

Openreach's response to Ofcom's consultation

"Further consultation on proposed charge control for wholesale standard and superfast broadband"

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Foreword

On 14 September 2017, Ofcom published a further consultation on proposed charge controls for wholesale standard and superfast broadband 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 responses to consultations relating 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

Overview

1. Openreach strongly supports Ofcom's objectives of increasing investment and raising service levels. This response focuses primarily on the issues covered in Ofcom's further Wholesale Local Access (WLA) charge control consultation, published on 14th September 2017 ("the WLA Charge Control Reconsultation"). However it is important to set our comments on the issues consulted on, both here and in Ofcom's accompanying Quality of Service (QoS) re-consultation ("the QoS Reconsultation"), within the broader context of Ofcom's overall market review and charge control proposals, given that a number of the most important and material areas are not covered, though we understand that they are still under review by Ofcom.
2. As we set out in this response therefore, although we are supportive of the changes to the original proposals in a number of areas, Openreach remains concerned that Ofcom's overall WLA proposals would depress returns on past and prospective WLA investments to well below their relevant cost of capital. As we indicated in our response submitted in June 2017 ("the June 2017 Response")² to Ofcom's earlier consultation ("the March 2017 WLA Consultation"), this would present a very material deterrent to future investment in the UK's digital infrastructure, by Openreach and others, which we do not believe is Ofcom's intent.
3. This WLA market review will shape the direction of the UK telecoms market for the next decade, so it is vital that the resulting regulatory framework continues to support dynamic retail competition and provides the right incentives for the significant infrastructure investment needed to maintain the UK's thriving digital economy.
4. Openreach continues to believe that Ofcom's proposals would result in prices that are too low: this is due to Ofcom's use of inappropriate assumptions and issues with its modelling. Since we submitted the June 2017 Response, we have engaged constructively with Ofcom, setting out our views and evidence regarding the changes required to modelling assumptions and methodologies to ensure that our investments can earn a fair return and that the charge control does properly reflect the costs of improved service delivery. In some areas (for example, in the changes to QoS proposals across the WLA Charge Control and QoS reconsultations), Ofcom has taken this evidence on board and proposed changes, but in other areas, particularly on fibre pricing and efficiency assumptions, we are unclear on Ofcom's position in relation to the points made by Openreach – and indeed by other stakeholders. We appreciate that Ofcom has indicated that these matters are still under review and we look forward to revised proposals that reflect the evidence we have submitted.

Ofcom's current proposals do not give investors a fair return

5. We have updated our analysis since the June 2017 Response to reflect Ofcom's latest proposals (all other things being equal); this shows that Ofcom's overall WLA proposals would still drive returns below Openreach's cost of capital (whether based on Ofcom's view or our own). This would result in a very material deterrent to future investment by Openreach and other infrastructure providers. Figure 1 below shows the extent of the shortfall.

² Openreach, "Wholesale Local Access Market Review: Response to Ofcom's consultation on proposed charge control designs and implementation", June 2017.

Figure 1: Openreach forecast returns after Ofcom price cuts.

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Source: Openreach internal analysis

6. Ofcom's current pricing proposals for the GEA 40/10 product, unaltered since the March 2017 WLA Consultation, are a significant factor in this analysis. As Figure 1 shows Ofcom's currently proposed 40 /10 prices would depress in-year reported returns below both our and Ofcom's view of the cost of capital. As set out in the June 2017 Response it is more appropriate to look at the overall project returns assessed over a 20 year period. We have updated this analysis and, as shown in Figure 2, Ofcom's proposals are not consistent with honouring the 'fair bet' principle which both Openreach and Ofcom agree is important to incentivise future fibre investment, and which underpinned BT's initial fibre investment in 2008.
7. Ofcom proposes these price cuts on the basis of a bottom-up model of the costs of building and operating a FTTC network in commercial areas.³ The latest NGA business case⁴ shows that Ofcom's WLA proposals would take our 20-year Internal Rate of Return (IRR) down to ✂ , below even Ofcom's view of the forward looking cost of capital for NGA. These returns are well below the level which we consider relevant when assessing the fair bet (see paragraph 17 below).

³ Commercial areas exclude areas of the UK subject to public funding.

⁴ Supplied under separate cover to Ofcom.as part of the June 2017 Response.

Figure 2: Expected 20 year returns on fibre investments after base case price cuts

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Source: Openreach internal analysis

8. In our response to Ofcom's March 2017 consultation, we stressed that the commercial case for FTTP investment remains very challenging, with large up-front investments needed in the face of uncertain demand and limited willingness to pay. As we set out, the proposed GEA 40/10 price reduction significantly discourages full fibre investment by creating a low-price anchor product capable of speeds more than sufficient for most current consumer needs. This will limit demand for higher speed products at the level of prices required to fund the costs of full fibre networks; as a result, the investment case for any operator to build new ultrafast broadband networks becomes much more challenging.
9. Openreach has now concluded its initial consultation with its customers and other key stakeholders on the appetite for large scale FTTP deployment and the associated challenges of making such an investment. There has been strong industry engagement in this process with broad support for a 'full fibre' vision, but it is also clear there are some key enablers, including a supportive regulatory environment, that need to be in place to support a sustainable investment case for scale FTTP roll-out. We will be discussing these enablers and resultant next steps with Ofcom and industry over the coming months, but it is increasingly apparent that Ofcom's current WLA proposals make it much harder for Openreach to invest in FTTP at scale.
10. We cover these issues in more detail in section 2 of this response.

There is further work to do to align modelling and cost assumptions

11. After factoring in Ofcom's latest proposals, we estimate a shortfall of c. ✂ against the copper revenues required for Openreach to achieve its cost of capital by the final year of the control, 2020/21. The estimated revenue shortfall, for the factors outlined below, is shown in Figure 3.

Figure 3: Copper access revenue impact of Ofcom's proposals (£m)

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Source: Openreach internal analysis

12. The shortfall arises because Ofcom's top down model still significantly understates the costs of delivering and improving service to our customers, as a result of the following items:
 - a) Efficiency assumptions (c. ✂). As outlined in the June 2017 Response, Openreach has significant concerns regarding Ofcom's approach to assessing the efficiency targets for the charge control. In particular, we are concerned that:
 - The compound impact of Ofcom's assumptions leads to an unrealistic level of forecast future efficiency when compared to previous historic levels of achieved efficiency;
 - Ofcom's approach to analysis of historic operating cost efficiency (RFS and management accounts) results in a misleading conclusion that the level of historic achieved efficiency is consistent with Ofcom's proposed opex efficiency target of 5.5%;
 - Ofcom has double-counted the impact of Fault Volume Reduction (FVR) by making specific cost adjustments in its modelling whilst at the same time reflecting the same costs savings in its efficiency analysis; and
 - There is compelling evidence from Openreach's management plans that the scope for future efficiency cost savings is much less than Ofcom assumes.

In addition, we have concerns about Ofcom's approach to assessing the scope for capex efficiency, and further consider that Ofcom has inappropriately included depreciation costs when assessing the level of non-pay inflation, leading to significant understatement of expected inflation for both copper and GEA services. Openreach intends to submit a further detailed response on these efficiency issues.

Moreover, Openreach is currently carrying out a detailed transformation programme review which focuses on strategy, structure and performance. The findings to date support much lower levels of forecast efficiency than those currently assumed by Ofcom. We have set up a session with Ofcom in early November to take them through these.

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- b) Quality of service adjustments (c. 3.1) – We welcome Ofcom’s changes to the Year 3 repair MSL and the related service cost uplift but, as set out in our response to the QoS Reconsultation, there is still a cost recovery gap. Ofcom has not allowed enough extra costs to fund the resources required to meet the increased MSLs. Most of the costs not provided for by Ofcom relate to training and to the upskilling of engineers to deliver this work.
- c) Weighted Average Cost of Capital (WACC) (c. 3.1) – Ofcom has underestimated the appropriate WACC for calculating returns (it uses 8.0% for copper rather than 8.5%). We set out our evidence on this point in the June 2017 Response.
- d) Volumes assumptions (c. 3.1) – We refer Ofcom to Annex 4 of Openreach’s June 2017 Response where we outline why we consider that Ofcom’s volume forecast for copper lines is overstated by at least 3.1 lines in 2020/21. Ofcom has not responded to the evidence we provided, and since our June 2017 Response more information has emerged, especially regarding an increasing mobile-only trend, which should also be taken into account. We consider Ofcom needs to decrease its copper line forecast in line with our previous submission and the further evidence provided below:
- Since the June 2017 Response was submitted, we have observed changes concerning a number of the volume drivers. In some cases the extent to which the volume driver has changed since our submission has been significant and therefore it is relevant to bring to the attention of Ofcom. We have noted changes regarding the following volume drivers:
 - i. Mobile-only households;
 - ii. Losses to Virgin Media; and
 - iii. Losses to Alternative Network Providers (beyond Virgin Media).
 - Taking this new information into account increases the impact of Ofcom’s understatement of line loss from 3.1 to 3.1 of revenue over the charge control period.
- e) Cumulo costs (3.1) – We cover this issue, which has arisen from Ofcom’s new proposals in this consultation, in detail in our response to Question 3.1. Our key concerns are as follows:
- Ofcom speculates that BT will achieve a significant reduction to the 2017 Rateable Value (RV) set by the ratings authorities. It sets out two possible scenarios as to the timing of any reduction in BT’s RV: (1) changes to BT’s RV are agreed and published before Ofcom’s WLA Final Statement and could be fully reflected in the charge control; and (2) changes to BT’s RV may not be agreed and published until after the WLA Final Statement has been published.
 - Ofcom dismisses the feasibility of introducing some form of retrospective pass-through as an alternative to predicting the reduction that might be achieved through challenging the 2017 RV. Openreach considers it is impossible to predict with any certainty whether there will be any reduction in RV or the extent of any reduction. Ofcom has not “allowed for uncertainty”, for example by applying explicit uncertainty mechanisms, as other regulators have done. It simply makes a guess at the relevant cumulo costs with no mechanism for adjustment if the estimate is wrong.
 - In fact, there is no certainty that the 2017 RV will reduce or that the terms of the Material Change In Circumstance (MCC) framework, which is a key determinant of Ofcom’s estimate of future RV, will remain as they were historically. Openreach notes that it is already unable to recover increased cumulo costs within the current Business Connectivity Market Review (BCMR) (i.e. Openreach cannot recover the higher costs arising in 2017-18 and 2018-19 as the existing charge controls for Ethernet were set using the old rating scheme). Ofcom’s WLA proposals potentially create a further area of under-recovery for each of the three years of the WLA charge controls. Under Ofcom’s current proposals, it would only be possible to reflect the higher costs arising after 2020/21.
 - Ofcom’s key concern is to avoid windfall gains or losses. Rather than rely on a clearly speculative estimate of future costs, which is prone to significant error and has little evidential basis, Openreach proposes a simple and practical pass-through approach whereby rebates

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would be made retrospectively against the published 2017 RV to account for a successful challenge of the 2017 RV and future changes due to MCCs applied by the ratings authorities. Such an approach is common in other regulated industries and it avoids windfall gains or losses in an accurate manner, thereby avoiding the risk of unintended distortion. It should be noted that since not all of BT's cumulo charges will fall on regulated products, BT will still be incentivised to negotiate efficiently for the lowest possible cumulo charges, even with a pass-through mechanism.

