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## Wholesale Local Access Market Review

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

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**CONSULTATION:**

Publication Date: 14 September 2017

Closing Date for Responses: 26 October 2017

## About this document

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On 31 March 2017, we published a consultation that set out our proposed controls of the maximum charges that Openreach can make for the wholesale access services used to provide telephone and broadband services.

In light of stakeholder responses and our own further analysis, we are now consulting further on specific issues, that have the effect of changing the levels of our proposed charge controls.

We have set a deadline of 26 October 2017 for responses to this consultation. We will take responses to this further consultation into account before reaching our final conclusions on all aspects of the charge controls and intend to publish our decision in early 2018.

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# 1. Executive Summary

1.1 On 31 March 2017, we published a number of documents setting out our proposals for the regulation of the Wholesale Local Access (WLA) market from 1 April 2018 (March 2017 WLA Consultation).<sup>1</sup> This included proposals for charge controls for Local Loop Unbundling (which is used to provide standard broadband services) and Virtual Unbundled Local Access (which is used to provide superfast broadband services), both provided by Openreach.<sup>2</sup>

## Revised proposals on wholesale rental charges for standard broadband and superfast broadband

1.2 In light of stakeholder responses and our own further analysis, we have decided to consult on the following issues which impact our proposed wholesale rental charges for the period 1 April 2018 to 31 March 2021 for standard broadband (MPF<sup>3</sup>) and for superfast broadband (GEA<sup>4</sup> 40/10):

- **Cumulo – Non-domestic (business) rates:** In our March 2017 proposals we set out our expectation there would be a significant rise in BT's business rate costs due to the fourfold increase in its Rateable Value. Since then Virgin Media's Rateable Value has reduced significantly, by around 30%. We now have greater confidence that the final increase in BT's Rateable Value will not be as great as we had envisaged in March. We have therefore reviewed our forecast of BT's cumulo costs and assumed BT's cumulo Rateable Values decrease by 25% relative to our March proposals; and
- **Long run incremental cost (LRIC) and fully allocated cost (FAC) Ratios:** In our March 2017 proposals, we used 2015/16 LRIC to FAC ratios to forecast costs that are shared across services in the WLA and Wholesale Fixed Analogue Exchange Line (WFAEL) markets (i.e. 'common costs'). We now propose a change in the approach for calculating common costs whereby we calculate the LRIC to FAC ratio in each year of the control rather than using the 2015/16 ratio.

1.3 We also take account of the proposals made in the following consultation documents insofar as they affect the proposed MPF and GEA 40/10 charge controls:

- **Quality of Service for WLR, MPF and GEA, Further consultation on proposed quality of service remedies<sup>5</sup>:** Today we have also published revised proposals on quality of

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<sup>1</sup> We refer to the Ofcom, 2017. *Wholesale Local Access Market Review – Consultation on the proposed market, market power determinations and remedies – Volume 1* and Ofcom, 2017. *Wholesale Local Access Market Review – Consultation on proposed charge control designs and implementation – Volume 2*. <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>.

<sup>2</sup> Openreach provides services related to the access network.

<sup>3</sup> Metallic Path Facility is Openreach's wholesale service which enables telecoms providers to take control of BT's physical telephone lines so that they can provide broadband and voice services direct to end customers.

<sup>4</sup> Generic Ethernet Access is Openreach's wholesale service providing telecoms providers with access to BT's Fibre to the Cabinet (FTTC) and Fibre to the Premises (FTTP) networks in order to supply higher speed broadband products.

<sup>5</sup> Ofcom 2017, *Quality of Service for WLR, MPF and GEA – Further consultation on proposed quality of service remedies* <https://www.ofcom.org.uk/consultations-and-statements/category-2/quality-service-wlr-mpf-gea>

service for broadband and fixed voice wholesale services. These proposals have a resulting impact on the costs of providing the MPF and GEA 40/10 rental services and we have reflected these in this document;

- **Wholesale local access market review:** duct and pole access remedies<sup>6</sup> and the associated consultation on pricing proposals for Duct and Pole Access remedies:<sup>7</sup> We take account of our proposals in relation to duct and pole access remedies; and
- **Wholesale local access market review: Recovering the costs of investment in network expansion:**<sup>8</sup> We take account of our consultation on network expansion, in which we set out our proposals to recover through the MPF and GEA 40/10 rental services charge controls the additional relevant costs BT would incur, should it enter into a clear and public agreement with the Government committing BT to make the investment in universal broadband.

