

Response to Ofcom's consultation

WLA Market Review: Consultation on pricing proposals for Duct and Pole Access remedies

Joint submission by Colt, Sky, TalkTalk and Vodafone (the Passive Access Group)



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Executive Summary

1. The Passive Access Group (PAG)¹ has actively supported and participated in developing Ofcom's proposals for passive access remedies – from duct and dark fibre in the Business Connectivity Market Review through to duct and pole access (DPA) in the Wholesale Local Access Review – and will continue to do so.
2. In its response to Ofcom's April consultation,² the PAG expressed its disappointment that Ofcom had simply accepted Openreach's approach to achieving 'basis of charges' compliance (as given by reference to BT's 'current methodology') and proposed the Wholesale Local Access (**WLA**) DPA cap on that basis rather than obtaining the data and performing its own cost modelling exercise. There is no evidence that BT's methodology is cost orientated. The PAG is concerned, therefore, that flaws and errors in the previous Physical Infrastructure Access (**PIA**) pricing will simply be replicated and baked into the new DPA remedy without Ofcom analysing whether they are appropriate with any level of rigour.
3. The PAG welcomes Ofcom's recognition that the previous PIA product was priced too high, making it commercially unviable; and that significant upfront costs created a genuine barrier to communications providers (**CPs**) from purchasing the product.
4. The PAG considers that reductions to the price of DPA are necessary to achieve Ofcom's objective of creating an effective remedy. Ofcom's proposal to impose a cap on rental charges (which will amount to a reduction in rental prices for core duct services by up to around 50%) is a positive step.
5. However, as Ofcom itself recognises, this is almost entirely due to its decision to remove productisation costs from the PIA rental charges and to allow BT to recover those costs across all SMP products that use the physical infrastructure.³ Ofcom's approach suffers from a number of legal and policy errors:
 - First, it is not enough for Ofcom to simply shift costs in the hope that they can be recovered from other services. While this may be appropriate, Ofcom has not properly investigated whether the stated productisation costs are appropriate; neither has it properly articulated how they will be recovered. In particular, the PAG considers that these costs should be recovered from all services that use BT's infrastructure not just SMP services;

¹ The PAG is a group of UK's major alternative communications providers, including Vodafone, Sky, Colt and TalkTalk.

² Ofcom 'Wholesale Local Access Market Review: Consultation on Duct and Pole Access remedies' (20 April 2017). (**April DPA consultation**).

³ Ofcom 'WLA Market Review: Consultation on pricing proposals for Duct and Pole Access remedies' (1 August 2017), paragraph 3.64 and Figure 3.1. (**August DPA pricing consultation**).

- Secondly, Ofcom side-steps its obligation to establish regulated prices by reference to the principles of cost causation. By failing to investigate properly whether BT's charges for its PIA services are reasonably derived from its cost of provision, Ofcom has instead simply relied on unsubstantiated assertions by BT. Ofcom is under a duty to rely on the best available evidence which requires that it perform a bottom-up analysis of BT's costs and properly investigate BT's claims about its costs⁴;
 - Thirdly, if Ofcom is serious about its objective to achieve a strategic shift to large-scale fibre deployment by making *'it easier for telecoms providers to invest in advanced, competing infrastructure by improving duct and pole access'*⁵ it needs to price DPA at a level and in a way that creates the right incentives for CPs to build a business case and invest. However, the high level of uncertainty about how and in relation to which products BT will recover its productisation, network adjustment and ancillary costs over the review period is unlikely to provide the appropriate level of certainty that promote incentives to invest;
 - Fourthly, Ofcom's methodology for deriving the asset component builds in double recovery for BT on Ofcom's own analysis due to the growth forecast in PIA orders beyond the volumes used to underpin the pricing derived from the current methodology; and
 - Finally, the PAG does not accept that a lack of granularity in BT's data and the fact that there is uncertainty about the take-up of PIA prevents Ofcom from: (i) conducting a more detailed costing exercise; and (ii) developing a detailed plan for obtaining more data for the next review period.
6. As the PAG has stated to Ofcom on many occasions, it is crucial that CPs have certainty about how the rental charge cap has been calculated (and the likely level of overall costs) in order to build a commercially viable business case and to forecast prospective downstream demand.
7. The PAG strongly encourages Ofcom not to simply accept BT's underlying approach to the methodology it has developed to meet its 'basis of charges' obligations (subject to some small

⁴ It is clearly not beyond Ofcom's capabilities to undertake this analysis given that other NRAs do it. In France, the NRA (ARCEP) asks for the relevant costs to Orange and also other CPs whenever possible (for example to build their leased line model they asked all CPs for their costs associated with new deployments- even though the aim was to regulate Orange's leased lines services. It can help to understand whether the incumbent cost components are overestimated/underestimated) and then builds a bottom model based on each component it considers relevant to include. The model is often done by an external economic consultancy specialised in telecoms (e.g. such as TERA consultant – they build different models for other regulators in Ireland, Sweden, etc). Once it is done, there is a consultation on the model to ask other CP's view on methodology.

⁵ Ofcom 'Progress update supporting investment in ultrafast broadband networks' (July 2016), paragraph 1.5.

adjustments) but to take a step back and properly assess both BT's underlying cost base and the way those costs are distributed and allocated.

8. Ofcom's proposals appear to be based largely on updating and re-allocating BT's existing (and, at times, historical) costs as opposed to assessing whether its proposed price caps are truly cost reflective.
9. The PAG believes that the ineffectiveness of the current DPA remedy is one key factor constraining CPs from rolling out full-fibre networks. Experience overseas shows that fit-for-purpose DPA remedies can unleash significant new investment.
10. More generally, many of Ofcom's proposals are difficult to understand, insufficiently evidenced and appear to be unnecessarily complex. In relation to the regulatory cost base for box-related products, for example, Ofcom stated that Openreach was simply '*unable to locate what evidence was used to support*' its initial assumptions.⁶ Making regulatory decisions based on little or no evidence is plainly inadequate.
11. As demonstrated by the experience of the current PIA product; complexity about BT's prices, the way it charges and the way it recovers costs inhibit demand and dampen the business case for investment. In contrast, the success story of Local Loop Unbundling (LLU) was driven by strong, transparent and targeted regulation of BT.
12. In this submission, the PAG highlights:
 - where Ofcom has made good progress to identify issues with the flawed 2010 PIA remedy;
 - why Ofcom's proposed price cap methodology is unlikely to promote take-up of DPA and is inconsistent with its statutory duties;
 - that Ofcom's approach to applying BT's current methodology is flawed because it contains a number of evidential and methodological errors and fails to satisfy CPs that any proposed price caps will actually be cost reflective;
 - that Ofcom's approach to deriving Openreach's total network adjustment costs (estimated to be £134m over the review period) is unclear and is likely to be inflated. In addition, the financial cap for network adjustments that Ofcom proposes is, in any event, too low;
 - that prospective purchasers of PIA services should not be required to bear the cost of BT's general network maintenance and repair and that BT should not be allowed to recover on these costs through PIA rental prices; and
 - that Ofcom has failed to demonstrate that its proposed prices are in line with international comparisons.