- f) Pension costs (c. 36) – We cover this issue in detail in our response to Question 3.5. Our key concerns are as follows:
- Ofcom proposes not to update its pension cost forecast as set out in the March 2017 WLA Consultation to reflect the increasing cost of providing pension benefits. The relevant 2017/18 cost forecasts have increased by c.36.
 - As Openreach explained in its June 2017 Response, the amount of ongoing pension service costs relating to defined benefit plans is based on many influencing factors, including the real discount rate and demographic assumptions, Pension Protection Fund (PPF) levies and other administrative expenses. Independent actuaries provide input into BT's ongoing pension service costs for defined benefit plans periodically, taking account of these factors. The changes which will lead to an increase in ongoing costs in 2017/18 were beyond BT's control, and it cannot be argued that the increase is due to a failure of cost control, or that they represent inefficient costs which Openreach could have avoided.
 - Underlying Ofcom's decision not to reflect the 2017/18 increase in costs in its charge control forecast is the uncertainty as to the outcome of the review of the key BT pension schemes (BTPS and BTRSS). To date, the anticipated consultation has not yet started. There is a material risk that the outcome of the consultation, whether an increase or decrease in costs, will not be available in time for Ofcom to incorporate them in its draft Statement in February 2018.
 - Given the significant shortfall that would result if the pensions costs were not uplifted and the difficulty of predicting the outcome of BT's consultation, Openreach suggests that in this exceptional circumstance, the 2017/18 costs are used to forecast future pensions costs and that a 'true-up' mechanism similar to that proposed for cumulo costs is instead used. This is clearly appropriate because:
 - i. These costs are largely beyond the control of BT;
 - ii. To the extent they can be controlled, BT has every incentive to ensure service costs are efficient; and
 - iii. It is appropriate, in these circumstances, to allow actual costs to be passed through rather than to rely on inevitably uncertain estimates that expose BT (and customers) to under/over-recovery if the estimates prove to be wrong.
 - If Ofcom is not minded to introduce a cost pass-through, we consider that the most appropriate estimate of pensions costs are the 2017/18 cost forecasts provided to Ofcom.
13. As we set out in the June 2017 Response, we have also identified a major gap between the bottom-up fibre model and our fibre commercial business case of over 36 of opex and capex for the four-year period until the end of the next controls. This is shown in Figure 4 below. The reasons for the gap include understatement of the expenditure needed on NGA capacity and incorrect assumptions on NGA volumes. We have supplied Ofcom with detailed information on this issue and look forward to revised proposals which properly take this data into account.

Figure 4: Forecast fibre spend in commercial footprint, 2017/18 to 2020/21 (£bn)



Source: Openreach internal analysis

14. To ensure that past and prospective WLA investments would earn acceptable returns above their cost of capital, Ofcom should adjust its prices for copper and fibre services to reflect correction of assumptions and resolution of modelling issues. We consider that this would require prices above the top end of Ofcom's proposed range.

2 A supportive regime for fibre investment

Achieving a fair return

15. Ofcom's proposals to reduce the price of Openreach 40/10 GEA rental services by up to 40% over the course of this control period will reduce the overall project returns (assessed over a 20 year period) below levels that would be consistent with allowing a fair bet given the risks faced ahead of making those investments. For efficient investment to take place, investors, at project inception, must *expect* to earn a return equal to the project-specific cost of capital. In the face of project risks and uncertainties, the opportunity to earn upside returns above this level is crucial. To be consistent with the fair bet, regulation should not have the effect of truncating the ability to earn upside returns such that the expected project return would fall below the project-specific cost of capital – i.e. to do so would change the basis on which the investment was made.
16. The table in Figure 5 below shows the impact of Ofcom's proposed price cuts on the 20 year project returns by reference to (i) Ofcom's bottom up model of the costs of supply and (ii) Openreach's latest business case for the supply of fibre services in the commercial footprint.⁵ For the avoidance of doubt, we believe Ofcom's bottom-up model significantly understates the costs of meeting forecast demand, as outlined in paragraph 13 above and our June 2017 Response. But even by reference to this model, we do not believe that price regulation that caps returns to 11.8% can be considered to be consistent with the fair bet.
17. We have presented analysis from Oxera and Professor Julian Franks to suggest that: (i) the relevant project specific cost of capital for investments in fibre was likely to be towards the upper end of the range of 11.4% to 12.8%; and (ii) the spread of outcomes faced at project inception suggests that capping upside outcomes below 15% risked being inconsistent with the fair bet – i.e. truncating returns at this level would push expected returns below the project-specific cost of capital. If Ofcom takes full account of the costs of supply set out in the Openreach business case, it is clearer still that the proposed level of price cuts would reduce returns well below what is required to allow project returns consistent with the fair bet.

Figure 5: Expected 20 year returns on fibre investments after base case price cuts

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Source: Openreach internal analysis

⁵ i.e. excluding BDUK areas.

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18. Since responding to the March 2017 WLA Consultation, we have submitted further analysis to support Oxera's assessment of the fair bet. This has used the financial forecasting model that generated the figures presented in the June 2008 BT Board paper relied on by Ofcom to identify investor expectations. Oxera's analysis shows that the sensitivity of the projected returns to the price premium required to drive take-up is consistent with the assumptions Oxera has made about the 'spread' of potential project outcomes.

Regulation should encourage full fibre investment

19. In our June 2017 Response, we stressed that the commercial case for FTTP investment remains very challenging, with large up-front investments needed in the face of uncertain demand and limited willingness to pay. Investment decisions in this market review period will shape the capabilities of UK infrastructure to meet customer needs over the next decade, and Ofcom's proposed interventions in this review risk seriously undermining delivery of these objectives.
20. Openreach has now concluded its initial consultation with its customers and other key stakeholders on the appetite for large scale FTTP deployment and the associated challenges of making such an investment. There has been strong industry engagement in this process with broad support for a 'full fibre' vision, but it is also clear there are some key enablers, including a supportive regulatory environment, that need to be addressed to support sustainable investment case for scale FTTP roll-out. We will be discussing these enablers and resultant next steps with Ofcom and industry over the coming months, but it is increasingly apparent that Ofcom's current WLA proposals make it much harder for Openreach to invest in FTTP at scale.
21. Based on our consultation responses we believe that there could be widespread benefits from a large scale roll-out of FTTP which would flow to a wide set of residential and business customers over time. These benefits include higher speeds, but also those from a fundamentally better access infrastructure: lower fault rates; greater stability and reliability; better predictability of speeds; and lower latency. They may also play a role in unlocking new business models, e.g. 5G and smart cities, which are nascent today.
22. Consistent with this, we believe it would be reasonable for Openreach to look to generate incremental revenue per customer across a large proportion of our base to recover the costs of any FTTP deployment. While some incremental revenue could be generated in the near term through the provision of ultrafast speeds, this is unlikely to support a business case that would attract investment. We note here the experience in other countries such as Australia and New Zealand that supports this view.
23. Ofcom's current proposal is to set a price for a 40/10 fibre 'anchor product' using Ofcom's bottom up model to estimate the forward-looking costs of supplying such a product over VDSL FTTC technology. As part of this approach, even where Openreach supplies a customer with a full fibre connection, it must offer a 40/10 service at the regulated price based on the costs of supplying over an FTTC network. However, we would remind Ofcom that current FTTP pricing is not aligned with FTTC/G.fast pricing. Today, where we offer voice and data, FTTP is already more expensive than FTTC at all bandwidths. This difference contributes to the case for our FTTP investments.
24. We set out in our June 2017 Response why we do not believe Ofcom has fully captured the consequences of extending its proposed charge control to FTTP 40/10 rentals and FTTP connections, as the proposals do not adequately take into account the very different cost bases between the two technological options, nor the differences in customer value that can be generated.
25. By establishing a regulatory requirement to provide a 40/10 service over an FTTP connection at the regulated FTTC price, we believe the WLA proposals will prevent additional revenue generation from the majority of FTTP lines. 40Mbps (over FTTP) is sufficient to meet current (and in many cases foreseeable) needs for the vast majority of residential customers, and anchoring FTTP pricing at FTTC pricing for the same headline 40Mbps rate means lower revenues per customer not just at 40Mbps but at all bandwidths.
26. An alternative approach would be to reconsider the merits of having a lower speed anchor product.
27. The core logic of an anchor product approach is that, while it allows commercial flexibility for other products, the regulated price of the anchor will serve to 'weigh down' overall price levels. Openreach and any other access network providers considering investment in full fibre networks will therefore have to assess the

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opportunity to extract value from those networks given the availability of the anchor product at the regulated price. The scope to generate value from the supply of full fibre connections will therefore be shaped by expectations around customer willingness to pay for any perceived improvements in customer experience – in terms of reliability and headline speed – that such connections would offer compared to the anchor product. Investment will only be supported where such expectations around willingness to pay support the funding of the network build (including a return on investments reflecting risk) and the ongoing costs of supply over a reasonable time period.

28. It follows then that a lower regulated 40/10 price will, by weighing down prices for all services across the market, inevitably reduce the value any potential full fibre investor can extract from that new network by attracting new customers (and/or, for existing suppliers such as Openreach and Virgin Media, retaining customers who might otherwise had switched network supplier). A lower 40/10 price will therefore, all else being equal, undermine investment cases. Ofcom's proposed price regulation significantly reduces the value that Openreach – or any other potential network investor – could make from investments in full fibre connections.
29. In considering the returns that could be made on any FTTP deployment, Openreach also needs to consider the longer term regulatory outlook and whether future price regulation might introduce direct constraints on a broader range of fibre access services – e.g. on ultrafast speed connections. This is why it is vital that Ofcom establishes a coherent framework that signals clear support for the 'fair bet' principle on a forward-looking basis: investors today must be confident that upside returns on investments would not be inappropriately truncated by future regulatory decisions given the significant demand and supply side uncertainties faced.
30. As well as considering scale FTTP deployments, Openreach is also considering the investment case for an immediate increase in FTTP to cover c.2m premises by 2020 to address areas currently poorly served by FTTC, including business areas, multi-dwelling units, and some recently built housing developments. Again, because headline speeds of 40Mbps will be good enough today for the overwhelming majority of residential customers, requiring Openreach to provide such connections at the lower regulated price over any new full fibre line will significantly reduce the value that can be generated from investing in such lines. This approach, therefore, undermines our current business rationale for this case.
31. Overall, the FTTP consultation process has given us greater insight into the impact of Ofcom's pricing proposals on potential investment cases. It is clear now that the proposed requirement to align prices for 40/10 services supplied over FTTP connections with the proposed regulated price based on estimated costs of supply over FTTC connections is unsustainable. Setting different prices for 40/10 services supplied over FTTC connections vs. those available over FTTP lines would reflect the underlying investment costs of the respective technologies and capture the higher value service supplied to the customer. Openreach therefore believes a 'fair and reasonable' pricing obligation on FTTP lines would be sufficient.

3 Responses to questions in Ofcom's consultation document: *"Further consultation on proposed charge control for wholesale standard and superfast broadband"*

Question 3.1 – Cumulo

Question 3.1: Do you agree with our proposed changes to forecasting BT's cumulo costs and our base case assumption that BT will be able to achieve a 25% decrease in its RV and therefore cumulo costs? Please provide reasons and evidence to support your answer.

32. We understand that Ofcom is considering changing its proposed approach to forecasting BT's cumulo costs. The change to its approach is based on its belief that, in light of the fact that BT has said it will challenge its rateable value (RV) assessment and that Virgin Media's RVs have been considerably reduced, BT's cumulo RV is highly likely to be reduced at some point in the future.
33. Openreach is concerned that Ofcom's revised forecast of the RV of BT's network in this charge control reconsultation is based on its view that the valuations set by the relevant ratings authorities are incorrect. This intervention is not only highly speculative in nature, but prejudices the results of any challenge that BT might make in relation to the RV of its network.
34. Before considering Ofcom's proposal, we observe that:
 - a. First, Ofcom's analysis is implicitly premised on the understanding that the final actual cumulo costs are efficiently incurred costs which Openreach can legitimately recover via the charge control. We agree that cumulo costs are efficiently incurred and Openreach should be entitled to recover those costs; and
 - b. Second, Ofcom should be cautious about assuming: (i) the outcome of an assessment being undertaken by a specialist, independent, valuation agency of HMRC; and (ii) the outcome of a challenge in advance of that challenge being formally made and determined.
35. Against that background, in this section, we set out our observations on:
 - a. The timing of reduction in BT's RV;
 - c. The scale of reduction in BT's RV; and
 - d. Material Changes in Circumstance (MCC).
36. We also set out why we believe a pass-through mechanism would be a pragmatic approach to dealing with the uncertainty arising from these factors, give an example of where it has been used in the past and show how it could be implemented in the next WLA.
37. Finally, we comment on Ofcom's proposed three-stage attribution for cumulo costs, which was outlined in paragraphs A17.84 to A17.93 of the March 2017 WLA Consultation. In principle, we believe the proposal is reasonable. However, there is considerable uncertainty over certain assumptions, and this creates a potential risk that BT's cumulo costs might not be fully recovered. This further reinforces the need for a pass-through mechanism.