- 1.4 We also explain our position in relation to ongoing pension costs following new information from Openreach. In our March 2017 proposals, we included ongoing pension costs as part of overall pay costs. This was consistent with our approach in the July 2014 FAMR Statement<sup>9</sup> and the December 2010 Pension Review Statement.<sup>10</sup> In its response, BT informed us that it expects the ongoing costs of the scheme to increase significantly in 2017/18. In principle, we would consider reflecting expected changes in pension costs in our modelling, but note that BT has recently announced a review of its defined benefit pension scheme. We explain that we do not consider that we have sufficient evidence at this time to assess any potential change. We will reassess future pension costs for our Statement, if further information becomes available.
- 1.5 Finally, we clarify our proposals regarding the speed of aligning our proposed charge controls to our estimate of cost and why we do not consider a starting charge adjustment is necessary for MPF rentals.
- 1.6 The impact of the different input costs and assumptions on the base case for MPF and GEA 40/10 rental services compared to our March 2017 proposals is set out in Table 1.1 below.

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<sup>6</sup> Ofcom 2017, *Wholesale Local Access Market Review - Consultation on Duct and Pole Access remedies* <https://www.ofcom.org.uk/consultations-and-statements/category-2/duct-pole-access-remedies>.

<sup>7</sup> Ofcom 2017, *Wholesale Local Access Market Review - Consultation on pricing proposals for Duct and Pole Access remedies*, <https://www.ofcom.org.uk/consultations-and-statements/category-2/pricing-proposals-duct-pole-access>.

<sup>8</sup> Ofcom 2017, *Wholesale Local Access Market Review – Recovering the costs of investments in network expansion* <https://www.ofcom.org.uk/consultations-and-statements/category-2/wholesale-local-access-market-review-recovering-the-costs-of-investment-in-network-expansion>

<sup>9</sup> Ofcom, 2014. *Fixed Access Market Reviews: Approach to setting LLU and WLR Charge Controls – Statement, Annex 13.* [https://www.ofcom.org.uk/data/assets/pdf\\_file/0026/78812/annexes.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0026/78812/annexes.pdf).

<sup>10</sup> Ofcom, *Pensions Review – Statement*, 15 December 2011. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0019/47701/statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0019/47701/statement.pdf).

**Table 1.1: March 2017 Base case charge control proposals for MPF SL1 Rental and GEA 40/10 and our revised proposals**

Base case	Annual charge 1 July 2017 (£ nominal)	Proposals for charge control <sup>11</sup> (£ nominal per annum)		
		2018/19	2019/20	2020/21
<b>MPF Rental</b>				
March 2017 proposals <sup>12</sup> (base case)	84.38 <sup>13</sup>	83.50	82.28	81.98
<b>MPF Rental</b>				
Revised proposals (base case)		83.70	82.56	81.81
<b>GEA 40/10</b>				
March 2017 proposals <sup>14</sup> (base case)	88.80	66.28	57.00	52.77
<b>GEA 40/10</b>				
Revised proposals (base case)		67.86	59.03	54.66
<b>Additional cost for network expansion<sup>15</sup></b>		0.39	1.19	1.93

## Revised proposals for charges for wholesale ancillary services

1.7 We are also consulting further on our approach to certain ancillary services for the period 1 April 2018 to 31 March 2021, including:

- **GEA Cablelink:** to reduce the starting charges we proposed in March 2017 to reflect Openreach's recent announcement to reduce its charges for GEA Cablelink 1Gbit/s and 10Gbit/s services<sup>16</sup> and use a flat real cap rather than flat nominal cap;

<sup>11</sup> We have presented our estimate of the charges for 2018/19, 2019/20 and 2020/21. The actual figures will depend on the Consumer Price Index minus the 'X' applied.

<sup>12</sup> As set out in March 2017 WLA Consultation – Volume 2 Table 1.1:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0034/99637/Vol2-Charge-control.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0034/99637/Vol2-Charge-control.pdf)

<sup>13</sup> This charge has decreased from £85.29 in the March 2017 WLA Consultation.

<sup>14</sup> As set out in March 2017 WLA Consultation – Volume 2 Table 1.2:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0034/99637/Vol2-Charge-control.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0034/99637/Vol2-Charge-control.pdf)

<sup>15</sup> We propose uplifting the MPF rental charge, and GEA 40/10 rental charge by the network expansion cost uplift when it is bought with WLR rather than MPF.

