough and suggest a minimum of 18 months as a more reasonable timeframe, we agree with Ofcom that these new requirements cannot come into effect at the same time as Ofcom's WLA Statement comes into force. This is because changes need to be made to our reference offer and any such changes must be discussed and agreed with industry prior to coming into effect. However, it is not clear from the proposed SMP conditions in the current consultation, when the obligations relating to PIA Adjustment Services come into effect. We would welcome clarification from Ofcom that any obligations relating to PIA Adjustment Services only come into effect at the same time as the new requirements relating to Openreach's reference offer (identified in Condition 8.3B of Ofcom's April DPA Consultation) come into effect. We suggest that at the very least Condition 7D.4 in the current consultation is amended to reflect this. If it is not, there would be no industry agreed process under which Openreach could comply with Conditions 7D.4 – 7D.6 in the current consultation.

222. Moreover, in light of the extensive discussions Openreach will need to have with industry as part of the revised reference offer process, it is possible that Openreach and industry reach an agreement on certain issues which Ofcom may have already set in stone in its WLA Statement. By way of example, Openreach and CPs may reach agreement on how a PIA Order should be defined for the purposes of the cap, the type of works that should fall within the scope of an obligation on Openreach to fund network adjustments and what products should fall within the scope of PIA Adjustment Services. As a result, we strongly urge Ofcom to limit the amount and type of information relating to PIA Adjustment Services which are the subject of an SMP obligation when the WLA Statement comes into force. It is important that Ofcom retains sufficient flexibility to amend and/or interpret its proposals following the conclusion of the reference offer process, and that its WLA Statement does not unnecessarily constrain legitimate negotiations as part of the reference offer process.

223. Notwithstanding the concerns highlighted above, we make the following comments on the specific SMP conditions proposed in the consultation. Where appropriate, we have also suggested revised wording for the SMP conditions. If Ofcom does not agree with any of our proposed amendments, it would be helpful if Ofcom could explain why.

224. Our detailed comments, suggestions and proposals are shown in the table below. Our comments on the legal instruments related to regulatory financial reporting are included in our response to Question 5.1.

7D.5	As explained in our response to Question 4.1 above, capacity may be required on a pole to facilitate the provision of a drop wire or other equipment (such as a box). As a result, we suggest amending the text in 7D.5(a) to read: "PIA Pole Adjustment Services undertaken to provide capacity on a pole to facilitate the provision of a drop wire or other equipment which is reasonably necessary for the provision of Physical Infrastructure Access"

7D.6	As explained in our response to Question 4.1 above, we are concerned that this Condition does not reflect how CPs order PIA today but more importantly Ofcom's proposal could be undermined by CPs who may be able to benefit from multiple caps. For example, CPs could split up what would ordinarily have been submitted as a single PIA Order into multiple orders in order to benefit from more than one cap. As a result, we suggest there needs to be a secondary control mechanism in place and that this Condition is amended accordingly. We further suggest that the definition of PIA Order is amended to address the risk of CPs undermining Ofcom's proposal for a per order cap (please see below).
7D.8	This Condition requires Openreach to submit compliance statements to Ofcom annually. However this is not consistent with what Ofcom has said in paragraph 5.28, namely that "We do not propose that BT should supply any information related to compliance with the maximum PIA rental charges. This is because stakeholders can assess compliance by reference to BT's price list". We agree with Ofcom's position in the consultation document (that compliance need not be demonstrated in a formal submission), and suggest that the legal instrument is amended to reflect this.
7D.11(c), "Defective Pole"	As explained in our response to Question 4.1 above, above, a defective pole may still be useable. As a result, we suggest amending the definition of "Defective Pole" to "Unusable Pole" defined as: "a pole that has been identified and recorded by the Dominant Provider as (i) hazardous for an engineer to climb due to the pole being decayed, damaged or defective (including leaning) and (ii) inaccessible for the attachment of additional wires or equipment, including by use of specialist equipment, such that it is not possible to confirm whether the pole can be used for the purpose of facilitating the establishment, installation, operation or maintenance of an electronic communications network."
7D.11(e), "Physical Infrastructure"	Please see our response to Ofcom's April DPA Consultation. We suggest this definition is amended to: "any duct, pole, manhole or joint box, in, on, by or from which an electronic communications network is or may be installed, supported, carried or suspended over Physical Infrastructure access, which is owned and controlled by the Dominant Provider."
7D.11(g), "PIA Adjustment Services"	We suggest that this definition is amended to include the additional text which corresponds with our proposal for when Openreach is prepared to fund up-front costs: "For the avoidance of doubt, the provision of a product and/or service will only be necessary for the provision of Physical Infrastructure Access where: (i) the works relate to Openreach's current network footprint; (ii) there is a clear and demonstrable material benefit to the Openreach network and its customers; (iii) the works pass a financial assessment of the cost/benefit