Timing of reduction in BT's RV and feasibility of a pass-through mechanism

38. Ofcom sets out two possible scenarios as to the timing of any reduction in BT's RV.

Scenario 1

39. In Scenario 1, changes to BT's RV are agreed and published before Ofcom's WLA Final Statement and could be fully reflected in the charge control. Under this scenario the concerns identified in paragraph 3.34 of the WLA Charge Control Reconsultation are effectively addressed, i.e. risk of windfall gain to BT or BT potentially under-recovering its cumulo payments. On this basis, we consider it essential that, if any changes to BT's RV are agreed/published in advance of Ofcom's WLA Final Statement, these are fully reflected in the charge control. This should be made clear in any draft

statement and notification to the European Commission.

Scenario 2

40. Ofcom notes that any changes to BT's RV may not be agreed and published until after the WLA Final Statement has been published and, indeed, the charge controls are in force. In these circumstances, Ofcom considers two options: (i) to estimate the scale of reduction; or (ii) to introduce some form of retrospective pass-through.
41. In considering these options, we consider that the risks associated with a pass-through mechanism have been overstated and that Ofcom has not undertaken a proper analysis of the relative risks of relying on an estimate, i.e. including the risk of windfall gain/loss. In paragraphs 44 to 50 below, we outline the benefits and demonstrate the feasibility of a pass-through mechanism.

Assumption that BT's Rateable Values (RVs) will decrease by 25%

42. If, notwithstanding the submissions above, Ofcom decides to estimate BT's cumulo costs, we make the following observations:
 - a. Ofcom's proposed assumption that BT will obtain a 25% discount is based on speculation: there is no way of predicting the final BT RV for the period from 1 April 2017 that would apply following an appeal to the Valuation Tribunal or a voluntary settlement between BT and the Valuation Office Agency (VOA).
 - b. Ofcom's rationale is based on the 32% reduction that the VOA has made to Virgin Media's RVs for England and Wales since the March 2017 WLA Consultation was published. However the BT and Virgin Media networks have different characteristics such that Virgin Media is not a good reference point for estimating the size of any reduction that might be made to BT's RV. The key relevant differences are that:
 - i. BT's hereditament relates to a national network which is in practice valued as a single entity and then apportioned between England, Wales, Scotland and Northern Ireland, whereas Virgin Media's hereditaments are local networks entered in local lists in England and Wales;
 - ii. The access network architectures are different, and these differences currently result in much higher speed broadband offerings from Virgin Media which can therefore be expected to obtain an increasing share of the broadband market. Specifically, the difference is that Virgin Media's network is mainly hybrid fibre/coaxial. This combination of fibre to local nodes and coaxial cable drops to the customers' premises, as opposed to BT's requirement to provide broadband via twisted copper pair cables between cabinets and premises, means that significantly more bandwidth is available to Virgin Media;
 - iii. Virgin Media is free to restrict its coverage to areas which can be served at lower cost and where take-up is likely to be greatest. BT is unable to 'cherry pick' in the same way because it has a universal service obligation. It is required to provide uncommercial services: no such requirement is imposed on Virgin Media;
 - iv. The Virgin Media network is considerably smaller, is much newer and laid at significantly shallower depths, in areas where Virgin Media chose to go (presumably partly for ease of installation). The consequence of this is that the repair burden for Virgin Media is significantly lower than that for BT; and
 - v. Virgin Media's hereditament includes buildings used for functions which in the case of BT are carried out in premises which are not included in the BT central rating list hereditament, but are instead separately assessed in the local list.
 - c. Ofcom adopts a range of 20-35% for the likely reduction in BT's RV. There is no evidence in the WLA Charge Control Reconsultation to support the upper or lower end figures in the range. There must be a real risk that the final RV will achieve a discount of less than Ofcom's range (for example if the matter were to progress to formal determination).

Material Changes in Circumstances

43. Ofcom continues to assume that, as in the previous pre-1 April 2017 cumulo rates regime, each addition of a fibre (FTTC or FTTP) line or an MPF line will be considered an MCC. In summary, it assumes that each additional FTTC line adds £18 to RV, each FTTP line adds £20 and each MPF line reduces RV by £30. In fact, the VOA has not yet taken any decisions on the regime for MCCs in the current ratings period to 2022. Therefore, this assumption may be incorrect. As we consider that the charge control needs to appropriately reflect the future MCC rules (i.e. as opposed to those that applied in the 2010 to 2017 rating period) and any resulting upward and downward movements to the RV, an adjustment mechanism is needed. A pass-through mechanism would be a pragmatic solution.

Benefits of a pass-through mechanism and how it could be implemented

44. Ofcom rejects the pass-through mechanism option as unrealistic on the grounds that there is no precedent for pass-through in an SMP condition, that the drafting of such a condition would be very complex, and that it would lead to a significant distortion in distribution of benefits to CPs. Ofcom maintains there would be beneficiaries of retrospective price reductions who had not paid the higher prices beforehand.
45. Openreach does not agree:
- a. During the charge control period, it is likely that the main consumers of MPF and GEA services will remain, and any exit is likely to be as a result of consolidation where the acquiring CP would get the benefit of any retrospective true up. Any new entrants that enter without consolidation are likely to take time to become significant consumers of MPF and GEA services. These factors tend to diminish any potential distortion from a retrospective true up.
 - b. For a cost which is primarily outside BT's control, we are of the view that a pass-through is appropriate in circumstances where forecasting the cost is subject to a large degree of uncertainty. This is common practice by other UK regulators as it reduces the risk for the regulated supplier and ensures that there are no "windfall" gains or losses. Ofgem for example has applied this to business rates.⁶ In the terminology which Ofcom has used before in terms of price controls, a pass-through avoids requiring Openreach to place a bet which does not serve any purpose.
 - c. We would expect any retrospective pass through ("true up") to deal with significant increases or reductions to the RV. Our proposal below specifically addresses reductions in the RV. A similar mechanism could be employed for increases in the RV.
46. A pass-through mechanism does have administrative consequences, but Openreach considers these are relatively straightforward to overcome. Further, the benefits of ensuring there are no windfall gains or losses far outweigh the administrative consequences cited by Ofcom.
47. Lacuna pricing arrangements such as those applying to MPF, WLR and SMPF prices in 2014 are a precedent. In 2014, during the three month lacuna period before the last Fixed Access Market Review (FAMR) came into effect on 1 July 2014, Openreach set prices for this three month period at the top end of Ofcom's consultation range. When the prices were set out in the Final Statement, Openreach calculated the amounts due to and from each CP on each rental product (WLR, MPF and SMPF) and carried out a true up through the billing system.
48. We believe a pass-through mechanism would be relatively straightforward to set out in an SMP condition and to design in a way that addresses Ofcom's concerns over the distribution of benefits. For example, a pass-through mechanism could be based on rebates or additional payments against historic billed revenue rather than a forward adjustment of prices. This would ensure that customers would receive any rebate or make additional payments in proportion to the payments they had historically made to Openreach in order to recover the cumulo costs in the historic period.

⁶ Ofgem, "Guide to the RIIO-ED1 electricity distribution price control", January 2017, Table 15.1 "Summary of uncertainty mechanisms for RIIO-ED1".

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49. As an example, we outline below how the legal instrument to implement such a mechanism could be drafted to account for a change in the RV. Such a mechanism could be adopted for either a reduction or increase in the RV.

To be inserted after 7A.7:

7A.X In order to adjust prices retrospectively for the cumulo charges incurred, Openreach will calculate the adjustment needed to the prices set by Ofcom in this control using the following approach.

- (a) *The price for each year (either set out in 7A.2 for the First Relevant Year where a price ceiling applies or 7A.6 otherwise) includes an estimate of cumulo charges as set out in the table below, as well as the total amount of cumulo that Ofcom assume will be paid relating to the WLA market in each year of this control.*

	First Relevant Year	Second Relevant Year	Third Relevant Year
Ofcom list all products	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>
e.g. MPF SML1 Rental	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>
TOTAL Cumulo Charge allocated to the WLA market	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>	<i>Ofcom insert value</i>

- (b) *Within four months of the end of each relevant year, Openreach will compare the actual cumulo paid (allocated to the WLA market) to the value assumed by Ofcom in setting prices, as set out in 7A.X (a) above. The ratio between these charges will be used to adjust the level of cumulo that should have been included in each specific product price, using the following formula:*

$$\frac{(C - EC)}{EC} \times PC_n = CAdj_n$$

Where

C current year total WLA market cumulo paid

EC estimated cumulo total for WLA market as estimated by Ofcom and included in 7A.X (a)

PC_n cumulo assumed by Ofcom for specific product n, as included in 7A.X (a)

CAdj_n cumulo adjustment for product n, as calculated by this formula.

- (c) *Within four months of the end of the relevant year, Openreach will calculate the amount of money due back to customers (in the event that CAdj_n is negative) or due to be invoiced to customers (in the event that CAdj_n is positive). This will be calculated based on the volumes for each month of the prior relevant year that the adjustment relates to, and will be pro-rated for any circuits connected or ceased during a month (where relevant for recurring charges). Monthly interest will be applied using the Bank of England base rate plus 1% to take into account the impact of the cash balances being provided in advance (or withheld in the event that CAdj_n is positive).*

50. We do not believe that using such a mechanism in the WLA would introduce significant complexity or practical challenges. Using such a process would also address Ofcom's concerns that the beneficiaries of any reductions (if actual costs are lower than forecast costs) might not be the same as those who paid the higher prices in earlier years. Further, the process would fully meet Ofcom's objective of reflecting future RV changes within the charge control period.

Attribution of BT's cumulo costs

51. Ofcom's proposed three-stage attribution for cumulo costs was outlined in paragraphs A17.84 to A17.93 of the March 2017 WLA Consultation. In principle, we believe the proposal is reasonable. However, there is considerable uncertainty over certain assumptions, and this creates a potential risk that BT's cumulo costs might not be fully recovered.
52. The biggest uncertainty is in estimating the RV of GEA lines, used in step 1 of Ofcom's three-stage process. Ofcom continues to use £18 (for FTTC lines), based on guidance published by the VOA for the 2010 rating list. Ofcom recognises that this might understate or overstate the allocation for a GEA line in future. We are concerned that this could be an under-estimate, particularly in the light of the large increases in RV for both BT and Virgin Media between 2010 and 2017. If this proves to be the case, there would be two consequences: i) the overall cumulo cost assumed by Ofcom would be too low (because the additional costs for new GEA lines would be under-valued); and ii) the allocation to GEA lines in the WLA would be too low (since the RV for GEA as a percentage of total RV would be under-stated).
53. This would result in unrecovered costs in WLA services, and Openreach would have no means of recovering this shortfall. We note that Openreach is already unable to recover increased cumulo costs within the current BCMR and FAMR (for example we cannot recover the significantly higher costs that arose in 2017/18) as the existing charge controls were set using the old rating scheme). Ofcom's WLA proposals potentially create a further area of under-recovery for each of the three years of the next WLA charge control. Under Ofcom's current proposals, it would only be possible to reflect the higher costs arising after 2020/21.
54. We believe this re-enforces the need for an adjustment mechanism of the sort outlined above – i.e. the adjustment mechanism should not only reflect changes in the base valuation, but also any revision in scope and quantification of the MCC items.
55. Further, we are concerned that Ofcom's forecast cumulo poundage rates are understated:
 - a. In part this appears to arise from using inflation assumptions from the November 2016 report of the Office of Budget Responsibility "Economic and Fiscal Outlook November 2016".⁷ We understand that Ofcom intends to use the latest forecasts for its final statement (as Ofcom state in footnote 493 of the March 2017 WLA Consultation); and
 - b. It may also arise from the way that Ofcom has calculated a weighted average across the four regions of the United Kingdom; in this regard, we have specific concern that the average poundage rate for NGA lines (quoted as 0.505 in paragraph 3.60 of the September consultation) is not consistent with the poundage rates assumed for each of the four nations in the March 2017 WLA Consultation (i.e. the stated average is less than each of the four nations).
56. We consider that the calculation of poundage rates should be based on the following approach and assumptions:
 - a. The forecast should start with the official 2017/18 rates. We note that the rates quoted in the March 2017 WLA Consultation are consistent with our understanding of the poundage rates for England, Wales and Scotland. The rate for Northern Ireland is 57.2p (compared to Ofcom's figure of 58.7p); and
 - b. Inflation assumptions (RPI in the case of 2018/19 and 2019/20; CPI for 2020/21) should be based on the September indices preceding the year in question.⁸ It is not clear whether this is what Ofcom has done: Table A17.5 in the March 2017 WLA Consultation refers to the forecasts

⁷ We assume that Ofcom continues to use the rates from its March consultation (Table A17.5). Footnote 835 of that document refers to the forecasts of CPI and RPI in Annex 15.