<sup>16</sup> See: <https://www.openreach.co.uk/orpg/home/updates/briefings/super-fastfibreaccessbriefings/super-fastfibreaccessbriefingsarticles/nga02917.do>

- **Co-mingling:** to adjust the base year data to remove historical costs that have already been recovered, which results in relatively flat charges over this charge control period (compared to the almost doubling of charges we proposed in March 2017);
- **Tie-cables:** to correct some forecasting assumptions and make similar base year adjustments for these charges as we are proposing for co-mingling services. This results in a greater proposed reduction of tie cable charges compared to our proposals in March 2017;
- **Design of Other MPF ancillaries services basket:** We propose to make some changes to our approach to controlling charges for services we proposed to include in the “Other MPF ancillaries services basket”, the expected impact of which is relatively minor; and
- **GEA cancellation, modification and amendment services:** We propose to align the charges for these services to the GEA bandwidth modify services, which we expect to have similar costs.

1.8 We also discuss some additional financial reporting requirements on co-mingling, tie-cables, GEA Cablelink and abortive visit charges to ensure greater transparency on the costs and revenues associated with these services in the future.

## Consultation and next steps

1.9 We invite comments from stakeholders on the proposals in this consultation. The deadline for responses is 26 October 2017.

1.10 The proposals set out in this consultation form part of our overall proposals for the WLA market. We have not at this stage taken any decisions in relation to other aspects of the proposals set out in our March 2017 WLA Consultation. We are currently considering all consultation responses and undertaking further analysis and information gathering before deciding on appropriate next steps. We therefore invite comments from stakeholders on the proposals in this consultation and their impact on our March 2017 WLA proposals. We are not in this document seeking further representations on the broader proposals set out in our March 2017 WLA Consultation.

1.11 We expect to publish our final decision in a statement in early 2018, with new measures taking effect on 1 April 2018.

## 2. Introduction

### Background

- 2.1 On 31 March 2017, we published a number of documents setting out our proposals for the regulation of the Wholesale Local Access (WLA) market from 1 April 2018<sup>17</sup> (March 2017 WLA Consultation). We also published our quality of service proposals for the WLA market (and other markets)<sup>18</sup> (March 2017 QoS Consultation).
- 2.2 In light of stakeholder responses and our own further analysis we have decided to consult further on specific issues. We set out details of these issues in this consultation and the impact on our proposed charges for the local access services used to support standard broadband and superfast broadband (MPF and GEA respectively) and certain ancillary services, for the period 1 April 2018 to 31 March 2021.

### Regulatory Framework

- 2.3 The regulatory framework for market reviews is set out in UK legislation and is transposed from five EU Directives. These Directives impose a number of obligations on relevant regulatory authorities, such as Ofcom, one of which is to carry out periodic reviews of certain electronic communications markets.
- 2.4 We have set out the relevant regulatory framework in our March 2017 WLA Consultation and reference should be made to that document for further detail.<sup>19</sup>

## Impact Assessment and Equality Impact Assessment

### Impact Assessment

- 2.5 The analysis presented both in the March 2017 WLA Consultation and in this consultation constitutes an impact assessment as defined in section 7 of the Act.
- 2.6 Impact assessments provide a valuable way of assessing the options for regulation and showing why the chosen option was preferred. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that, generally, we have to carry out impact assessments in cases where our conclusions would be likely to have a significant effect on businesses or the general public, or where there is a major change in

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<sup>17</sup> We refer to the Ofcom. 2017. *Wholesale Local Access Market Review – Consultation on the proposed market, market power determinations and remedies – Volume 1* and Ofcom. 2017. *Wholesale Local Access Market Review – Consultation on proposed charge control designs and implementation – Volume 2*. <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>

<sup>18</sup> Ofcom. 2017. *Quality of Service for WLR, MPF and GEA – Consultation on proposed quality of services remedies*. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0033/99645/QoS-WLR-MPF-GEA.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0033/99645/QoS-WLR-MPF-GEA.pdf).

<sup>19</sup> We set out the applicable regulatory framework and the approach to market definition and SMP assessment in more detail in Annexes 5 and 6 of the March 2017 WLA Consultation.

Ofcom's activities. However, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions.<sup>20</sup>

## Equality Impact Assessment (EIA)

- 2.7 Annex 7 of the March 2017 WLA Consultation sets out our EIA for the WLA Market Review. Ofcom is required by statute to assess the potential impact of all our functions, policies, projects and practices on race, disability and gender equality. EIAs also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 2.8 It is not apparent to us that the outcome of our review (including the revised proposals set out in this consultation) is likely to have any particular impact on race, disability and gender equality. More generally, we do not envisage the impact of any outcome to be to the detriment of any group of society. Nor do we consider it necessary to carry out separate EIAs in relation to race or gender equality or equality schemes under the Northern Ireland and Disability Equality Schemes.