⁶ August DPA pricing consultation, paragraph 3.44.

13. There is no point mandating a DPA product if Ofcom is not prepared to investigate BT's prices fully. If this is the case, the remedy may fail, as it has largely failed since DPA was first introduced in 2011. If Ofcom is serious about DPA, it needs to do more.
14. A commitment to a robust dissection of BT's current methodology over the course of the review period is necessary if DPA is to be successful. In developing the final statement within the time permitted, Ofcom should review the current methodology for obvious errors and anomalies identified by the PAG's (and other) submissions, make appropriate enquiries and, where appropriate, make downward adjustments to the price cap. With respect to various cost elements that involve significant uncertainty, Ofcom should – at the very least – also indicate a willingness to investigate particular elements of BT's pricing by means of a dispute over the course of the review period.
15. Our hope is that this submission informs Ofcom's refinement and improvement of the DPA remedy and helps create a working and efficient final product.

Ofcom's proposed price cap methodology is unlikely to promote take-up of DPA and is inconsistent with its statutory duties

16. The PAG is disappointed that Ofcom has failed to develop its own cost model for DPA and instead proposes to impose a cap on rental charges by updating BT's current price calculation methodology (the **current methodology**). In addition, Ofcom does not review at all the level of the ancillary charges to ensure that they are cost reflective.
17. The PAG notes that DPA rental charges are currently derived from an allocation methodology adopted by Openreach. Openreach retains substantial freedom to revise the methodology, with significant potential impacts on the level of charges.
18. Ofcom has failed to have regard to the European Commission's recommendation that a bottom-up approach is required to achieve a NRA's objectives in these circumstances:

*'... where cost orientation is imposed as a remedy, where appropriate, proportionate and justified pursuant to Article 16(4) of Directive 2002/21/EC and Article 8(4) of Directive 2002/19/EC, NRAs should adopt a bottom-up long-run incremental costs-plus (BU LRIC+) costing methodology which includes a bottom up modelling approach using LRIC as the cost model and with the addition of a mark-up for the recovery of common costs.'*⁷

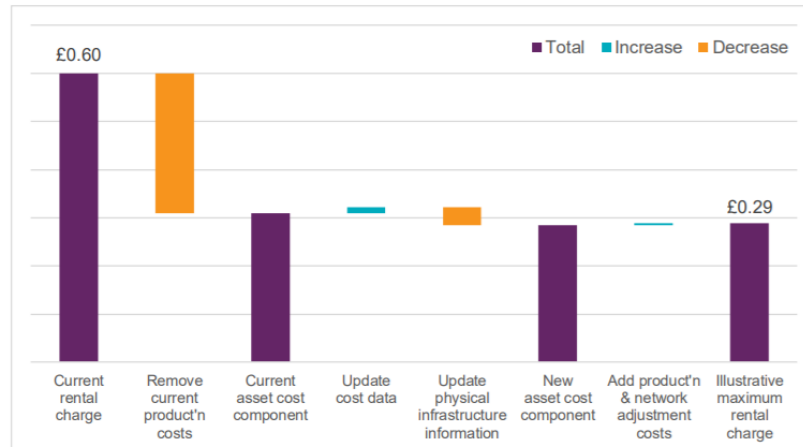
A simple application of Ofcom's pricing proposals

19. Ofcom proposes to impose a cap on rental charges and to reduce the current charges for certain DPA services by up to 50%.
20. As Ofcom acknowledges in Figure 3.2, this is almost entirely due to its decision to remove productisation costs from the PIA rental charges and to allow BT to recover those costs across all SMP products that use the physical infrastructure.⁸

⁷ European Commission 'Recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (September 2013), available here: http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2013/c_2013_5761_en.pdf

⁸ August DPA pricing consultation, paragraph 3.64 and Figure 3.1.

Figure 3.2: Illustrative impact of changes to the current rental charge for single bore spine duct



Source: Ofcom

21. While it is unclear how and to which products BT may seek to recover its productisation costs (and productisation related ancillary activities), the net effect of Ofcom's proposals to a prospective purchaser of DPA could be insignificant.
22. The information provided by Ofcom in this consultation is simply not sufficient to enable proper scrutiny of its proposed methodology. It seems that Ofcom has relied on a number of assumptions which are almost impossible to corroborate, particularly since in most cases it has not provided the appropriate underlying reasoning to support its assumptions.
23. For example, based on its maximum price cap, Ofcom considers that its proposal will result in approximately 0.5m premises passed by OCPs over the review period. It is not clear whether this also informs another of Ofcom's assumptions that a CP will use, on average, 16 metres of duct per premises passed.⁹
24. On this basis, the average annual duct rental for (standard) lead-in duct would be approximately £7.20 (i.e. £0.45 x 16 metres). In practice, however, the length of lead-in duct is likely to be greater than 16 metres and OCPs are likely to use a combination of lead-in and (lengthy) spine duct¹⁰.
25. In addition to this, an OCP will incur other rental charges such as facility hosting (per manhole entry, which Ofcom proposes to cap at £8.63) meaning that the annual rental charge per premises passed will be considerably higher than Ofcom appears to assume.
26. By way of illustration, consider a duct length of 100 metres (comprising 50% single bore spine, 50% lead-in and a single manhole hosting charge). In this example, the annual rental alone for a single home is likely to be around £45 (>50% of the current annual MPF charge of around £84). Unfortunately, Ofcom's proposals do not contain any analysis of the potential cost of

⁹ August DPA pricing consultation, paragraph 4.43 and footnote 124.