⁸ Local Government Finance Act 1988.

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- of inflation in Annex 15 (table A15.6), which appear to be based on averages for the entire financial year;
- c. Hence, the poundage rates for 2018/19 should be based on the RPI in September 2017. This has now been published (3.9%); the poundage rates for 2019/20 and 2020/21 should be based on the most up-to-date forecasts (as Ofcom has already noted);
 - d. The inflation forecasts should be applied to all elements of cumulo rates poundage including the small business multiplier in England and Scotland;
 - e. The UK average poundage rate should be calculated by weighting the four regions by the following percentages, which we understand are as set out below and will remain in force for the entire rating period:
 - i. England: 86.65%
 - ii. Wales: 7.77%
 - iii. Scotland: 3.42%
 - iv. Northern Ireland: 2.16%
 - f. Hence the poundage rate should be based on the weighted averages of the poundage rates across the four regions. We would expect that this should be used for both the calculation of the Cumulo liability in total and the amounts attributable to each element (e.g. to NGA lines).

Question 3.2 – Forecasting LRICs for copper services

Question 3.2 Do you agree with our proposed changes to forecasting LRICs for copper services? Please provide reasons and evidence to support your answer.

- 57. We understand that Ofcom's purpose in i) recalculating the 2015/16 LRIC:FAC ratios and ii) using dynamic LRIC:FAC ratios is that the overall forecast FAC would remain constant but the split between fixed and incremental costs would vary.
- 58. However, it is unclear precisely how Ofcom has modelled the LRICs, and the overall impact of its approach results in a shortfall of \pounds FAC to be recovered in GEA and MPF prices over the charge control period. Openreach proposes that Ofcom should allow an extra \pounds FAC to be recovered against MPF SML1 services.

Lack of response to stakeholders' comments on calculation of common costs

- 59. Ofcom states that in responses to the March 2017 WLA consultation, several stakeholders put forward views on its calculation of common costs as well as its approach to the allocation of these costs. For example, Sky and TalkTalk argued that certain components should be excluded when calculating common costs. Ofcom also report that CityFibre disagreed with Ofcom's approach to allocating common costs.⁹
- 60. Ofcom states that it is considering these views and will not comment further on them in this consultation. It is important that all stakeholders have the opportunity to respond to any proposals Ofcom makes on the basis of these responses, and we request clarification from Ofcom as to when and how it will consult on any such proposals.

LRIC:FAC ratios

- 61. In the consultation document, Ofcom proposes:
 - a. Recalculation of 2015/16 LRIC:FAC ratios to incorporate FCM depreciation (OCM depreciation and holding gains) in addition to operating costs (Pay and Non-pay) and cost of capital;¹⁰ and

⁹ WLA Charge Control Reconsultation, paragraph 3.64.

¹⁰ Ibid, paragraph 3.67.

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- b. The use of 'dynamic' LRIC:FAC ratios, weighted according to the mix of costs (Pay, Non-pay, cost of capital and FCM depreciation) in each year.¹¹
62. The derivation of the LRIC:FAC ratios is set out in Ofcom's workbook 'CPI-X Model'. Some aspects of the derivation that are set out in this workbook are not explained in the WLA Charge Control Reconsultation, and this means that we are unable to respond to the proposed changes to the model and its inputs. In view of this, we request that Ofcom explain these aspects, which are outlined below:
- a. The derivation of the OCM Depreciation LRIC:FAC ratio (in the workbook 'CPI-X Model', on the worksheet 'Parameters'). We believe this represents FCM depreciation (differing from OCM depreciation by including holding gains) but have not been able to replicate it from the source data; and
 - b. The derivation and meaning of the MCE LRIC:FAC ratio (in the workbook 'CPI-X Model', on the worksheet 'Parameters') and how this differs from the AVE (in the workbook 'CPI-X Model', on the worksheet 'AVEs').
63. Our observations on LRIC:FAC ratios are subject to any further submissions we might wish to make in light of the requested clarifications.

Discrepancy between stated and implied overall forecast FAC

64. Ofcom states that its proposals do not change the overall forecast FAC, but only the split between 'common' costs and 'incremental' costs. We understand Ofcom believes that the former costs are fixed and the latter are variable.¹²
65. However, we note that Ofcom's unit costs for 2020/21 decrease by £1.40 per annum for GEA 40/10 rental and increase by £0.40 per annum for MPF SL1 rental.¹³ Using the volumes from the model Ofcom provided to us, this implies a reduction in forecast FAC of $\pounds 1.40$ for GEA 40/10 rental, offset by an increase of $\pounds 0.40$ on MPF SL1 rental, giving a net reduction of $\pounds 1.00$.
66. We have requested clarification from Ofcom of how this is consistent with there being no change to the overall forecast FAC and what this means for WLR prices, where the charge control is about to be replaced by an obligation to set fair and reasonable prices. Our observations in this section are subject to any further submissions we might wish to make in light of the requested clarifications.

Question 3.3 – QoS-related adjustments

Question 3.3: Do you agree with our proposed approach to implementing the QoS-related adjustments in the charge control? Please provide reasons and evidence to support your answer.

67. The answer to this question covers the three main sections that Ofcom has identified in its updated its WLA Charge Control Reconsultation document, namely:
- a. Fault volume reduction (FVR);
 - b. Resource uplift to meet higher repair standards; and
 - c. SLG payment forecasts.
68. In its WLA Charge Control Reconsultation, Ofcom applies its proposed changes to QoS targets as set out in the related QoS Reconsultation. In line with Ofcom's approach, we have set out in detail our views on Ofcom's proposed FVR and QoS uplift assumptions in our separate response to the QoS Reconsultation. Here, we focus on the impact of the assumptions on these changes, and how they are applied in the relevant model.

¹¹ Ibid, paragraph 3.68.

¹² Ibid, paragraph 3.66.

¹³ Ibid, paragraph 3.70.

Fault volume reduction

69. As we state in our response to the QoS Reconsultation,¹⁴ we agree with Ofcom that the network fault rate forecasts should be based on the Openreach actual planned levels of investment rather than an aspirational view of the scale of benefits that could be delivered, and that the method adopted by Ofcom for allocating the benefits across different products is reasonable. We welcome Ofcom's ongoing review of its cost models and updating of them in response to the issues identified in the June 2017 responses.
70. This subsection discusses Openreach's view on a number of key implications of applying FVR adjustments in the charge control models:
- a. Calculation of Ofcom's fault rate cost 'downlift';
 - b. Removal of compound efficiency impact that previously included FVR benefits;
 - c. Additional FVR funding – both Opex and Capex; and
 - d. Risk of efficiency double count when considering any FVR adjustment.

Calculation of Ofcom's fault rate cost downlift

71. In its QoS model, Ofcom calculates the proportion of costs associated with repair activity across both shared components and those specific to WLR/MPF. To determine the proportion of costs associated with repair activity Ofcom uses both direct (engineering costs) and indirect costs associated with repair activity. The reduction in the fault rate forecasted from Openreach's fault rate reduction programme is then used to calculate a proportional reduction in the total component cost within the CPI-X model. In doing this Ofcom assume a linear relationship between both the direct costs and indirect costs associated with repair.
72. Whilst we agree that it is reasonable and appropriate to assume a linear relationship between the direct costs and fault rates – such that less faults require less visits and therefore less repair work – we do not believe this to be the case for the indirect costs.
73. Ofcom have identified $\pounds 1.2$ bn of indirect repair costs in 2015/16, c. $\pounds 0.8$ bn of which relate to the following:
- a. Training;
 - b. End of day travel;
 - c. Field support officers;
 - d. Work manager control;
 - e. Coaching;
 - f. Personal development time (1-to-1's, team meetings); and
 - g. Admin activity.
74. As we outline both in our QoS document response and below, these costs will increase over the years in the charge control due to the need to recruit more people to meet higher service levels.
75. In using these costs to make its adjustment, Ofcom applies a percentage reduction for FVR activity in addition to the 5.5% operational efficiency, whereas we know that these cost lines will increase (relative to the base year) as a result of the larger workforce needed to deliver the higher MSLS. In fact, for the training and shrinkage costs alone, we believe that across the three years of the charge control, Openreach will incur an additional $\pounds 0.5$ bn of costs (see Figure 6 after paragraph 92 below).
76. We think Ofcom needs to retain costs driven by the number of engineers (rather than faults per se): removing the costs identified above implies that Ofcom consider there will be a reduction in people

¹⁴ Table 3 in our response to Question 4.1.

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during the charge control period. This is plainly at odds with the RPM model which concludes that additional manpower relative to the 2015/16 base year will be needed to achieve the proposed MSLS. Ofcom should consider retaining the proportion of the c.3% of costs identified above that would otherwise be removed by the FVR adjustment in the CPI-X model.

Removal of compound efficiency impact that previously included FVR adjustment

77. We welcome the fact that Ofcom has changed its methodology for estimating repair costs, recognising that the impact of fault reduction is modelled in two different places (steps ii and steps iii) as Ofcom discusses in its updated charge control document.¹⁵
78. However, we still have a concern that a similar issue occurs when the FVR rate reduction is applied to the entire cost base after the QoS uplift. For example, FVR benefits are associated with the avoidance of repair costs (not actually completing the tasks themselves), and as such there is a finite amount of costs relating to the reduction in the current repair base. We consider it is not appropriate to assume that this proportional adjustment can be applied to a base which includes the additional costs associated with servicing these faults, i.e. the QoS uplift. We believe that the QoS uplift and FVR adjustment should be modelled in an additive way rather than multiplicative way (the latter is the current method in the model).

Additional FVR funding – Opex and Capex allowances

79. We welcome the fact that Ofcom now acknowledges that there are additional operating costs above the base year for FVR activities. This equates to 3% and is rolled forward from the base year after common costs have been redistributed in the CPI-X model. Given Ofcom's approach to the re-allocation of common costs we believe this to be a reasonable way to allocate these additional costs.
80. Ofcom claims that no incremental FVR allowance for capital costs is needed over the course of the charge control period as it has assumed a steady state network and, given that Openreach have been spending less capex relative to depreciation costs, that there should then be sufficient coverage for the FVR spend in our latest plans. In assessing the most significant capital cost components, we consider this is a broadly reasonable assumption.