	analysis; and (iv) the works do not involve providing large amounts of new capacity or long lengths or new duct". We suggest that the detail of (i) to (iii) above should be bottomed out with industry during the reference offer negotiations and as a result it may be preferable for Ofcom to impose these SMP conditions in a Direction to make them easier to change following the reference offer process. At the very least, the definition of PIA Adjustment Services should be amended to include the following additional text to reflect Ofcom's own intention that Openreach is not required to fund works that do not relate to its current network footprint, works requesting long lengths of new duct and works for large amounts of new capacity:[75] "For the avoidance of doubt, the provision of a product and/or service will not be necessary for the provision of Physical Infrastructure Access where: (i) the works do not relate to Openreach's current network footprint; or (ii) the works involve providing large amounts of new capacity or long lengths or new duct."
7D.11(h), "PIA Pole Adjustment Service"	We suggest that this definition is amended to include the additional text identified in our response to Condition 7D.11(g) (immediately above) which corresponds with our proposal for when Openreach is prepared to fund up-front costs.
7D.11(j), "PIA Order"	In order to mitigate the risk of CPs splitting up what should have been submitted as a single PIA Order into more than one PIA Order in order to benefit from more than one cap, we suggest this definition includes additional text as follows: "Two or more PIA Orders will be treated as the same PIA Order where […]" Our response to 4.1 above suggests a number of ways in which Ofcom could prevent CPs undermining the per order cap. We suggest that Ofcom amends its proposed definition of PIA Order, by treating as a single PIA Order, two or more PIA Orders which, for example, are submitted by the same CP within a forecast period or other defined period of time (e.g. in a 6 month period), are based on the same route, concern the same work order areas or three digit grid reference in PIPeR and/or request works on adjacent duct sections. We further suggest that this definition is amended to refer to "a request for Physical Infrastructure Access *located* between Network termination Points and the Local Access Node serving those termination points ". This is because orders will be physically located between these points but not necessarily terminated between them.
7D.11(n)	Please see our response to Ofcom's April DPA Consultation. We suggest this definition is replaced with a new definition of "PIA Purchaser" (or "PIA Third Party" or "Established PIA Purchaser") defined as follows:

[75] April 2017 DPA consultation, paragraphs 4.38 and 4.42

	"A person providing a public electronic communications service or a person providing a public electronic communications network [that is properly established with the Dominant Provider as a customer for Physical Infrastructure Access products and is acting for the sole purpose of purchasing Physical Infrastructure Access from the Dominant Provider]
Annex to 7D, Part 1	We strongly disagree with the inclusion of the following two services on the basis there is no reason why the costs of an aborted clearance should not be recovered against the CP that has requested the aborted clearance: • Aborted clearance of a blockage in a duct per aborted clearance; • Aborted clearance of an additional blockage in a duct per aborted clearance Openreach CPs should not be required to fund the aborted requests of PIA CPs. Further, as indicated below, there are two other abortive charges which are currently on the PIA price list that are not included in the Annex to 7D part 1, and we presume that this means Openreach are able to charge for these items as incurred and that they would not count towards the threshold limit. We can see no justification for the abortive clearance charges identified above being treated differently. We disagree with the inclusion of the following customer changeover services on the basis that these are cabling activities relating to changing a drop wire or aerial cable belonging to a CP which will not result in any clear and demonstrable material benefit to the Openreach network or its CPs, there is no reason why a CP cannot carry out the these activities themselves at their own cost, and it may actually be more efficient for a CP to carry out the activities themselves: • Customer changeover, per pole visit • Customer changeover - hourly rate For the same reasons, we disagree with the inclusion of the following cabling activities unless Ofcom confirms that we should only be required to fund the works where the aerial cable, drop wire or other cable is owned by Openreach: • Retention, Refix and Renewal of aerial Cable • Retention, Refix and Renewal of drop wire • Road closures (cable works) (as per fees) We disagree with the inclusion of the following activities relating to the removal of locks lids in circumstances where Openreach has made a key available to the CP: • Removal of locked lids – visit • Removal of locked lids – per hour Where Openreach has made a key available to a CP, there is no reason why Openreach should be expected to fund the cost of a site visit in order to access a joint box. We suggest that the inclusion of removal of locked lids activities are restricted to scenarios in which Openreach has not made a key available to the CP.

	We note that there are a number of items currently on the PIA price list that are not included in the Annex to 7D part 1, and we presume that this means Openreach are able to charge for these items as incurred and that they would not count towards the threshold limit. We believe that this is the correct approach as these items are all discretionary items that a CP may choose to order, but are not required in order to deliver a network adjustment. • Operative accreditation – surveyor • Operative accreditation – overhead • Operative accreditation – underground • Assessor accreditation – surveyor • Assessor accreditation – overhead • Assessor accreditation – underground • CP Accreditation – per licensing site • Diversionary Works; per hour • Restoration; per hour • Co-op Survey; per survey • Openreach Assist; per visit • Openreach Assist; per hour • Joint Chamber/Manhole 'pull through'; per 100m sub-duct • Abortive time charge - per hour, per operative • Abortive visit (for cable recovery) - per hour, per operative • Work outside Working Hours (outside working day and not including Sundays or Bank Holidays) - per hour • Work outside Working Hours (Bank Holidays or Sundays) - per hour • Mobilisation Payment • Non-standard civils work • Cancel co-op survey - per cancelled survey • Cancel route plan provision - per cancelled order • Cancel reservation - per order line item • Cease Facility, Facility hosting and Customer Apparatus hosting (duct share) per km • Cease Facility, Facility hosting and Customer Apparatus hosting (pole share) per attachment • Cease Facility (cable coil) per coil
Annex to 7D, Part 2	We strongly disagree with the inclusion of a new pole in this list on the basis putting up a new pole is extending our current network footprint and should not be construed as providing additional capacity. In relation to the inclusion of “Retention, Refix and Renewal of drop wire” in this list, and as explained in our response to Question 4.1 above, we note that Ofcom itself has acknowledged that its dropwire proposals represent “a new form of network access”. Similarly, we consider swapping out a drop wire does not represent access to existing Openreach duct or pole infrastructure but rather forms part of the construction of a new FTTP network. Nonetheless, we are prepared to accept the inclusion of this item in Part 2 to Annex 7D on the basis Ofcom confirms we would only be required to fund the costs where the retention, refix or renewal of a drop wire is required in order to provide capacity or replace an unusable pole, in accordance with Condition 7D.5 (as amended, in accordance with our suggestions above).