## Consultation and next steps

- 2.9 We invite comments from stakeholders on the proposals in this consultation. The deadline for responses is 26 October 2017.
- 2.10 The proposals set out in this consultation form part of our overall proposals for the WLA market. We have not at this stage taken any decisions in relation to other aspects of the proposals set out in our March 2017 WLA Consultation. We are currently considering all consultation responses and undertaking further analysis and information gathering before deciding on appropriate next steps. We therefore invite comments from stakeholders on the proposals in this consultation and their impact on our March 2017 WLA proposals. We are not in this document seeking further representations on the broader proposals set out in our March 2017 WLA Consultation.
- 2.11 We expect to publish our final decision in a statement in early 2018, with new measures taking effect on 1 April 2018.

## Structure of this document

- 2.12 The remainder of this document is structured as follows:
- in section 3 we set out details of our revised proposals for the wholesale rental charges for services used to support standard and superfast broadband (MPF and GEA respectively);
  - in section 4 we set out details of our revised proposals for wholesale charges for certain ancillary services; and

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<sup>20</sup> For further information, see Ofcom, 2005. *Better Policy Making: Ofcom's approach to Impact Assessment*, [https://www.ofcom.org.uk/data/assets/pdf\\_file/0029/45596/condoc.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0029/45596/condoc.pdf).

- in section 5 we explain how we have implemented our proposals in our legal instruments and how our proposals meet the relevant legal tests.
- 2.13 In Annexes 1-4 we set out how you can respond to this consultation and a summary of our consultation questions.
- 2.14 In Annex 5 we set out the draft legal instruments.

## Disclosure of financial and volume forecast models

- 2.15 We have disclosed the following models alongside this consultation by publishing:
- a version of the top-down cost model which includes non-confidential input data and formulae;
  - a version of the QoS intermediate model which includes non-confidential input data and formulae;
  - a version of the volume forecast model which includes non-confidential input data and formulae;<sup>21</sup>
  - a version of the bottom-up cost model which includes non-confidential input data and formulae;<sup>22</sup> and
  - a version of the base year model which includes non-confidential input data and formulae.
- 2.16 These models, in non-confidential versions, are available here:  
<https://www.ofcom.org.uk/consultations-and-statements/category-2/wla-market-review-further-consultation-on-charge-control>
- 2.17 As a consequence of the redactions to preserve confidentiality, the final outputs from the models are not consistent with the results shown in this consultation.
- 2.18 In developing our proposals on model disclosure, we have had regard to our obligations under the Communications Act 2003 (the “Act”) and our Framework for Disclosure of Charge Control Models.<sup>23</sup>

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<sup>21</sup> The only change to this non-confidential version of the WLA volumes model is to no longer forecast service volumes beyond the charge control period, i.e. only up to 2020/21).

<sup>22</sup> This model has not changed since we published this as part of the March 2017 WLA Consultation. We are re-publishing this for completeness. We note that due to the changes to the volumes model, the input volumes are now zero after 2020/21.

<sup>23</sup> Ofcom. *Framework for disclosure of charge control models*  
[http://stakeholders.ofcom.org.uk/binaries/consultations/784024/Charge\\_control.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/784024/Charge_control.pdf).

## 3. Wholesale rental charges for standard and superfast broadband

### Introduction

- 3.1 In this section we set out our revised proposals for wholesale rental charges for MPF (used to provide standard broadband) and GEA 40/10 (used to provide superfast broadband).
- 3.2 We set out our proposed changes with respect to:
- Cumulo – Non-domestic (business) rates; and
  - LRIC to FAC ratios.
- 3.3 We explain how we have implemented our proposals from the following consultations in our charge control models:
- Quality of Service for WLR, MPF and GEA, Further consultation on proposed quality of service remedies (September 2017 QoS Consultation);
  - Wholesale local access market review: duct and pole access remedies (April 2017 DPA Consultation)<sup>24</sup> and the associated Consultation on pricing proposals for Duct and Pole Access remedies (August 2017 DPA Consultation);<sup>25</sup> and
  - Wholesale local access market review: Recovering the costs of investment in network expansion (WLA Network Expansion Consultation).<sup>26</sup>
- 3.4 We also:
- explain our position in relation to pension service costs, following new information provided by Openreach; and
  - clarify our proposals regarding the speed of aligning our proposed charge controls to cost and why we do not consider a starting charge adjustment is necessary.
- 3.5 Finally, we set out the impact of our proposed changes to the wholesale rental charges for MPF and GEA 40/10.