Risk of efficiency double-count when considering any FVR adjustment

81. Ofcom has used historic analysis to assess that Openreach is able to achieve a level of operating cost efficiency for which they determine the midpoint to be 5.5%. Then in its base scenario the cost reduction relating to Openreach's latest FVR programme is added to this – the result is that Openreach would need to deliver a significantly higher level of efficiency than the 5.5% assumed in the model. In assessing the 5.5% efficiency, Ofcom has already captured the benefits (and efficiency) relating to previous FVR investment, and therefore it does not represent an underlying level of efficiency (excluding the impact of FVR). We believe that if Ofcom is to factor in a reduction of costs relating to FVR investment in the forecast years, they need to remove this impact from the base level of efficiency that has been assumed.
82. We appreciate that removing the impact of FVR in previous years for efficiency is not straightforward given that Ofcom's pairwise analysis is based on changes in component volumes and that differences in the usage factors between WLR and MPF lines will affect these volumes disproportionately. We would welcome the opportunity to discuss this point further with Ofcom to ensure FVR programme impacts are modelled appropriately in the model.
83. Further, it is important to remember the scale of the benefits Ofcom has calculated from Openreach's FVR programme. Ofcom's assumptions result in a reduction in operating costs of around 3% over the charge control period across the whole WLA and WFAEL markets. As a proportion of the copper component operating costs, this represents an average annual reduction of c.3%. This reduction is in

¹⁵ WLA Charge Control Reconsultation, paragraph 3.79.

addition to Ofcom's assumptions on operating cost efficiency (5.5% per annum) as well as further efficiencies delivered through economies of scale (through the assumed CVE being less than 1).

Resource uplift to meet higher repair standards

84. In its QoS Reconsultation, Ofcom has adjusted both the level of the MSLs that Openreach needs to achieve as well as the level of resource required to achieve these. This level of resource has been calculated using the adjusted RPM model and generates a resource uplift of 11% for all service levels in 2020/21.
85. This cost uplift is then translated into a percentage amount against total operating costs for the relevant components in each year of the model and applied to the operating cost base.
86. In our response to Question 4.1 of the QoS Reconsultation, we outline in detail our view of the 11% resource uplift, and we believe there to be a number of major differences in the cost uplift allowed and the costs we will incur:
 - a. The impact of loans on resource uplift (adjacent sharing);
 - b. The calculation of the QoS standard costs uplift; and
 - c. Lack of allowance for training and upskilling costs.
87. We believe that Ofcom's revised approach to the way that usage factors are applied in the charge control model is more appropriate than that set out in the March 2017 WLA Consultation.

The impact of loans on resource uplift

88. We discuss in greater detail in our response to the QoS Reconsultation that we believe Ofcom has made unrealistic assumptions with regard to adjacent sharing within the adjusted RPM. Correcting for these assumptions would result in an incremental increase in resource closer to 14.6% (compared to the 11% proposed). Therefore, we would welcome the opportunity to continue to work with Ofcom to ensure that there is an aligned understanding of the required resource uplift to deliver the MSLs.

The calculation of the QoS standard costs uplift

89. We have concerns that Ofcom have underestimated the QoS standards uplift factor that is used to adjust the cost base to reflect the additional resource required in delivering the higher MSLs in each year of the charge control. Specifically, in the QoS model, when the weighted average inflation factor is multiplied by the proportion of repair costs, Ofcom use the proportion of repair costs after the fault rate reduction. We believe this to be inconsistent with the way this is applied in the charge control model, and instead the proportion of repair costs before fault rate reduction is applied should be used in this calculation. Given that the QoS uplift is relevant to the base before the FVR adjustment in the charge control model, this factor should represent the allowable costs appropriately. Using the repair cost proportion after the fault rate dampens down the desired impact unnecessarily, and we do not believe this is the correct mathematical approach.

Lack of allowance for training and upskilling costs

90. Whilst we appreciate Ofcom's assumptions relating to the level of resource uplift required are closer to what we would have expected to deliver the 88% service level by 2020/21, there is no benefit in having this incremental resource if they are not able to do the work required of them. Therefore the cost associated with training new recruits and upskilling existing engineers are crucial to the successful delivery of the increased MSLs.
91. As stated in our response to the QoS Reconsultation, we believe that Ofcom's assumptions do not adequately reflect the operational impact of the recruitment and upskilling required to meet the higher MSLs. Specifically, these costs relate to:
 - a. Engineer training of both experienced and new engineers and taking them out of the pool of engineers available to carry out the actual work to undertake this training ("upskilling shrinkage"); and

- b. Reductions in engineers' "productive time" due to experienced engineers supporting new recruits ("recruit shrinkage").
92. Openreach has estimated the impact of these (together with the resource uplift differences), recognising that these short term changes are necessary in order to drive the ongoing benefits associated with reduced faults in the future. Figure 6 below shows that the \times allowance built into Ofcom's model falls significantly short (c. \times) of the uplift required according to Openreach's analysis. We believe that any improvements in service need to be fully funded within the charge control and therefore need to be reflected in Ofcom's CPI-X model. Additionally, we would note that these costs do not represent the absolute costs required to deliver this training and upskilling, but only the incremental spend relative to the base year (2015/16) costs used in Ofcom's modelling for these activities, as some cost would already have been incurred to deliver the MSLs to date.

Figure 6: Impacts of the proposed MSLs

\times

Source: Openreach analysis

Usage factors

93. Ofcom has corrected how usage factors are applied in Ofcom's CPI-X model to reflect reallocations of costs between MPF, WLR and SMPF, as well as how costs are converted from components to services. From meetings with Ofcom we determined that it was not their intent to change the underlying total costs through the usage factor adjustments, and agree that adjusting these to affect the relevant costs across the different services is more appropriate.
94. In summary, we believe that in order to capture the necessary costs associated with delivering the required MSLs, Ofcom should:
- a. Adjust the resource uplift percentage from 11% in 2020/21 to 14.6%;
 - b. Apply inflation to the pre-FVR adjusted costs; and
 - c. Ensure the additional necessary costs associated with training and upskilling are either included in the QoS uplift percentage or the CPI-X model itself.

SLG payment forecasts

95. Openreach welcomes Ofcom's changes and adjustments to SLG payments, which we believe now more accurately capture the cost dynamics of having to deliver increased MSLs over the charge control period.
96. These adjustments more accurately reflect the fact that the repair activity that Openreach will have to complete will be more complex on average as MSLs improve as a result of the glass ceiling jobs.
97. We also believe that using the base year SLG costs across provision and repair as a starting point for forecasting future payments is more realistic and accurate.

Question 3.4 – Implementing the proposed DPA remedies

Question 3.4: Do you agree with our proposed approach to implementing the proposed DPA remedies in the charge control? Please provide reasons and evidence to support your answer.

98. We consider that Ofcom's approach to implementing its proposed DPA remedies in the charge control is consistent with its proposals in the DPA consultations conducted during 2017. However, as our response to those consultations explained, Openreach disagrees with key aspects of those proposals. In particular:
- a. We do not believe that PIA productisation costs should be recovered across all SMP products;¹⁶
 - b. We do not believe Openreach should be funding network adjustments where there is no clear and demonstrable material benefit to the Openreach network;¹⁷
 - c. We do not believe every user of SMP products should be contributing to a PIA CP's network adjustments;¹⁸ and
 - d. We do not believe the financial limit adjustments Ofcom have arrived at are objectively justified or proportionate.¹⁹
99. 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".²⁰ Openreach should retain the ability to recover its efficiently incurred costs 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. Our view remains that such costs should be recovered through PIA charges alone. All other things being equal, this would result in lower prices for MPF Rentals and GEA FTTC Rentals, and by extension WLR Rentals.

Question 3.5 – Pensions costs

Question 3.5: What factors should we take into account in deciding if and how to update our assessment of pension costs in 2018/19?

100. We agree with Ofcom's conclusion that "the accounting charge in 2015/16 might not provide a reliable basis for forecasting the charge in 2018/19." However, Ofcom has commented that "in the absence of better information at this stage, [Ofcom has] not updated our cost calculations in this consultation to reflect either Openreach's forecast of the increasing cost of providing pension benefits or the potential outcome of the review of the BTPS".²¹
101. As Openreach explained in its June 2017 Response, the amount for ongoing pension service costs relating to defined benefit plans is based on many influencing factors, including the real discount rate and demographic assumptions, Pension Protection Fund (PPF) levies and other administrative expenses. Independent actuaries provide input into BT's on-going pension service costs for defined benefit plans periodically, taking account of these factors. The changes which led to an increase in

¹⁶ Openreach's response to Ofcom's consultation "Wholesale Local Access Market Review: Duct and Pole Access remedies", April 2017, response to Question 7.3.

¹⁷ Ibid, response to Question 4.1.

¹⁸ Ibid, response to Question 4.1.

¹⁹ Openreach's response to Ofcom's consultation "Wholesale Local Access Market Review: Consultation on pricing proposals for Duct and Pole Access remedies", August 2017, response to Question 4.1.

²⁰ Framework Directive, Article 8(5)(a).

²¹ WLA Charge Control Reconsultation, paragraph 3.141.

ongoing costs in 2017/18 were beyond BT's control, and it cannot be argued that the increase is due to a failure of cost control, or that they represent inefficient costs which Openreach could have avoided.

102. Underlying Ofcom's decision to not reflect the 2017/18 increase in costs in its charge control forecasts is the uncertainty as to the outcome of the review of BT's key pension schemes (BTPS and BTRSS).²² Ofcom indicates, however, that it might update its estimate of pension costs if BT is able to provide Ofcom with more information in advance of the publication of the Final Statement.
103. As part of BT's review of benefits, a consultation of at least 60 days will take place to allow BT to consider feedback from employees on any changes proposed before deciding on final outcomes. If this consultation commences in November 2017, BT is likely to consider final outcomes in early 2018. The impact on the pensions cost cannot be determined until the conclusion of the consultation and there is a material risk that the final resulting changes (if any) to BT's pension schemes will not be available in time for Ofcom to incorporate them in its draft Statement in February 2018. The outcome may even result in higher overall costs over the short to medium term, e.g. due to transitional arrangements. Costs would also continue to vary with market conditions.
104. If Ofcom considers there is not sufficient certainty as to BT's pension costs in advance of the publication of the WLA Final Statement, Ofcom must consider measures to ensure that the pension costs are appropriately reflected in the charge control. In this regard, it is apparent that using 2015/16 or 2016/17 pensions costs is not an appropriate basis for setting pension costs going forward as it would likely lead to BT under-recovering its pension costs.
105. Given the significant shortfall that would result if the pensions costs were not uplifted and the difficulty of predicting the outcome of BT's consultation, Openreach suggests that in this exceptional circumstance, the 2017/18 costs are used to forecast future pensions costs and that a 'true-up' mechanism similar to that proposed for cumulo costs is instead used. This clearly appropriate because:
 - a. These costs are largely beyond the control of BT;
 - b. To the extent they can be controlled, BT has every incentive to ensure service costs are efficient; and
 - c. It is appropriate, in these circumstances, to allow actual costs to be passed through rather than to rely on inevitably uncertain estimates that expose BT (and customers) to under/over-recovery if the estimates prove to be wrong.
106. If Ofcom is not minded to introduce a cost pass-through we consider that the most appropriate estimate of pensions costs are the 2017-18 cost forecasts provided to Ofcom. We will continue to engage with Ofcom as more information becomes available and will be happy to discuss with Ofcom the mechanism for a true up in the absence of a final decision from the review.

Question 3.6 – Recovering the cost of network expansion

Question 3.6: Do you agree with our proposed approach to implementing the impact from recovering the cost of investment in network expansion? Please provide reasons and evidence to support your answer.

107. Openreach's detailed views on this issue are set out in our response to Ofcom's August 2017 consultation "Wholesale Local Access Market Review: Recovering the costs of investment in network expansion". In summary the key points we would highlight are as follows:
 - a. We agree with Ofcom that in this instance, the most appropriate means of recovering Openreach's costs is through an uplift on all broadband lines, both copper and fibre;
 - b. There is no "one size fits all" when it comes to cost recovery. Ofcom itself identifies a number of cost recovery principles in paragraph 6.11 of the network expansion consultation but accepts that some of these principles are more relevant than others in assessing the cost recovery options in that case. Ofcom and BT share the common objective of minimising the impact on

²² BT Retirement Saving Scheme.