¹⁰ Indeed, the more distance a CP needs to cover, the more it will rely on spine duct as there will be less manholes to pass through. Furthermore, a CP will not necessarily use the same network topology as BT so they might decide to use some lead-in ducts for backbone and some spine ducts for last mile.

PIA relative to other SMP products and services; recognising that duct and physical infrastructure is a core component in all of these services (e.g. WLA services like LLU). Therefore, it is difficult to ascertain the relative scale of Ofcom's proposed rental charges.

27. In addition to this, a CP will incur a range of setup and ancillary charges which, when apportioned on a line basis, will increase the annual per line rental cost.¹¹ Therefore, the annual duct rental charge may be actually close to the charges for existing active services.
28. Furthermore, Ofcom is proposing to base duct rental charges on length and, to an extent, volume; spine-duct is disaggregated by the number of bores (but effectively capped at 50% of the determined regulatory cost). This follows BT's method of cost attribution and basis of charging. Given that the charges for lead-in duct are considerably higher per metre than spine-duct, this presumably means that much of the costs of BT's physical infrastructure will be recovered via the lead-in product (access duct). Clearly, the access component of the PIA service is critical to CPs that will like to ensure costs are being recovered appropriately and not disproportionately -recovered from one component relative to others.

Ofcom's proposed approach is inconsistent with its statutory duties and the standards required of a public administrative body

29. Ofcom's stated rationale for relying on the current methodology appears to be based on two considerations:
 - First, that BT has been unable to provide sufficiently granular cost data from its accounting systems to enable Ofcom to apply a price cap based on BT's fully allocated costs;¹² and
 - Secondly, as there is uncertainty about the take-up of PIA Ofcom does not consider that *'determining [its] own methodology in this review period would lead to a more appropriate outcome in terms of the level of the maximum charges set.'*¹³
30. Taken together, Ofcom concludes that the current methodology is a *'pragmatic and reasonable'* approach and is in line with its approach *'not to depart from the current methodology unless it is clearly inappropriate.'*¹⁴
31. The PAG strongly disagrees with this approach. Ofcom's approach grants BT discretion about how its costs should be attributed and the level of regulated charges. BT will use this flexibility

¹¹ For example, CPs may pay ancillary rental charges such as 'customer apparatus In-line splice hosting and distribution joints which costs 'per manhole splice'/per annum £40.06 excl VAT, 'per joint box splice/per annum: £31.42. Other ancillary rental charges include customer apparatus cable coil hosting per manhole, with a varying price according to size (small: £25.90 per annum excl VAT, medium: £40.06 excl VAT, large £54.23 excl. VAT). Similar charges on cable coil hosting apply to joint boxes.

¹² August DPA pricing consultation, paragraph 3.6.

¹³ August DPA pricing consultation, paragraph 3.7.

¹⁴ August DPA pricing consultation, paragraph 3.6.

to its advantage to overstate costs. It seems wrong – as a matter of law – that BT should be given the discretion to select cost attribution rules. As an impartial regulator, Ofcom ensure that it is in a position to make those choices.

32. In addition, the DPA product set has never effectively been used at all, pointing to a serious underlying deficiency in its pricing. The PIA costs and pricing methodology is not even in BT's Regulatory Financial Statements (**RFS**) and does not use any of the approved methodologies or costing allocations. Instead, they are derived from an 'off-line' excel type methodology used by BT which is not reviewed by Ofcom or BT's auditors like the rest of the RFS. PIA products and costs should already be included in the RFS, audited and published. In contrast, Virtual Unbundled Local Access (VULA) was published in 'other' in the RFS even before it reached appropriate levels of revenues. It is inconsistent that, in relation to PIA, the components or service items do not even exist in the system.
33. Even if that were not the case, Ofcom has not investigated whether allocations are appropriate or not. In a material number of cases, it has simply followed what BT has suggested regardless of appropriateness and often where BT itself admits it does not understand why things have been done in a particular way.
34. The 'basis of charges' condition requires that BT ensure that its charges for PIA services are reasonably derived from its costs of provision based on forward looking long run incremental costs.
35. In interpreting a similar SMP condition, the Court of Appeal in *British Telecommunications Plc v Office of Communications* (the **PPC Judgment**) stated that:

'... the Dominant Provider shall secure, and shall be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered ... is reasonably derived from the cost of provision ...'

*'The burden lay on BT to be able to demonstrate that BT's relevant prices were cost orientated and that BT had failed to do so because it had approached cost orientation on the aggregated basis of taking trunk and terminating segments together. Once BT had failed to demonstrate to Ofcom the required cost orientation, it fell to Ofcom to assess a fair cost orientated charge as best it could.'*¹⁵

36. In setting this condition, Ofcom must have regard to the principles under which its regulatory activities should be '*transparent, accountable, proportionate, consistent and targeted only at cases where action is needed*'.¹⁶ Ofcom must also act in accordance with its statement of regulatory principles which require (among other things) that Ofcom '*strive to ensure its*

¹⁵ British Telecommunications Plc v Office of Communications [2012] EWCA 1051 (27 July 2012) at [20] and [35].

¹⁶ Communications Act 2003, section 3. (**CA03**).

*interventions will be evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome.*¹⁷

37. There is, therefore, a clear statutory duty on Ofcom to base its decisions on sufficient and robust evidence. It is clearly inappropriate for Ofcom to base its decision to apply the current methodology on the fact that BT's data is insufficiently granular and the fact that it does not have a sufficiently robust forecast on PIA usage over the control period. This is especially the case given that Ofcom can require that BT (and other CPs, if relevant) provide additional information to assist its market review analysis. In addition, Ofcom's failure to take reasonable steps to sufficiently acquaint itself with all relevant information is in breach of its duty of sufficient inquiry.¹⁸
38. More fundamentally, in relying on the current methodology Ofcom relies on outdated cost inputs from 2012/13. This is in breach of its legal obligation to use the best available evidence when – at the very least – data from 2015/16 is available to it.