### Cumulo rates

#### Introduction

- 3.6 Cumulo rates are the non-domestic rates (property tax) BT pays on its rateable assets in the UK. It is called a cumulo assessment because all of the rateable assets are valued together. In previous charge controls we have allowed BT to recover its cumulo rates costs within its wholesale prices.

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<sup>24</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/duct-pole-access-remedies>.

<sup>25</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/pricing-proposals-duct-pole-access>.

<sup>26</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/wholesale-local-access-market-review-recovering-the-costs-of-investment-in-network-expansion>.

- 3.7 Payments on non-domestic rates are usually calculated by multiplying a Rateable Value (RV) for the property by a “rate in pound”. RVs are assessed by the relevant rating authority in each nation, for example the Valuation Office Agency (VOA) in England and Wales.
- 3.8 Rateable values are normally reassessed periodically. The draft reassessments published by the valuation authorities in September 2016, which were due to come into force from 1 April 2017, revealed that BT’s “cumulo” RV would increase significantly from £197m in October 2016 to £812m in April 2017.<sup>27</sup> Given this large increase we proposed to forecast BT’s cumulo costs separately.

## March 2017 WLA Consultation

- 3.9 We set out our approach for forecasting BT’s cumulo costs and attributing these costs to services in the top-down and bottom-up models in Annex 17 of the March 2017 WLA Consultation.<sup>28</sup>

### Forecasts of BT’s cumulo costs

- 3.10 We forecast BT’s RVs by making the following key assumptions:
- There would be no change to the draft RVs for BT’s cumulo assessment that had been published and were due to come into effect on 1 April 2017; we noted though that BT was intending to challenge its 2017 reassessments and that we would take account of any changes in our Statement.
  - BT’s cumulo RV would change due to “material changes in circumstance” (MCCs) associated with the growth of GEA fibre and MPF rental volumes. We assumed that BT’s cumulo RV would increase at a fixed rate of £18 for each new GEA rental and decrease at a fixed amount of £30 for every extra MPF line.<sup>29</sup>
  - Any future business rates relief on “full fibre infrastructure”, the proposals for which had been outlined in the Government’s Autumn Statement,<sup>30</sup> would not apply to BT’s GEA FTTC lines.
  - The net changes to BT’s RV would be distributed across England, Wales, Scotland and Northern Ireland in proportion to the draft RVs published in April 2017.
- 3.11 To convert these forecasts of BT’s RVs to costs we made assumptions about rates in the pound in each home nation using the latest Office for Budget Responsibility (OBR) forecasts of RPI and CPI and also reflected the transition scheme in place in England. This scheme essentially works to reduce bill shocks by limiting any increases (or decreases) to payments resulting from reassessments.<sup>31</sup> We also explained that in producing these

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<sup>27</sup> See March 2017 WLA consultation, Annex 17, Table A17.3.

<sup>28</sup> Ofcom, 2017. *Wholesale Local Access Market Review – Annexes*.  
[https://www.ofcom.org.uk/data/assets/pdf\\_file/0035/99638/Annexes1-19.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0035/99638/Annexes1-19.pdf)

<sup>29</sup> See March 2017 WLA Consultation, Annex 17, paragraph A17.32.

<sup>30</sup> See March 2017 WLA Consultation, Annex 17, paragraph A17.29.

<sup>31</sup> The scheme limits increases on a ratepayer’s bill before inflation by 42% (2017/18), 32% (2018/19), 49% (2019/20), 16% (2020/21) and 6% (2021/22).

estimates we assumed there would be no further changes to BT's cumulo RV in England in the remainder of 2016/17.<sup>32</sup>

- 3.12 Using the above approach we forecast BT's total cumulo rate costs as set out in Table 3.1 below.

**Table 3.1: Forecast of BT's total cumulo costs (£m, nominal)**

	2017/18	2018/19	2019/20	2020/21	2021/22
Assuming RVs increase to reflect GEA MCCs	178.9	234.8	333.8	389.9	423.7

Source: Part of Table A17.6 in Annex 17, March 2017 WLA Consultation.

### Attribution of BT's cumulo costs

- 3.13 We proposed to introduce new directions for the attribution of cumulo costs from 2018/19. Our proposed approach required us to first identify the incremental cumulo costs associated with GEA services (assuming that each GEA rental connection contributed £18 to the RV), and then attribute GEA cumulo costs across GEA network components and non-GEA cumulo costs across non-GEA network components using the Profit Weighted Net Replacement Cost (PWNRC) method.
- 3.14 Using this approach and forecast of net replacement costs, we attributed cumulo costs across all services within the 2017 WLA top-down and bottom-up models. In 2020/21, our unit cumulo costs for GEA and MPF rental services were £7.70 and £7.08 per line per annum, respectively.