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- end-users of BT's proposed Universal Broadband Commitment (UBC), if accepted by Government, by spreading the costs as widely as possible, and in a way that is broadly consistent with allocative efficiency (i.e. allocating to services which are less sensitive to price);
- c. In the case of DPA, as set out above and in Openreach's responses to Ofcom's DPA consultations,²³ more emphasis needs to be placed on cost causation – i.e. recovering costs from those whose actions cause the costs to be incurred at the margin. This is because, in the case of DPA, it is important that appropriate signals are sent for efficient investment. Firms should build their own fibre networks (using DPA access) if the benefits of introducing such network competition exceed the costs. Whilst Ofcom is seeking to reduce the costs of introducing this competition by allowing access to Openreach's ducts and poles (rather than competitors having to build their own passive infrastructure) those using this access should still make a reasonable contribution to the costs they cause BT to incur, otherwise there is a risk of competition being introduced where the benefits do not exceed the costs (i.e. assistance of inefficient entry);
 - d. We note that Ofcom proposes cost uplifts only for the three years of the next WLA charge control. However, given that Openreach's investment is mainly capitalised, we will also need to recover the bulk of our costs, primarily depreciation, through subsequent charge controls. Whilst we recognise that it is not possible to be prescriptive over the detail of future charge controls at this stage, we do need as much certainty as possible that the entirety of Openreach's efficiently incurred UBC investment can be recovered through future charge controls;
 - e. We have some concerns over the WACC for the copper access network that Ofcom considers appropriate in this context; and
 - f. There are several detailed aspects of the inputs to the modelling driving the UBC mark-up with which we disagree. In our response to the network expansion consultation we make some suggestions as to how improvements could be made to deliver more robust estimates.

Question 4.1 – Charges for GEA Cablelink and VLAN moves

Question 4.1: Do you agree with our proposals for controlling charges for GEA Cablelink and VLAN moves? Please provide reasons and evidence in support of your views.

GEA Cablelink connections

108. In assessing whether it would be appropriate to price GEA Cablelink at FAC or LRIC, Ofcom's chief concerns are whether (1) high GEA prices might act as a barrier to GEA take-up or (2) setting GEA Cablelink prices at LRIC might more generally promote competition and encourage investment.²⁴
109. As set out by Ofcom, recovering the common costs allocated to GEA Cablelink through GEA rentals would not help encourage migration to GEA services as GEA Cablelink costs are "shared over all of a telecom's provider's superfast customers".²⁵ Further, Openreach considers there is no reason to believe a GEA Cablelink price set at LRIC would promote competition or encourage investment. For those reasons, Openreach agrees that FAC is a more appropriate cost standard than LRIC to use for a GEA Cablelink product.
110. Since the June 2017 Response, the price of GEA Cablelink has been reduced to reflect Ofcom's proposals for FTTC rental pricing. Setting the GEA Cablelink price at FAC is consistent with how Ofcom proposes to set the FTTC rental price.

²³ Including Openreach's response to Ofcom's consultation "Wholesale Local Access Market Review: Consultation on pricing proposals for Duct and Pole Access remedies", August 2017.

²⁴ WLA Charge Control Reconsultation, paragraph 4.12.

²⁵ Ibid, 4.12.

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111. Following the revised approach set out above, Ofcom now proposes start charge adjustments to bring GEA Cablelink prices to FAC at the start of the control, followed by a CPI-0% control, in other words a flat price cap in real terms.²⁶ Openreach considers that Ofcom's approach to a start charge adjustment must be seen in the context of the significant price reductions that have already been proactively implemented by Openreach. On that basis, Openreach considers that, if necessary, a glide from the current price would be more appropriate. The price reductions already made by Openreach, and the future price reductions proposed by Ofcom, could stimulate additional demand for Cablelink connections.
112. As the cost of electronic equipment is recovered in GEA rentals and not in the price of GEA Cablelink, this could lead to an inefficient use of electronic equipment. We would expect that Ofcom reflect this in the costs they assume in their cost modelling for GEA rentals.

GEA Cablelink rentals

113. Openreach does not currently charge for GEA Cablelink rental: all the prices referred to above are connection charges only. Ofcom proposes that this should be formalised through the imposition of a rental charge cap of zero for GEA Cablelink services. The intention is that this should prevent Openreach from circumventing the control on GEA Cablelink connection charges by introducing rental charges.

114. We disagree with this proposal. ✗

. We understand that by setting a price ceiling of £0 on the rental charge Ofcom is seeking to prevent Openreach generating overall revenues for GEA Cablelink above FAC. ✗

115. ✗.

VLAN moves

116. We agree that VLAN moves should be priced using a FAC standard (as opposed to LRIC), and that bandwidth modify represents a suitable proxy. However please refer to comments made in section 4 of Volume 2 of the June 2017 Response about the prices calculated by Ofcom for bandwidth modify using the bottom up model, which we believe is too low based on our own view of costs from the RFS.

Question 4.2 – Forecasting tie cable service costs

Question 4.2: Do you agree with our proposals for forecasting tie cable service costs? Please provide reasons and evidence in support of your views.

117. Ofcom uses 2012/13 RFS volumes, which include charge controlled and non-charge controlled tie cable services, and extrapolate these volumes forward using the 2012/13 ratio of ties to MPF and SMPF lines to forecast the component volumes for the charge control period.
118. Ofcom also performs an additional adjustment to component volumes to account for non-charge controlled ties services (SL206). This adjustment is unwarranted because the base volumes used to extrapolate and forecast tie cable component volumes already includes the non-charge controlled

²⁶ Ibid, 4.13.

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services. The resulting component volume forecasts are therefore overstated. We estimate this results in an under-recovery of costs during the charge control period of c.£

119. Ofcom should correct its forecast to remove the double-counting of ties component volumes.

Question 4.3 – Forecasting co-mingling service costs

Question 4.3: Do you agree with our proposals for forecasting co-mingling service costs? Please provide reasons and evidence in support of your views.

120. We understand Ofcom's intention in setting the 2018/19 price is that it should equal its modelled LRIC plus EPMU cost.²⁷ It appears that the price is actually 4% lower than this cost level, and Openreach would ask Ofcom to modify its price proposals to give effect to its intention.

Question 4.4 – MPF New Provides basket, MPF order cancellations/amends and MPF Standard Line Test

Question 4.4: Do you agree with our proposals for the MPF New Provides basket, the individual charge controls for MPF order cancellations/amends, and MPF Standard line test? Please provide reasons and evidence in support of your views.

121. We agree with Ofcom's proposal for the MPF New Provides basket. We appreciate that Ofcom has moved the Tie Pair modification products to the MPF New Provides basket and believe this will lead to more sensibly aligned pricing. We agree with Ofcom's assessment in paragraph 4.83 (a) of the WLA Charge Control Reconsultation that given the volumes and revenues on these products are immaterial, there should be no impact on the 'X' calculated for the MPF New Provides Basket.
122. We agree with Ofcom's proposal for the price controls for MPF Cancellations and Amends. These are substantially the same service as the GEA Modify, Cancellation and Amend products, and it is appropriate to assume they have the same cost, and price at the same level.
123. We agree with Ofcom's proposal to set a real cap on MPF Standard Line Test prices. As we set out in our response to the March 2017 WLA Consultation, we believe real caps are more appropriate than nominal caps. We question, however, why the CPI-0% cap does not commence in the first year of the control, to reflect changes in cost from 2017/18 (when the current charge is £3.93) to 2018/19, whereas in table 4.5 Ofcom shows the price remaining flat at £3.93 in 2018/19.

Question 4.5 – GEA Cancel/Amend/Modify services

Question 4.5: Do you agree with our proposals to GEA Cancel/Amend/Modify services? Please provide reasons and evidence in support of your views.

124. We agree with Ofcom's proposal for the GEA Cancel, Amend and Modify services and appreciate that Ofcom has responded to feedback that Openreach provided in the June 2017 Response.
125. The service performed when a modify is made to GEA 40/10 is the same as when a modify is made to any other bandwidth and so using the FAC determined by Ofcom for Bandwidth Modify to GEA 40/10 for all other Bandwidth Modifies is appropriate. The costs for other order Modifies, Cancels and Amends are also substantially the same and it is appropriate to set all these items at the same price.

²⁷ LRIC – Long Run Incremental Cost; EPMU – Equal Proportionate Mark-Up.

126. We agree that FAC is the right cost standard to use. There is no impact on the competitive conditions of the market from these ancillary items that could justify a LRIC standard being applied.

Question 5.1 – Implementation of charge controls for BT's LLU and VULA services

Question 5.1: Do you agree with each of our further proposals in relation to the implementation of charge controls for BT's LLU and VULA services? Please provide reasons and evidence in support of your views

127. We have conducted a review of the legal instrument and would like to bring the following points to Ofcom's attention. We have focussed our comments on the changes as blacklined in Annex 5 "Draft Legal Instruments" to the WLA Charge Control Reconsultation ("Draft Legal Instruments"), however we have also made a number of other observations based on the further review opportunity afforded by the WLA Charge Control Reconsultation.
128. This section has been presented in the order that the conditions are presented in the Draft Legal Instruments.

Condition 7 generally – Special Offers

129. It appears that "Special Offers" are excluded for the purposes of condition 7A, and therefore the compliance calculations. For example, the definition of Total Revenue (condition 7A.12.dd) specifies that this is revenue "excluding any discounts offered" and the data that should be provided for demonstrating compliance includes "all charges, excluding any discounts" (condition 7A.9.c).
130. We believe that Special Offers should be allowed to count towards compliance, which is the approach adopted by Ofcom in the BCMR (see BCMR, condition 10A.19 for example). In BCMR, time limited special offers are reflected in the weighted average and thus taken into account when assessing compliance with the charge control. This benefits CPs and consumers in general, as it allows Openreach the flexibility to stimulate demand, or incentivise migration from legacy to strategic products.
131. Openreach considers that such flexibility would also be appropriate in relation to the WLA market. For example, in relation to GEA, it may enable Openreach to stimulate demand to optimise capacity or to encourage migration from copper to GEA products. If such special offers cannot be taken into account for the purposes of assessing compliance, the incentives to offer such special offers could be reduced, to the detriment of CPs and consumers.
132. Openreach notes, however, that Condition 7 does not prevent increasing/reducing prices (and those prices being reflected in the weighted average price for compliance purposes) where those price moves are not characterised as a "special offer". For example, the price of GEA connection could be reduced for six months and then increased to its original level (subject to complying with notice periods). As long as the movement in the weighted average price from one year to the next is lower than the controlling percentage, Openreach would have complied with the charge control. Condition 7B.5 states that "For the avoidance of doubt, nothing in this condition 7B.5 shall prevent the Dominant Provider from increasing and/or decreasing the charges made for each of the services at conditions 7B.5(a) to 7B.5(e) provided the requirements set out in this condition 7B.5 and condition 7B.1 are complied with." Accordingly, Openreach could reduce the price of a product and subsequently increase it again, and would comply with the charge control. However if a reduction of the same value and duration was called a "special offer" the current legal instrument drafting suggests that this wouldn't comply. However, relying on these provisions is inefficient: Openreach will have less flexibility and agility to change prices to responds to commercial drivers.
133. Therefore we request that Condition 7 is amended to allow special offers to count towards compliance, mirroring the approach in the BCMR.

Condition 7A

134. There is a typographical error in the definition of "MPF Amend" in condition 7A.12(k), i.e. there is no corresponding service described in row 4 of the table in Part 4 of the Annex to condition 7A.