¹⁷ Ofcom 'Enforcement statement' (26 October 2016), available here: <https://www.ofcom.org.uk/about-ofcom/what-is-ofcom/enforcement-statement>. See also, *Vodafone v Ofcom* [2008] CAT 22 at [46] where the CAT stated that '*... it is still incumbent upon Ofcom, in light of their obligations under s 3 of the CA 2003, to conduct their assessment with appropriate care, attention and accuracy so that their results are soundly based and can withstand the profound and rigorous scrutiny that the Tribunal will apply on an appeal on the merits under section 192 of the CA 2003.*'

¹⁸ See, e.g., *Secretary of State for Education and Science v Tameside Metropolitan Borough Council* [1977] AC 1014 at [1065B] and *R (DF) v Chief Constable of Norfolk Police* [2002] EWHC 1738 at [45] where the Court stated that '*a decision-maker has an obligation to equip himself with the information necessary to take an informed decision.*'

Ofcom's approach to applying the current methodology as the basis for its price cap proposals is flawed

Ofcom failed to make correct adjustments to BT's current methodology

39. The PIA remedy was originally introduced following Ofcom's review of the WLA market in 2010. As part of that review, Ofcom required that BT ensure that its charges are reasonably derived from its costs of provision. The basis of charges condition did not specify how charges should be calculated and, following the imposition of the remedy, Openreach adopted its 'current methodology' in 2011 to derive rental charges.

40. In the consultation, Ofcom states that:

*'The current methodology has remained stable since charges were first set in 2011. Although Openreach reduced some PIA charges in 2013, this reflected a change in the underlying cost inputs following the outcome of the appeal of the 2012 Regulatory Asset Value (RAV) adjustment, rather than a fundamental change to the methodology.'*¹⁹

41. This is not a fair or accurate characterisation. Since Openreach first adopted the current methodology in 2011 and the subsequent Regulatory Asset Value (**RAV**) adjustment in 2012, there have been a significant number of changes which are likely to have impacted materially the current methodology. While BT's pricing may not have changed materially, the underlying position has changed significantly.

42. Furthermore, the need for Ofcom's present consultation to review PIA pricing only proves that the current methodology was not efficient and should be reviewed extensively.

43. Ofcom's reviews of BT's Cost Attribution Methodologies (**CA Reviews**)²⁰ identified serious concerns with BT's approach to cost allocation, particularly in relation to duct valuation and attribution. It is not clear from this consultation whether Ofcom has taken this into account and, particularly given that the most recent update to input costs seems to be from 2012/13. The PAG considers that a failure to take the CA Reviews into account is likely to have a material impact on the output of the current methodology. Ofcom considered four different cost allocation errors, including:

¹⁹ August DPA pricing consultation, footnote 7.

²⁰ Ofcom 'Review of BT's cost attribution methodologies' (12 June 2015), available here: https://www.ofcom.org.uk/data/assets/pdf_file/0016/81412/review-bt-cost-attribution-method.pdf (**First CA Review**); and 'Review of BT's cost attribution methodologies: Second consultation' (13 November 2015), available here: https://www.ofcom.org.uk/data/assets/pdf_file/0025/84814/bt_cost_attribution_review_second_consultation.pdf (**Second CA Review**).

- mathematical, input or allocation errors in spreadsheets and supporting calculations;
 - inappropriate attribution methodologies in non-compliance with Regulatory Accounting Principles;
 - deficient supporting evidence; and
 - inadequate documentation.
44. We note that in the First CA Review, Ofcom identified some serious issues with BT's 'Duct Valuation Methodology' and said that it would be working with BT to '*gain a better understanding*' of this.²¹
45. As a result of the issues Ofcom identified, BT estimated that correcting the issue would result in circa £39.9m reduction in costs in the fixed access markets. The PAG would be grateful if Ofcom would confirm that this removal was included in its determination of the cap that Ofcom has proposed to apply using the current methodology.
46. In addition, in the First CA Review, Ofcom made a number of detailed proposals about how BT's cost attribution rules should apply to future market reviews.²² For example:
- at paragraph 7.41 of the CA review Ofcom identified that BT did not apply any CCA indexation to its duct values when calculating the Access:Backhaul duct ratio. Ofcom stated that this would have an impact of £700,000 in FAC terms based on the 2014/15 RFS. The PAG invites Ofcom to confirm if and how this adjustment has been made to the current methodology and what the final adjustment is using the 2015/16 RFS;
 - at paragraph 7.76, Ofcom noted that '*the proportion of LMD costs allocated to FTTC actually fell by a third in 2013/14. We therefore think BT's apportionment of costs from CoW LMD to NGA FTTC tie cables should be corrected so that the annual depreciation of duct built for NGA FTTC is derived from cumulative capex rather than in-year capex.*' BT agreed with Ofcom's assessment and stated that £5.9m of FAC would be removed from FAC from Fixed Access markets in the 2014/15 RFS. The PAG invites Ofcom to confirm if and how this adjustment has been made to the current methodology and what the final adjustment is using the 2015/16 RFS; and
47. These errors amount to a removal of £46.5m from the cost base directly attributable to duct assets. As it is unclear in the consultation whether the conclusions from the First CA review are built in to Ofcom's assessment of the price cap for DPA, the PAG would welcome Ofcom's confirmation of this fact.

²¹ First CA Review, paragraph 10.22.

²² August DPA pricing consultation, paragraph 1.5.

Asset costs component

48. Ofcom's approach to calculating the asset costs component consist of two parts: (i) determining what the regulatory cost base is; and (ii) determining what share of this cost should be included in the PIA rental products which use BT's infrastructure.

Ofcom's failure to conduct a forward-looking review of BT's costs over the control period is methodologically flawed

49. Throughout its assessment of BT's regulatory cost base, Ofcom relies on historical data provided by BT at a particular 'snapshot' in time (some of which appears to be very out-of-date) and applies that on a forward-looking basis across the control period.²³

50. Ofcom recognises that this might be problematic but suggests that:

*'... any under-recovery or over-recovery resulting from changes in costs over the review period is unlikely to be material given the likely scale of PIA usage relative to Openreach's internal consumption of physical infrastructure, and it does not appear that the risk of under- or over-recovery is asymmetric.'*²⁴

51. There are several problems with Ofcom's analysis:

- First, the price Ofcom proposes to set for duct access and, therefore, the expected level of demand from CPs over the control period is directly linked to the cost base Ofcom adopts;
- Secondly, it raises serious doubt about whether Ofcom is complying with its duty to be evidence-led when it expresses concerns about the accuracy of its underlying data;
- Thirdly, Ofcom appears to contradict its medium case forecast that its proposal will result in approximately 0.5m premises passed by CPs over the review period. If this is the case, the likelihood of under or over-recovery by BT could be very significant; and
- Fourthly, Ofcom's methodology for deriving the asset component will unfairly favour BT because BT will over-recover on duct costs as the volume of PIA orders grows. For example, while PIA rental prices have approximately halved this does not mean that BT is recovering a lower level of costs from PIA services. In fact, BT will recover a higher level of overall costs with greater certainty from PIA because: (i) Ofcom has allocated additional non-direct

²³ August DPA pricing consultation, paragraph 3.26 where Ofcom's rationale for not forecasting costs over the control period is because '*BT does not report physical infrastructure costs or volumes at the required level of granularity ...*'.