## Stakeholder responses

### Stakeholder comments on our forecast of BT's cumulo costs

- 3.15 Vodafone, TalkTalk and Openreach commented on our proposed forecast of BT's cumulo costs. Both Vodafone and TalkTalk argued that, to prevent BT from over-recovering its cumulo payments, our forecast of these costs should consider the progress and likely outcome of BT's challenges to its cumulo assessment.
- 3.16 Vodafone considered that BT had scope to achieve a significant reduction in its RV and hence cumulo costs both from its proposed challenge to its assessment and as a result of the Government's proposed business rates bill to provide relief on new fibre. Vodafone suggested that BT's business rates should be treated as a simple "pass-through" so that any subsequent reductions in BT's rates would be passed on to customers in the form of wholesale price reductions.<sup>33</sup>

<sup>32</sup> See March 2017 WLA Consultation, Annex 17, Paragraph A17.20.

<sup>33</sup> Vodafone non-confidential response to March 2017 WLA Consultation, paragraph 12.19 and 12.16, available here: [https://www.ofcom.org.uk/data/assets/pdf\\_file/0017/105029/Vodafone.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0017/105029/Vodafone.pdf).

- 3.17 TalkTalk believed that Ofcom should “understand the progress of these appeals and include an estimate of the likely outcome...” in our forecast cumulo costs. It considered that our estimate of MCC impacts may be too low, both for GEA and MPF rentals<sup>34</sup> and wanted to understand why our forecast cumulo costs increased by 87% in 2017/18, given that the English transition scheme limited increases to 42% this year.
- 3.18 Openreach’s primary concern was that our proposals “make an allowance for cumulo costs which matches the expected bill”, so that these costs can be recovered in full.<sup>35</sup>

### Stakeholder comments on attributions of BT’s cumulo costs

- 3.19 We received limited responses from stakeholders on our proposed approach to attributing cumulo costs. Openreach was concerned that “the relative allowance per service is fair to avoid distortion, e.g. the cost allowance should be the same for MPF and WLR as they are treated in the same way for cumulo valuation purposes”.<sup>36</sup>
- 3.20 Vodafone argued that our attributions to MPF and GEA services were too high based on its own high-level calculations that compared estimated proportions of BT’s cumulo costs associated with MPF and WLR lines with the proportion of BT’s wholesale revenues accounted for by these services.<sup>37</sup> TalkTalk agreed with our proposed overall attribution approach. However, it suggested that more of BT’s business rate costs should be attributed to Ethernet services to “reduce competitive distortions resulting from the fact that other telecoms providers pay higher NDRs than BT”<sup>38</sup>. TalkTalk did not propose a revised methodology to implement its suggestion.<sup>39</sup>

## Developments since our March 2017 WLA Consultation

### Increase in BT’s RV effective from March 2017

- 3.21 BT’s RV increased by about 5% in both England and Wales with effect from 21 March 2017.<sup>40</sup> This has minimal impact on BT’s 2016/17 payments as it affects liabilities in only 3% of the year but will affect costs in England post 2017/18: the final RV on the previous rating list is an input into the calculation of payments in England under the English transition

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<sup>34</sup> TalkTalk, non-confidential response to the March 2017 WLA Consultation, paragraph 6.23, available here:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0014/105026/TalkTalk.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0014/105026/TalkTalk.pdf)

<sup>35</sup> Openreach non-confidential response to March 2017 WLA Consultation – Volume 2, paragraph 307, available here:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0011/105023/Openreach-vol-2.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0011/105023/Openreach-vol-2.pdf)

<sup>36</sup> Openreach non-confidential response to March 2017 WLA Consultation- Volume 2, paragraph 307.

<sup>37</sup> Vodafone non-confidential response to March 2017 WLA Consultation – Volume 2, paragraph 12.17.

<sup>38</sup> NDRs is short for Non-domestic rates

<sup>39</sup> TalkTalk non-confidential response to March 2017 WLA Consultation, paragraph 6.26.