Condition 7B

135. First, we refer to paragraph 54 of Openreach's response to Ofcom's consultation "*Wholesale Local Access Market Review: Recovering the costs of investment in network expansion*" which stated:

"We also agree with Ofcom's proposed approach of having two FTTC prices; one when FTTC 40/10 is taken with WLR or on its own, and another when FTTP 40/10 is purchased with MPF. However, we do not believe that Ofcom's approach to implementation within the legal instrument Condition 7B is the best way to achieve their proposal. We believe there are two ways that Ofcom could charge control the two prices of FTTC 40/10:

"a) Set a charge control for FTTC 40/10 sold with MPF, with a charge ceiling in year one of the control and a CPI-X control thereafter (as per the original WLA Charge Control legal instrument). Set a price for FTTC 40/10 sold on its own or with WLR to be a fixed amount above the other FTTC charge, with the fixed amount being different in each year (namely, £0.39, £1.19 and £1.93).

"b) Set a charge control for FTTC 40/10 sold with MPF, with a charge ceiling in year one of the control and a CPI-X control thereafter (as per the original WLA Charge Control legal instrument). Set a price for FTTC 40/10 sold on its own or with WLR with a charge ceiling in year one of the control and a CPI-X control thereafter. The level of X is calculated so that the difference between the two FTTC prices will be the modelled amount of cost recovery.

"By proposing the second approach, Ofcom has chosen the option that will lead to the cost being over or under recovered depending on the rate of inflation. We believe it would be better to adopt the first option, which will always lead to the modelled costs being exactly recovered on each line."

136. We repeat those submissions here and submit that condition 7B, in particular 7B.1(aa) and 7B.4 (a) (i.e. reference to condition 7B.1(aa)) be amended accordingly.
137. There are also cross-referencing errors in the definitions of "1Gbit Cablelink Rental" and "10 Gbit Cablelink Rental" in conditions 7B.10(c) and (d), i.e. there is no corresponding service described on Openreach's website. These terms should be redefined on a standalone basis (i.e. without reference to Openreach's website).

Condition 7C

138. We disagree with Ofcom's definition of the hourly charge to be used for calculating the SFI price as set out in condition 7C.6 that it should be the charge calculated in accordance with condition 7C.1(d). This refers back to the TRC for an additional hour of work.
139. Ofcom sets the charge for an hour of TRC to reflect the actual amount of time worked on average (this was a change made in the 2014 FAMR). Given that charges are rounded up to the nearest hour (i.e. because a full hour is not always worked), Ofcom reduced the "up to one hour" charge from one hour's cost at FAC to $\frac{1}{2}$ at FAC. If this "additional hour" TRC charge is applied to the SFI task time to create the SFI price, it will always be under charging for an SFI by $\frac{1}{2}$ in every hour. Instead, the SFI task time should be applied to the cost of a full hour of labour at FAC.
140. The initial draft of the legal instrument in the March 2017 Consultation cross-referred to 7C.1(i), and was therefore correct. This is because, while this is the charge for additional hours out of hours work (currently £52.80), this is the same value as the current hourly cost of labour. Alternatively, Ofcom could refer to 7C.1(l) which is an Additional Internal Shift, as this product $\frac{1}{2}$ reflects one hour of labour at FAC.

Additional observations

141. In addition, we note that it is not clear from the WLA Charge Control Reconsultation whether the following specific representations on the legal instruments as set out in the June 2017 Response have been taken into account:
- Condition 1 (placement of paragraph on the application of the SMP conditions to MPF SML2, SML3 and SML4) – see paragraph 341 of the June 2017 Response;

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- b. Condition 2 (definition of MPF External Tie Circuit) – see paragraph 341 of the June 2017 Response;
 - c. Condition 6 (linkage between the SLU rental pricing to MPF SML1) – see paragraph 343 of the June 2017 Response;
 - d. Condition 7A.3 (calculation of compliance) – see paragraphs 344 to 345 of the June 2017 Response;
 - e. Condition 7A.6 and condition 7B.4 (adjustment of controlling percentage to reflect any excess or deficient compliance) – see paragraph 346 of the June 2017 Response;
 - f. Condition 7C.6 – (SFI modules) – see paragraphs 349 to 350 of the June 2017 Response; and
 - g. Condition 9 (notice periods) – see paragraphs 351 to 354 of the June 2017 Response.
142. We reiterate that we believe those comments should be reflected in the final Legal Instrument. In relation to Condition 7C.6 – (SFI modules) to assist Ofcom we suggest that:
- a. Condition 7C.6.a.i be amended to: “The amount of time required by an engineer on order to complete the corresponding Special Fault Investigation Service based on the actual task time of the six month period from April to October of the prior year”;
 - b. Condition 7C.6.b.i be amended to: “The amount of time required by an engineer on order to complete the corresponding Special Fault Investigation – Base Module or Special Fault investigation – Frame Direct Module based on the actual task time of the six month period from April to October of the prior year”; and
 - c. Ofcom could use its powers under conditions 7C.8(f) and/or 7C.8(e) to obtain the necessary data in order to audit the relevant engineer task times.

4 Other issues

Volumes

143. We refer Ofcom to Annex 4 of Openreach’s June 2017 Response where we outline why we consider Ofcom’s volume forecast for copper lines is overstated by at least \times lines in 2020/21. Ofcom has not responded to the evidence we provided and since our June 2017 response more information has emerged, especially regarding an increasing mobile only trend, which should also be taken into account. We consider Ofcom needs to decrease its copper line forecast in line with our previous submission and the further evidence provided below.
144. Since the June 2017 Response was submitted, we have observed changes concerning a number of the volume drivers. In some cases the extent to which the volume driver has changed since our submission has been significant and therefore it is relevant to bring to the attention of Ofcom. We have noted changes regarding the following volume drivers:
- a. Mobile-only households;
 - b. Losses to Virgin Media; and
 - c. Losses to Alternative Network Providers (beyond Virgin Media).
145. We discuss the extent to which each of these volume drivers has changed since our submission below.

Mobile-only households

146. Openreach’s June 2017 Response on mobile-only households was in agreement with Ofcom’s forecast and justification for a more conservative level of decline in mobile-only households through to 20/21. Since our June 2017 Response we have noted a number of insights and data points which indicate that the percentage of mobile-only homes has increased in 17/18. We estimate that Openreach has for the first time in 8 years experienced a net loss to mobile-only homes during the first 6 months of 17/18.
147. The measure of mobile-only households in Ofcom’s “Technology Tracker” reveals that the % of mobile-only households where no fixed broadband is present increased 1.4ppt in the H2 2017 survey (Figure 7). Although, as we previously raised in our June 2017 Response, the figures reported in the Technology Tracker have a margin of error in the region of plus or minus two percentage points, given the change in trajectory we see the latest movement in H2 2017 as significant.

Figure 7. UK Mobile-only households (%)²⁸

	H1 2015	H2 2015	H1 2016	H2 2016	H1 2017	H2 2017
Mobile-only no fixed broadband	9.9%	9.5%	10.2%	8.8%	8.3%	9.7%

148. Openreach observes a shift in a number of factors which are favourable to increased in-home mobile broadband adoption which have emerged over the past 12 months:
- a. Accumulation of fixed broadband price rises over recent years has resulted in some households making a financial decision to cease their fixed line and broadband connection to rely on mobile broadband with the majority of consumers now owning a smartphone and 4G SIM;²⁹
 - b. Highly competitive mobile market – current competitive nature of the saturated UK mobile market has seen the price per GB of data reduce resulting in mobile SIM and mobile

²⁸ Source: Ofcom Technology Trackers (H1 2015 – H2 2017) including follow-ups with Saville Rossiter-Base.

²⁹ Enders Analysis, “UK broadband, telephony and pay TV trends Q2 2017: Dead cat bounce?”.

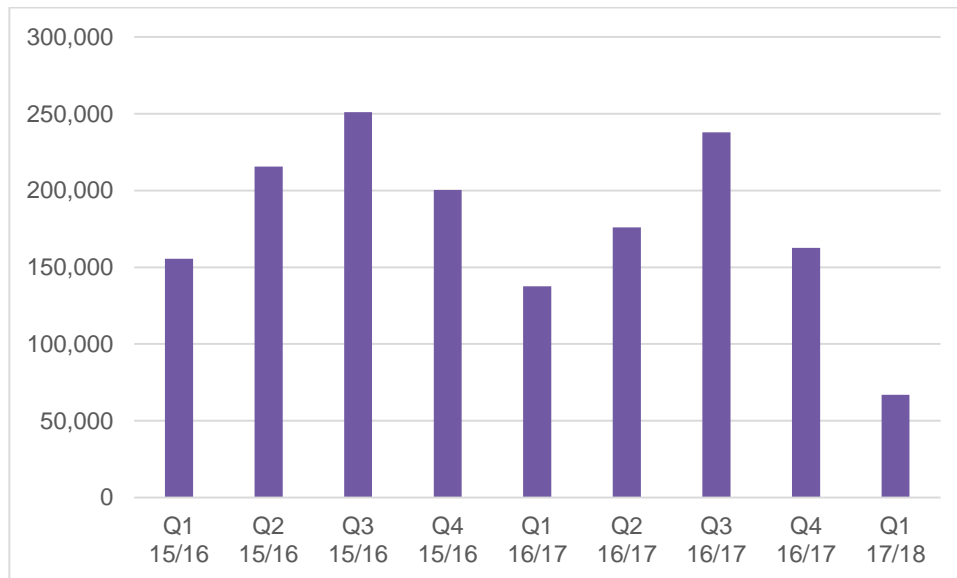
broadband packages priced more competitively vs. fixed;

- c. Mobile Network Operators (MNO) guaranteeing unlimited usage on particular apps (i.e. ‘zero-rated applications’) – the majority of UK MNOs now offer bundled or add-on zero-rated apps and services covering a range of apps including social media apps and more valuable options such as unlimited usage of video streaming services (e.g. Netflix);³⁰ and
- d. Continuing shift towards small and mid-screen device usage in home – smartphones/ tablets increasingly used by consumers to access web content³¹ with the experience via these devices improving with slicker mobile sites and app development.

149. We consider it likely that a combination of the above factors are driving both (1) losses from our existing broadband base to mobile-only and (2) mobile-only capturing an increased proportion of consumers choosing to take-up broadband at home and consequently dropping their fixed voice line.

150. Market statistics (Figure 8.) also demonstrate that growth in the UK broadband market has slowed markedly in 17/18. Total Market broadband net adds (Virgin Media + Openreach) of 67k in Q1 17/18 were down 51% YoY. Market broadband net adds were down 19% YoY also in Q4 16/17. Broadband net additions are yet to be published for Q2 17/18 (due on 2nd November from both BT and Virgin Media) but analyst consensus clearly indicates a further quarter of YoY decline.

Figure 8. Total UK market broadband net additions³²



151. Although the broadband market is nearing saturation there is still sizable room for growth fuelled by both new broadband adoption and build of new residential premises, indicating that other factors have started to weigh down market growth in recent quarters.

152. In summary, Openreach observes that a number of factors have already driven an increase in mobile-only households during 17/18 and forecast that this shift in the dynamic will remain through to 20/21. Although the available evidence gathered to date is not completely conclusive of a long-term change in this volume driver, we have concluded that the changes are most likely to influence the dynamic between fixed broadband and mobile-only adoption through to 20/21.

153. The change to the forecast of this volume driver amounts to increased losses of \times lines over the 3 year period between 18/19 and 20/21, in comparison to the previous Openreach forecast. We consider

³⁰ Example: <https://www.ispreview.co.uk/index.php/2017/07/three-uk-offers-go-binge-4g-mobile-plans-unlimited-video-streaming.html>.

³¹ Ofcom Communications Market Report 2017 – 42% of internet users rate smartphone as most important device to access web content; 26% laptop, 16% tablet, 11 desktop PC.

³² Sources: (1) BT quarterly KPIs – Openreach DSL & Fibre net additions, (2) Virgin Media quarterly results – Internet net additions.

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this to be a substantial change and recommend that Ofcom makes an adjustment to the impact of mobile-only households within the Volumes Model.