²⁴ August DPA pricing consultation , paragraph 3.26.

overheads to the PIA cost stack; (ii) Ofcom has increased the level of network adjustments included to enable BT to provide duct access; and (iii) productisation costs are now going to be recovered from other Wholesale Local Access (**WLA**) services whose volume and uptake forecasts are more certain.²⁵

52. In addition, Ofcom has decided not to require that BT undertakes a full re-valuation of its duct assets because *'this is unlikely to have a sufficiently material impact on rental charges to warrant undertaking such an exercise, given [its] approach is intended to be a pragmatic means of providing certainty over the next review period.'*²⁶
53. This is a deeply unsatisfactory position for Ofcom to take. Ofcom provides no basis for its assumption that there will be no material impact on rental charges. In fact, given that the CA Review specifically identified problems with the way BT valued its duct assets and re-allocations in the costs (and charges) of Openreach's products that use physical infrastructure, the PAG is not persuaded that reviewing BT's duct assets will not have a material impact on rental charges.
54. In any event, Ofcom's failure to evidence its assertions is, again, a breach of its statutory duties and the PAG requests that Ofcom require that BT undertake a full re-valuation exercise.

The PAG disagrees with Ofcom's proposed use of BT's copper WACC

55. To calculate the illustrative rental charges, Ofcom proposes to use its latest estimate of BT's copper Weighted Average Cost of Capital (**WACC**) (as set out in the March 2017 Wholesale Local Access Market Review consultation, **2017 WLAMR consultation**).²⁷
56. As Ofcom is aware, a number of the PAG members individually submitted responses to 2017 WLAMR consultation in which they disagreed with Ofcom's estimate of BT's copper WACC. For example:
- In a report by Frontier Economics for Sky and TalkTalk, Frontier Economics found that Ofcom may have overstated BT's copper WACC by around 1.1 percentage points because Ofcom: (i) failed to reflect a reasonable forecast of the forward-looking risk free rate (**RFR**); and (ii) in relation to the cost of equity, it used an incorrect estimate of the forward looking RFR and placed

²⁵ For example, Ofcom's approach is that the share of the asset cost of a duct attributed to the PIA rental charge is 1/Nth of total cost, where N is the number of sub-ducts in use by BT (prior to PIA being used). This means that: for a two bore spine-duct, the total cost = £0.80/m; there are four sub-duct equivalents used by BT; and the cost attributed to PIA = £0.80/4 = £0.20/m. Therefore, after PIA is in use BT will pay less per sub-duct (i.e. (£0.80-£0.20)/4 = £0.15) than other CPs (£0.20). This results in an uneven playing field and is discriminatory.

²⁶ August DPA pricing consultation, paragraph 3.29.1.

²⁷ August DPA pricing consultation, paragraph 3.27.

disproportionate weight on inappropriate metrics when estimating the asset beta for 'Other UK telecoms'.²⁸

- Similarly, Vodafone considered that Ofcom's move to a higher WACC for WLA services to be inappropriate and requested that Ofcom re-assess the use of a higher WACC and revert to Openreach's historic copper WACC.²⁹

57. As a group, the PAG supports the view that Ofcom has over-estimated BT's copper WACC. In any event, the PAG recommends that Ofcom revise its assessment once it has fully considered all submissions in response to the 2017 WLAMR consultation.

58. The PAG does, however, support Ofcom's position to use BT's copper WACC as the best estimate of its return on capital in relation to DPA services.

Ofcom has made a number of changes and assumptions to the regulatory cost base which do not appear to be justified

59. The PAG is concerned that Ofcom proposes to make a number of changes to the regulatory cost base, possibly at the request of BT, which do not appear to be justified.

60. For example, in its Regulatory Financial Statements (RFS) BT aggregates the costs of different types of PIA infrastructure (e.g. lead-ins, spine duct, joint boxes, manholes and poles) rather than splitting them up. Rather than calculate a bottom-up estimate of the costs of each component, Ofcom relies on a valuation it carried out in 2012/13 whereby the aggregate cost is split in proportion to the gross replacement cost for each component. In particular:

- Ofcom used partially updated figures based on 2012/13 prices and September 2015 volumes and updated the estimate of the gross replacement cost of lead-in duct; and
- Ofcom also proposed to take a similar approach in relation to poles, which are reported in a single cost category with cables and joints. Ofcom relies on a bottom-up valuation carried out in 2009/10 and has not updated the gross replacement cost figures for 2015/16 as doing so would require BT to perform an absolute revaluation of the relevant assets. Ofcom does note, however, that it will include a more recent valuation from 2012/13 in the final decision but that it was not able to include it in this consultation because Openreach indicated that a '*significant amount of work is required to update the calculation.*'³⁰

²⁸ Frontier 'WLA Market Review: Cost of capital for regulated services' (13 June 2017).

²⁹ Vodafone 'Response to Ofcom's Consultation: Wholesale Local Access Market Review' (June 2017), paragraph 13.5, Vodafone response to WLAMR.

³⁰ August DPA pricing consultation, footnote 40.

Ofcom should reconsider its proposal to adopt 25mm as the minimum unit of occupancy

61. In the consultation, Ofcom proposes to adopt 25mm as the minimum unit of occupancy.³¹

62. Openreach argued that:

*'setting a reduced charge for smaller sub-duct or cables which perform the same function and have the same substitutional impact as a larger sub-duct risks leaving Openreach unable to recover its full duct costs without increasing duct access prices in the future.'*³²

63. Ofcom supports this analysis and states that:

*'Whilst we recognise that setting lower prices for smaller cables or sub-duct could provide incentives for more efficient use of the existing space available in Openreach's duct, this could result in PIA users make a much smaller contribution to duct costs, which we do not think is appropriate in the short run and which may prove to be unsustainable in the long run.'*³³

64. The PAG considers that Ofcom has taken the wrong approach of favouring CP's contribution to Openreach duct costs rather than first considering incentives for CPs to use duct access (by scaling their own fibre needs to make the most efficient business case).