<sup>40</sup> Central Rating List, England 2010.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/629409/Central\\_Rating\\_List\\_for\\_England\\_2010.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/629409/Central_Rating_List_for_England_2010.pdf) [accessed 13 September 2017]

Central Rating List, Wales 2010.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/629410/Central\\_Rating\\_List\\_for\\_Wales\\_2010.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/629410/Central_Rating_List_for_Wales_2010.pdf) [accessed 13 September 2017]

scheme. We estimate that this change will increase BT's total UK payments in 2020/21 by 4% compared to our estimates in March 2017.

### Reduction in Virgin Media's draft 2017/18 RVs

3.22 We noted in our March 2017 WLA Consultation that the draft RVs for Virgin Media were significantly higher than its 2016/17 RVs.<sup>41</sup> However the VOA has since published revised RVs for Virgin Media<sup>42</sup> that are about 30% lower than the draft RVs (summarised in Table 3.2 below). Any change to Virgin Media's RVs in Scotland does not yet seem to have taken effect, and we have not been able identify any change in Northern Ireland.

**Table 3.2: Virgin Media's 2017/18 RVs in each nation (£m nominal)**

	Sept 2016 Draft RVs	Apr 2017 Current RVs	Percentage Reduction
England	348.23	237.67	-32%
Wales	9.30	6.30	-32%
Scotland	27.50	27.50	No change
Northern Ireland	1.12	1.12	No change
<b>Total</b>	<b>386.16</b>	<b>272.60</b>	<b>-29%</b>

Source: Ofcom analysis of Compiled RVs from rating agencies: Valuation Office Agency (VOA), Scottish Assessors Association (SAA) and Department of Finance (DoF).

3.23 Using our statutory information gathering powers we asked Virgin Media to confirm the scale of reduction in its rateable values between the draft version published in September 2016 and the VOA's latest assessments and also to provide the reasons for this reduction. Virgin Media said that [REDACTED]

].<sup>43 44</sup>

3.24 We noted in the March 2017 WLA Consultation that BT was intending to challenge its draft RV assessments for 2017/18. Neither the VOA nor the SAA has yet made any changes to BT's cumulo assessments for the 2017 Rating list in England, Scotland or Wales.

### VOA's new business rates appeal process

3.25 On 1 April 2017, a new business rates appeal process came into effect in England known as check, challenge and appeal. The VOA deals with checks and challenges, whilst the independent Valuation Tribunal for England handles appeals. The purpose of a check is to

<sup>41</sup> See March 2017 WLA Consultation, Annex 17, paragraph A17.79.

<sup>42</sup> Values in England and Wales can be obtained via downloads from the VOA website available at: <https://voaringlists.blob.core.windows.net/html/rlidata.htm> [accessed 13 September 2017]

<sup>43</sup> [REDACTED]

<sup>44</sup> [REDACTED]

agree on the correct property information, whilst a challenge is where the valuation is discussed. Under the challenge process a ratepayer can request a change to the valuation of a property, even if there have not been any factual detail changes, but will need to have completed a check first. A ratepayer who does not agree with the VOA's decision after making a challenge has the right (in certain circumstances) to appeal the decision. The VOA has published guidance for ratepayers on the check, challenge and appeal process, including some information on timescales.<sup>45</sup>

- 3.26 We asked the VOA if BT had initiated the check, challenge and appeal process on its cumulo valuation and if so where it was in the process. The VOA however was not able to respond as the status of any discussions between the VOA and any ratepayer is confidential.<sup>46</sup>
- 3.27 We have checked the Valuation Tribunal's web-site and cannot find any reference to any appeal hearing that may have been scheduled to be heard about BT's valuation, indeed it appears that no appeals on the 2017 Rating list have yet been scheduled to be heard.
- 3.28 The implications of the above are that the timing for the resolution of any revision to, challenge or appeal of BT's valuation are very difficult to assess. We note though that were BT to embark on the check, challenge and appeal process then, given the indicative timescales in the VOA's guidance note, any appeal that might ultimately be heard would be unlikely to take place much before the end of 2018 at the earliest.

### Business rates relief for new fibre

- 3.29 In our March 2017 WLA Consultation, we referred to the Government's 2016 Autumn Statement in which it announced there would be "a new 100% business rates relief for new full-fibre infrastructure for a 5 year period from April 2017".<sup>47</sup> We assumed in our consultation that any business rates relief on fibre would not apply to BT's GEA-FTTC lines.
- 3.30 In August 2017, the Department for Communities and Local Government (DCLG) published a consultation which explained how it proposed to implement this relief, along with draft regulations.<sup>48</sup>
- 3.31 DCLG proposed that the relief should apply to all new fibre "laid, flown, affixed or attached" in England after 1 April 2017. Specifically, the Government does not intend to permit relief for dark fibre which, whilst lit after 1 April 2017, was in fact present before 1 April 2017.<sup>49</sup> This means that any of BT's GEA-FTTC lines connected to fibre installed after April 2017 may well qualify for this relief, though our estimates are that there will be relatively few such connections.