Losses to Virgin Media

154. Virgin Media reported continued slow execution of additional Total Homes Passed (THP) under their “Project Lightning” programme over the six months to the end of June 2017. In total 229k THP was delivered in H1 2017,³³ significantly below the run rate needed to meet their previously stated target of 700-800k THP in 2017.³⁴ As Virgin Media maintain that they will achieve the full 4m build by 2019,³⁵ this changes the profile of their build programme with increased volume delivered in 2018 and 2019. As a consequence our modelling calculates that the Openreach fixed line base will incur marginally greater losses through to 2020/21.
155. In summary the increased losses we forecast between 18/19 and 20/21 are relatively small in the context of the overall net movement of the Openreach Fixed line base. The latest Openreach forecast accounts for a loss of more than \times more lines over the three year period between 2018/19 and 2020/21, in comparison to the previous forecast. Therefore we do not recommend that Ofcom makes any further adjustments beyond what was included in our June 2017 Response.

Losses to Alternative Network Providers

156. Two of the alternative network operators highlighted in our submission, Hyperoptic and CityFibre, made announcements in July 2017 concerning raising additional investment to increase their roll-out plans.
157. Hyperoptic announced that they had secured additional funding of £100m to extend their roll-out of FTTP beyond the current target of 500k premises to 2m by 2022.³⁶ We anticipate that a substantial part of the 2m target (2022) will be delivered by March 2021, specifically we model Hyperoptic’s THP to reach 1.5m by end of 2020/21. This is a material difference to our previous modelling of Hyperoptic’s THP in 20/21 which was based on an extrapolated profile anchored on achieving their previous THP target of 500k in 2018 (i.e. Hyperoptic would continue to build at a similar rate beyond 2018).
158. CityFibre announced a plan to raise up to £200m through placing of equity with new and existing investors in order to roll-out FTTP to residential premises in “5-10 UK cities” beginning in 2018.³⁷ Although not completely clear CityFibre’s Investor Prospectus implies that c.£100m of the funding will be directly used to deploy residential FTTP, with the remaining £100m used to fund of commercial priorities.
159. CityFibre have not stated a THP target associated with the new funding but using a conservative assumption of 5 cities of a similar size to York (c.80k total premises), and were to deploy to 50% of premises, the total THP beyond the York build would be 200k (254k incl. York build). This is broadly consistent with our previous modelling of CityFibre’s THP in 2020/21 but we note that this is on the basis of conservative modelling of CityFibre’s ambitions announced in July and therefore there is risk that losses from the Openreach fixed line base will be higher.
160. In summary the increased roll-out plans of Hyperoptic and CityFibre amount to increased losses of \times lines over the 3 year period between 2018/19 and 2020/21 (chiefly attributable to changes made to Hyperoptic modelling), in comparison to the previous Openreach forecast. We deem this to be a notable change and given that both operators have publicly stated their increased roll-out targets, we recommend that Ofcom makes a further adjustment to what was included in our June 2017 Response to reflect these latest announcements.

³³ <http://www.libertyglobal.com/pdf/presentations/Liberty-Global-Group-Q2-2017-Investor-Call-Presentation-FINAL.PDF>, slide 9.

³⁴ <http://www.libertyglobal.com/pdf/presentations/Liberty-Global-Group-Q4-2016-Investor-Call-Presentation-FINAL-AMENDED.pdf>, slide 6.

³⁵ <http://www.libertyglobal.com/pdf/presentations/Liberty-Global-2014-Investor-Call-Presentation-FINAL.pdf>, slide 8.

³⁶ <https://www.hyperoptic.com/press/posts/hyperoptic-secures-100million-to-accelerate-full-fibre-rollout/>

³⁷ <https://www.cityfibre.com/news/cityfibre-fundraise/>

AVCs

161. We note that Ofcom discuss Abortive Visit Charges (AVC) in this consultation, though does not ask any questions on it. As an initial observation, we refer to our submissions on the definition of network access (see paragraph 166 of our June 2017 Response) and the importance of undertaking a disciplined analysis of whether a service is “reasonably necessary”. We repeat those submissions here.
162. Notwithstanding those submissions, we nevertheless agree with Ofcom’s conclusion that there does not need to be a charge control on AVCs.
163. As TalkTalk accept in their response to the March 2017 WLA consultation, there is a good reason for the AVC to be above cost. This charge needs to be sufficiently high so that it acts as a disincentive to prevent inefficient use of engineering resource.
164. We also note that the price of AVCs is linked to the payment made for Missed Appointments.³⁸ Therefore we would expect that if there were to be a change in the charge for AVCs that this would flow through to the payment made for Missed Appointments. The linkage between these two items is understood by industry and historically no issues have been raised with the value of these items.

Start charge adjustments

165. In paragraphs 3.142 to 3.161 of the WLA Charge Control Reconsultation, Ofcom i) clarifies its general approach on the speed of aligning charges with costs and why this leads to its proposing glidepaths rather than start charge adjustments in the next MPF and GEA charge controls and ii) states that it is still considering stakeholders’ views on this issues set out in their responses to the March 2017 WLA Consultation.
166. We would particularly urge Ofcom to consider Openreach’s representations on start charge adjustments, which it has not yet addressed. These were set out in paragraphs 11 to 12 and 50 to 57 in our response to the March 2017 WLA Consultation, in which we explained that we believe it is not appropriate to impose truncated one-year glide paths. Our comments are summarised below:
 - a. The glidepaths that Ofcom proposes are non-linear and truncated, covering the first year of the controls only. These characteristics mean that the glidepaths are in effect starting charge adjustments, contrary to Ofcom’s intention not to impose such adjustments in these controls;
 - b. The proposal would cause a significant discontinuity in prices over time, contrary to Ofcom’s policy that there should be *“a more stable and predictable background against which investment and other decisions may be taken by market players. This is particularly important for telecoms as there are now many suppliers besides BT”*.³⁹
 - c. The proposed glidepaths are not supported by the degree of cost misalignment. Ofcom has consistently used DSAC as the benchmark for considering whether initial prices are too high. There is no evidence that any of the prices covered by the proposed controls is above DSAC: indeed, on the basis of Ofcom’s bottom-up model, current GEA prices have been insufficient for Openreach to reach discounted payback on its investments; and
 - d. There would be a harmful impact on Openreach’s incentives to make its business more efficient. Ofcom has previously (and repeatedly) noted that “where BT is subject to repeated charge controls, if at the end of each control we automatically adjusted prices to costs then this could dampen BT’s incentives to make cost savings through time”⁴⁰ and “there would be little incentive to efficiency towards the end of a control period”.⁴¹

³⁸ The values of AVCs and Missed Appointments are aligned. The Missed Appointment payment is set to be the AVC less the SLG that a CP typically receives when an appointment is delayed due to a missed appointment.

³⁹ Ofcom, Leased Lines Charge Control Statement, March 2009, paragraph 3.227.

⁴⁰ Ofcom, Leased Lines Charge Control Statement, March 2009, paragraph 5.88.

⁴¹ Ibid, paragraph 3.230.

Regulatory Financial Reporting

Ofcom's proposals

167. Ofcom states that it has not yet completed its analysis of regulatory financial reporting and intends to consult 'more fully' on its proposals in a separate reporting consultation in Autumn 2017.⁴² We will respond fully to any changes to regulatory financial reporting proposed by Ofcom, including any proposed changes to draft legal instruments.
168. In summary, Ofcom's proposals are:
- a. For Tie Cables, Co-mingling and GEA Cablelink services, BT is to expense all costs, including costs previously capitalised, and ensure that these services receive no attributions of historical assets.⁴³ Ofcom proposes no change to BT's revenue accounting policy for these services, which is to recognise the revenue immediately, but states that this is not consistent with BT's existing accounting policy for the costs;⁴⁴
 - b. Further discussions between Ofcom and BT on the whether the introduction of new network components is required to demonstrate compliance with the proposal to expense all costs associated with Tie Cables, Co-mingling and GEA Cablelink services;⁴⁵
 - c. BT to provide Ofcom privately with an additional AFI to demonstrate compliance with the proposal to expense all costs associated with Tie Cables, Co-mingling and GEA Cablelink services;⁴⁶
 - d. BT to publish revenue, volume, average price and FAC for Tie Cables, Co-mingling and GEA Cablelink services, including VLAN moves 'where practical', split between internal and external and also split between connections and rentals;⁴⁷
 - e. For AVCs, BT is to expense all costs, including costs previously capitalised, and ensure that these services receive no attributions of historical assets.⁴⁸ Ofcom proposes no change to BT's revenue accounting policy for this service, which is to recognise the revenue immediately, but states that this is not consistent with BT's existing accounting policy for the costs;⁴⁹
 - f. BT to publish revenue, volume, average price and FAC for AVCs;⁵⁰
 - g. Assets currently accounted for under the ACPA class of work are split into three groups: GEA, Co-mingling and all others;⁵¹
 - h. BT to attribute all costs of GEA OSS/BSS to GEA services; and
 - i. BT to update its Accounting Methodology Document ("AMD") to reflect Ofcom's proposed changes to reporting requirements.⁵²

BT's response to Ofcom's proposals

169. We disagree with Ofcom's proposal to change our accounting policy on the recognition of the costs of Tie Cables, Co-mingling, GEA Cablelink services and AVCs. Ofcom's proposal is not consistent with

⁴² WLA Charge Control Reconsultation, paragraphs 4.99 and 4.100.

⁴³ Ibid, paragraph 4.105.

⁴⁴ Ibid, paragraph 4.103.

⁴⁵ Ibid, paragraph 4.111.

⁴⁶ Ibid, paragraph 4.113,

⁴⁷ Ibid, paragraph 4.110.

⁴⁸ Ibid, paragraph 4.116.

⁴⁹ Ibid, paragraph 4.115.

⁵⁰ Ibid, paragraph 4.117.

⁵¹ Ibid, paragraph 4.107.

⁵² Ibid, paragraph 4.114.

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the relevant accounting standards and cannot therefore be adopted in our statutory accounts.⁵³ We believe that adopting different accounting treatments for these costs in the statutory and regulatory accounts will reduce their comparability and lead to a reduction in the transparency of the regulatory accounts.

170. In response to Ofcom's concern about the inconsistency of our accounting policies for costs and revenues for Tie Cables, Co-mingling, GEA Cablelink services and AVCs, we have reviewed our policies for the recognition of both revenue and costs and can confirm that they are consistent with our accounting policies and the relevant accounting standards.⁵⁴
171. In the event that Ofcom nevertheless requires BT to immediately recognise the costs for Tie Cables, Co-mingling, GEA Cablelink services and AVCs, we disagree with Ofcom's proposal to require BT to both i) provide an AFI demonstrating our compliance and ii) create additional network components to demonstrate compliance. We believe it is disproportionate to require us to do both and instead propose to discuss with Ofcom which alternative would be more effective and efficient.
172. In response to Ofcom's proposals on the costs currently accounted for in the Class of Work ACPA, we propose to:
- a. Move the cost of assets which provide power to the GEA DSLAMs to the Class of Work LFME, which is attributed to the Plant Group PG953C GEA DSLAM and Cabinets, which is in turn allocated to the Component CL953 GEA DSLAM and Cabinets and then attributed to GEA FTTC Rentals Internal and External.⁵⁵ This attribution is appropriate for these assets;
 - b. Leave the remaining costs in Class of Work ACPA and amend the attribution, removing PG953C GEA DSLAM and Cabinets, so that costs are shared between PG132B LLU Co-mingling Recurring Costs and PG136A LLU Co-mingling Surveys.⁵⁶ This attribution is appropriate for these assets; and
 - c. As our investigation has identified no other material assets which are included in the ACPA class of work, we propose to make no other changes.
173. We expect Ofcom's proposals for changes to regulatory financial reporting to be reflected in draft legal instruments in the consultation it proposes to hold in Autumn 2017.

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 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 for revenue is IAS 18 "Revenue". The relevant accounting standard for costs is IAS 16 "Property, Plant and Equipment".

⁵⁵ AMD 2017, pages 38, 202 and 228.

⁵⁶ AMD 2017, page 49.