65. The PAG members continue to support the use of lower sizes and strongly disagrees with Ofcom's proposal to adopt 25mm as a minimum unit of occupancy.

- In France, for example, Colt deploys fibre through Orange's duct using a 13.5mm cable. This includes 48 fibres and is more than enough to justify the economics of deployment and to build an efficient business case³⁴. Requiring that CPs adopt 25mm as a minimum unit of occupancy will oblige operators to take more space in Openreach ducts than is needed.
- Ofcom's model should be reviewed and the price should depend on the actual space needed. A model based on space and distance is an efficient way of managing BT's duct capacity which is a scarce facility and will ultimately reduce costs for the entire industry.

66. Overall, the PAG considers that lower sizes would free up space and lower costs where 25mm is not needed and increase the overall efficiency of BT's duct offering.

³¹ August DPA pricing consultation, paragraph 3.35.

³² August DPA pricing consultation, paragraph 3.34.

³³ August DPA pricing consultation, paragraph 3.35.

³⁴ In France the regulator used to apply a multiplying factor of 1.6 in order to compensate for the unused spaced implied by having several cables next to each other. But even if the multiplying factor was applied to the 13.5 mm occupied space, it would result in an occupancy of 21.6 mm which is still less than 25.

67. In addition to this, the PAG does not agree with Ofcom's argument that requiring BT to provide smaller sizes will be 'unsustainable' in the long-run and, in any event, a price based on actual space occupancy and distance would be more efficient, even if a multiplying factor was introduced to compensate for unused free space.
68. Ofcom goes on to state that adopting 25mm as a minimum unit of occupancy is justified because Openreach's network is mixed copper/fibre whereas a rival operator could deploy a new fibre network using less duct space than Openreach and '*could cover the same customer base as Openreach, but make a smaller contribution to the costs of shared physical infrastructure.*'³⁵ The PAG disagrees with this argument and considers that it is inconsistent with Ofcom's stated rationale for introducing the DPA remedy which is to '*make it quicker and easier for rival providers to build their own fibre networks*'³⁶ and to '*enable efficient deployment of rivals' broadband access networks at scale, using BT's ducts and poles.*'³⁷ Ofcom's approach is not consistent with the principle of technological neutrality in breach of section 4(6) CA03, by favouring BT's outdated technologies over newer, more efficient networks.
69. The PAG does, however, support Ofcom's proposal that where multiple cables or sub-ducts are installed and they occupy the same space as a 25mm diameter sub-duct, they should not attract rental charges in aggregate which exceed the maximum charge for a 25mm diameter sub-duct. In light of its submission above, the PAG does not consider that this should apply when the cables or sub-ducts occupy less space. In general, the PAG's position³⁸ is that Ofcom should seek to dis-incentivise overbuild (for example through a provision that requires CPs to pay rental charges for ducts and poles that they have requested even if they do not end up using the ducts and poles).

Customer churn

70. The proposed pricing structure would require CPs to pay rental charges if they want to keep fibre in a BT duct after a customer churns (and the fibre, therefore, is not in use).
71. This is clearly inefficient because that fibre will, all things being equal, be lit again in due course. There is no benefit to requiring it to be taken out and then pulled in again; this activity will be unnecessary unless the duct space is needed by someone else.
72. It is an established and hard-fought principle that CPs should not have to 'vacate' passive network elements where customers churn in order to avoid paying. In relation to LLU, for example, this is recognised by BT's 'stopped line provide' and 'left-in-jumper' products. These products allow CPs to continue to 'occupy' the copper in the local loop unless (and until)

³⁵ August DPA pricing consultation, footnote 49.

³⁶ August DPA pricing consultation, paragraph 1.2.

³⁷ April DPA consultation, paragraph 1.25.

³⁸ Please see PAG response to the WLA Consultation: 'Initial proposal to develop an effective PIA remedy (paragraphs 108 and the PAG answer to question 5.19) .

another CP needs it. There is no additional cost to BT in doing so. On the contrary, it is inefficient to require engineering work to be undertaken where it is not needed.

73. The correct approach, therefore, is for CPs' networks to be allowed to remain in-situ when the network element falls into disuse at no charge, unless the space is needed by another operator.

Network adjustment costs component

74. The PAG notes Ofcom's proposal that network adjustment costs should be:
- recovered across all SMP products that use the physical infrastructure; and
 - subject to a financial limit of around £7m per year (with 10% allocated to poles and 90% allocated to duct).
75. The PAG considers that, in principle, DPA should be provided on the basis of unrestricted use as long as that does not result in material trade-offs with the prices set in other charge controls.
76. The PAG recognises that it may be necessary to impose a different pricing structure on business use of DPA to residential use (without allowing any windfalls to BT). A possible approach to guard against this may be by allocating cost based on use. For instance, costs for DPA would be kept within products specific to particular market reviews by virtue of: (i) forecasting the migrations between, e.g., Ethernet Access Direct and DPA³⁹; and (ii) forecasting the reduction in WLA DPA volumes based on residential use.
77. In addition, Ofcom must ensure that total duct access asset costs, the major cost in the PIA cost stack, are not over-recovered. The regulated accounts attributes 100% of duct access asset costs into the products and services that use the network and are defined in the RFS. However, because Ofcom has not ensured that PIA components and services exist in the RFS they will, through the cost attribution system in the RFS, attract zero costs and thus BT will continue to recover 100% of its duct access asset costs from all other services excluding PIA. This means the current system will enable BT to over-recover duct access asset costs as PIA volumes increase.
78. The PAG reiterates its concern in the last consultation that requiring CPs to bear too large a component of the cost of network adjustments is inappropriate and gives BT an unfair advantage because Openreach recovers its costs for network adjustments across all users of its infrastructure.

³⁹ The PAG recognises that migration between DPA and EAD are unlikely to happen very often as the CP will need to already have a local network in the city were duct access is requested (i.e. the CP needs to be present in the local exchange or have their own node in the surrounding area where it is planning to use duct).

79. This is particularly the case under Ofcom's estimates that Openreach's total network adjustment costs (£134m) are based on 1.5m premises passed which includes 0.5m by OCPs and 1m by Openreach's own network deployment.⁴⁰

Productisation

80. The PAG is not persuaded that Ofcom's estimate of total productisation (and productisation related ancillary activities) costs is accurate. For example:
- In relation to set-up costs, Ofcom proposes to allow Openreach to recover £3m over the review period in addition to £1.25m to £1.5m of costs incurred to-date. Absent any evidence from Ofcom, it is unclear why set-up costs will increase by 200% over the review period especially given that Ofcom expresses concerns about the likely take-up of DPA over the period.
 - Similarly, even though Ofcom's estimate of selling, general and administrative (SG&A) costs is likely to have an immaterial impact on the actual level of rental charges its overall approach appears to be wrong. Ofcom notes that Openreach provided an estimate of SG&A costs of £0.3m per annum in 2016/17 but that it has revised that estimate up to £0.4m per annum to reflect the fact that Openreach will be required to undertake significantly more work in revising the Reference Offer. The PAG questions whether the work involved in revising the Reference Offer would really amount to £0.1m and, in any event, would be a one off cost rather than a cost incurred in each year of the review period.
 - Finally, it appears that Openreach's prices for productisation related ancillary activities are significantly higher than the prices for similar services in other countries, which may indicate that those prices are not cost-reflective. For example, in Spain 'Route Plan provision' costs £23.30 per information request whereas Openreach charges £75 per hour. (See further paragraph 89 below).
81. These examples highlight evidential and methodological flaws in Ofcom's modelling and, again, bring into question the overall accuracy of Ofcom's analysis.

⁴⁰ August DPA pricing consultation, paragraph 3.52 and footnote 65.

Ofcom's proposed approach to network adjustments is wrong

82. The PAG disagrees with Ofcom's approach to network adjustment costs.
83. First, it is unclear how Ofcom has derived Openreach's total network adjustment costs (estimated to be £134m over the review period) and it appears that Ofcom's approach may suffer from evidential flaws and is, therefore, likely to be inflated. More importantly, Ofcom's analysis is not transparent which means impedes independent and objective review.
- For example, at paragraph 4.24, Ofcom states that '*Analysis of Openreach data indicates an average incidence of between 1 and 2 [redacted] blockages per kilometre*'. It is unclear why Ofcom has redacted information here (it is difficult to imagine that anything missing from this sentence could genuinely be confidential to BT). The range for the number of blockages is very wide (i.e. a difference of 100%). Ofcom goes on to calculate the cost by simply averaging the initial and subsequent blockages charges from Openreach's price list (to derive a figure of £490-£990). Elsewhere, the price list is acknowledged to be unsupported by any real evidence so this appears to be an inadequate starting point.
 - In addition, Ofcom appears to have used the prices that Openreach intends to take effect from 1 October 2017 in calculating this average (see footnote 96). These charges appear to reflect Openreach's Excess Construction Charges (ECCs) but with a 10% uplift. There does not appear to be any justification for this additional 10%.
 - In other cases, Ofcom takes BT's assumptions about the likely amount of work involved at face value. For example, Openreach assumes that between 0.5 and 1 additional new jointing-chambers will be required per kilometre. This results in an average cost of £900-£1800 per kilometre. Again, as with blockage clearance, relying on a 100% range is not precise. In addition, Ofcom has failed to objectively assess whether Openreach's assumption is accurate or is likely to be carried out in practice. In fact, Openreach's assumption appears to be taken from its business plan and not adjusted for actual experience.
84. Secondly, Ofcom has simply adopted Openreach's product and price list for ancillary network adjustment services without properly assessing whether those services genuinely constitute network adjustments as opposed to incidental repair of BT's assets. While there are many others, examples of possible errors include:
- that ancillary services appear to include general network maintenance and repair. As a point of principle, prospective purchasers of PIA services should not be responsible for these costs and BT should not be allowed to recover on these costs through PIA rental prices. The PAG requests that Ofcom review

BT's list of network adjustment services to ensure that it excludes general network maintenance and repair

- An alternative approach is to provide guidance about the circumstances in which a requested network adjustment would represent an 'exceptional case' and to allow Openreach the ability to dispute specific cases if issues arose. Given the lack of clarity about how the PIA remedy will operate in practice, this may represent a more proportionate approach;
- the fact that Openreach has incorrectly applied a 10% uplift to its ECCs. As described above, there does not appear to be any objective basis for this and this should be reversed; and
- the fact that BT has adopted charges set in the Business Connectivity Market Review (**BCMR**) which are unlikely to be appropriate in a large-scale network upgrade as BT's likely to benefit from significant economies of scale (e.g. having engineers on-site rather than having to make bespoke appointments). In addition to this, many of the ECCs (which are only needed in a fraction of BCMR-related orders) have not been tested.

85. For these reasons, therefore, we consider that Ofcom's estimated £134m is very likely to be significantly overstated. If DPA is to be successful, it is important that Openreach and CPs understand exactly how different categories of cost will be treated in practice. To assist with this, Ofcom's final statement should set out clear, practical guidance about what Openreach may charge on a 'per incident' basis. In the absence of that, it is likely that every order may attract disputes which will slow down provisioning times. If the product is not workable at a practical level, take-up will be hampered. While this would not diminish the need for Ofcom to set out what it intends at a practical level in detail, there may also be a role for the OTA2 in establishing processes to deal with these types of questions once the product has launched.

86. Secondly, we understand that Ofcom's purpose in introducing financial cap is to encourage efficient network roll-out by deterring CPs from requesting network adjustments when it would cost less to roll-out their own network. To achieve this, Ofcom must set the cap at a level which is equal to or higher than the average cost of a CP's own network build (i.e. the opportunity cost of purchasing PIA services).

- If, by reasonable assumptions, the average cost of a CP's own network build is roughly £25,000 per km (if we assume £400 per premises costs x 64 homes per km), then Ofcom's proposed cost threshold of £4,000 to £6,000 per km is lower than it needs to be to achieve this objective.
- In fact, the threshold could be double this level and CPs would still be incentivised to choose the most efficient roll-out method. We acknowledge that there is considerable uncertainty around the total network adjustment costs that may need to be recovered through SMP products, but consider that this can be managed by the approach set out above.

Ofcom has failed to demonstrate that its proposed prices are in line with international comparisons

87. Ofcom notes that in the Strategic Review it ‘expressed the view that the resulting prices were broadly in line with international comparisons, and this view was supported by stakeholder submissions.’⁴¹
88. To support this, Ofcom referred to Vodafone’s submission which demonstrated that while the rental prices for duct were broadly consistent with some countries in Europe, the ancillary charges imposed by BT (e.g. in relation to repairs) were disproportionately higher. For example, Vodafone submitted evidence which indicated that while Telefónica charged £11.37 to open a manhole, BT charged £522 to open a joint chamber/manhole ‘pull through’ per 100m sub-duct.⁴² In a report produced by WIK for Vodafone, WIK noted that:
- ‘Variations in prices can be seen both for ducts, where total prices range from €0.046- €0.084 per metre and for poles where prices range from €0.016-€0.074 per metre. The charges exclude ‘optional’ expenses such as charges for blockage clearance. However, it should be noted that in some cases such expenses could have a significant impact on the total price. For example, including blockage clearance in the UK charges would result in prices of €0.123 for ducts and €0.129 for poles.’*⁴³
89. In response to the SRDC consultation, Vodafone carried out a benchmarking exercise which compared Openreach’s ancillary charges with those in Spain and Portugal and which illustrated that comparable charges were higher in the UK (see Table 5⁴⁴ below).

⁴¹ Ofcom ‘SRDC (initial conclusions)’ (25 February 2016), paragraph 4.30.

⁴² Table 5, page 17 Vodafone ‘The Impact of Effective Passive Infrastructure Access’ for the SRDC (Annex 4) (October 2015), Table 5, page 17. (**Vodafone SRDC report**).

⁴³ WIK Consult ‘Best practice for passive infrastructure access’ (19 April 2017), page 50. Available here: <http://www.wik.org/fileadmin/Studien/2017/best-practice-passive-infrastructure-access.pdf>. (**WIK Report**).

⁴⁴ Vodafone SRDC report, table 5, page 17.

Table 5: List of current Spanish non recurrent ancillary charges and similar UK charges

Feature in Spain	Charge £ Excluding VAT – Spain	Similar charges in the UK (£ Excluding VAT)
Information request	£ 23.30	£75/h - Route plan Provision - per hour £75/h - Network records administration charge - per hour
Analysis of the application before survey	£ 38.75	£615.00 Operative accreditation - surveyor £615.00 Assessor accreditation - surveyor
Survey	£ 113.65	
Opening joint box	£ 32.47	£600.00 Joint box breakthrough £12.00 Joint box breakthrough administration charge
Opening manhole	£ 11.37	£522.00 Joint Chamber/Manhole 'pull through' – per 100m sub-duct
Pole visit	£ 4.38	

90. Similarly, the cost for supervising infrastructure work on the incumbent network are higher in the UK than Spain and Portugal (this type of work costs £77.11 in Spain while an Openreach equivalent Co-Op survey is charged at £245.14 under the new revised prices). Both Portugal and Spain would charge £30.85 an hour per work while an Openreach assist per hour costs £52.80⁴⁵. The WIK report benchmarking data (which takes these ancillary charges into account), shows that total price in euros, per month and metre⁴⁶ for duct is higher in the UK than in France, Germany and Portugal. Similarly, for pole access, charges are lower both in Spain and Portugal. Given that Openreach is planning to increase the price of some of these ancillary activities by 1 October 2017⁴⁷, it seems likely that the cost of ancillary activities will continue to make DPA disproportionately expensive in the UK when compared to other countries.
91. As productisation-related ancillary charges will always be necessary to support an order, the cost of DPA as a whole is likely to be unreasonably high. (For example, while technical

⁴⁵ Pricing data from Spain and Portugal is derived from Vodafone Spain and Vodafone Portugal (see the Vodafone SRDC report) UK figures are derived from Openreach revised price list (effective from October 2017).

⁴⁶ This figure includes one-time fee, monthly rental and ancillary charges. See table 2.8 and 2.9 of the WIK report at page 50.

⁴⁷ The price for first time blockage clearance is increasing from £358.00 to 536.52 and for subsequent blockage clearance it will increase from £306.00 to £450.38. Aborted clearance price will increase from £304.00 to 455.52 per clearance (see Openreach ancillary activities price list).

validation is priced by Openreach at £75 per hour, the cost is likely to fluctuate significantly according to the time taken to carry out the validation and the frequency with which this charge is incurred.) Therefore, productisation charges could significantly affect the commercial viability of the product. However, there is no way to compare charges as it is not clear how charges will be incurred under the new productisation pricing. For example, as stated by WIK:

*'... charges may vary depending on the cable size, on manholes passed, on the network segment the infrastructure belongs to (feeder or distribution segment) etc., and all depend on the length of the infrastructure used ...'*⁴⁸

92. Without access to the underlying cost data, it is difficult for the PAG to assess whether these higher prices are justified or whether BT is over-recovering on its relevant cost base. Simply reducing rental prices by shifting productisation costs and allowing them to be recovered elsewhere does not fix the problem. In addition, if Ofcom wishes to claim (as it did in the Strategic Review) that prices in the UK are in line with other countries it should carry out a full and proper benchmarking exercise.
93. In any event, Ofcom should not rely on benchmarking data as a substitute for effective price regulation. The European Commission has discouraged NRAs from determining prices on the basis of international benchmarking as it *'... may not allow for [considerations of] specific national circumstances that may impact on costs'*.⁴⁹

⁴⁸ WIK Report, page 49.

⁴⁹ These comments related to the Spanish NRA notification to the European Commission to rely on benchmarking data as transitory measure when moving to a BU LRIC approach for LLU. The notification and Commission's comments (at page 4) are available here: [https://circabc.europa.eu/sd/a/5470f552-9dbd-46e7-933f-06c16022c8ea/ES-2011-1192-1193-%201194%20Acte\(4\)_EN+date%20et%20nr.pdf](https://circabc.europa.eu/sd/a/5470f552-9dbd-46e7-933f-06c16022c8ea/ES-2011-1192-1193-%201194%20Acte(4)_EN+date%20et%20nr.pdf)