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<sup>45</sup> <https://www.gov.uk/guidance/how-to-check-your-rateable-value-is-correct> [accessed 13 September 2017]

<sup>46</sup> [3<

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<sup>47</sup> March 2017 WLA Consultation, Annex 17, paragraph A17.29.

<sup>48</sup> <https://www.gov.uk/government/consultations/business-rates-relief-for-new-fibre-on-telecommunication-heritaments> [accessed 13 September 2017]

<sup>49</sup> See paragraphs 7 and 9 of DCLG's consultation.

3.32 This consultation closes on 21 November 2017 and we will continue to monitor for any updates made by DCLG. Below, we explain the analysis we have undertaken in more detail.

## Our analysis and proposals

3.33 In light of stakeholder responses and the recent changes discussed above, we propose to make changes to our approach to forecasting BT's cumulo costs. Due to receiving limited comments, we are not proposing any changes to the way we attribute BT's cumulo costs though we are still considering stakeholder responses in relation to our proposed approach. This section describes our proposals and provides estimates of the impact of making such changes.

### Forecast of BT's cumulo costs

3.34 Both Vodafone and TalkTalk questioned our assumption that BT's RVs in England, Scotland and Wales would not change from the draft values published in October 2016. Given that BT has said it will challenge its assessments and that Virgin Media's comparable RV assessments have been considerably reduced, we consider it is highly likely that BT's cumulo RVs and hence its payments will reduce at some time in the future. We therefore agree with Vodafone and TalkTalk that we should review this assumption and our forecast of BT's future cumulo payments. If we do not anticipate these changes in the charge control then this could lead to windfall gains for BT if it is able to reduce its RV assessments. At the same time, BT could potentially end up under recovering its cumulo payments if we were to overestimate the anticipated reduction in its RVs.

3.35 The timing of any reduction affects how we might reflect these changes in the charge control and therefore, we first consider when any reduction to BT's cumulo RVs would be made. We then consider the likely magnitude of any reduction.

### Timing of reduction in BT's RVs

3.36 We have identified two potential scenarios for when any reductions to BT's RVs might be made:

- Scenario 1: Any changes agreed between BT and the rating authorities and published before our final statement, which we expect to publish in early 2018, could be fully reflected in the charge control.
- Scenario 2: Any changes are agreed and then published after the statement is published and the charge control comes into force. In this case, we could either rely on estimates of what the scale of reduction will be, or we could consider introducing some retrospective pass through arrangements, under which BT repaid operators for any overpayments that may have occurred as part of any reductions. This is the suggestion that Vodafone made in its response.<sup>50</sup>

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<sup>50</sup> Vodafone non-confidential response to March 2017 WLA Consultation, paragraph 12.19 and 12.16.

- 3.37 We do not consider that introducing “pass-through” arrangements into the charge control under Scenario 2 is a realistic option, primarily due to the uncertainty about when any changes to BT’s RVs might be finalised.
- 3.38 As we note above, changes may be agreed before the statement, but equally it may be several years before any agreement is reached. There is also a chance that changes will not be agreed before the end of the planned charge control period: we understand that BT’s appeal of its 1995 assessment took 5 years to resolve. As any such changes are likely to affect BT’s RVs from 1 April 2017 these will affect what BT’s cumulo payments should have been in 2017/18, 2018/19 and/or 2019/20.
- 3.39 Introducing retrospective “pass-through arrangements” would require Ofcom to specify in directions how BT should calculate and then make those payments for multiple operators for multiple products potentially over several years. If “pass-through” was only calculated using the rebates received in the year in which they were settled and applied to the charges in that year, then the beneficiaries of any reductions might not be the same as those who paid the higher prices in earlier years. The writing of any relevant legal conditions to cover all such possibilities, whilst not impossible, would not be straightforward and Ofcom has not previously imposed such conditions. We therefore anticipate significant practical difficulties in implementing retrospective pass-through arrangements. These would introduce further complexity with a greater risk that doing so might not achieve the objective of reflecting future RV reductions within the charge control period.
- 3.40 However, as we consider BT’s cumulo RVs from 1 April 2017 are likely to reduce in the future, we are proposing to base our projections of BT’s cumulo costs on estimates of what those reductions may ultimately be. This approach to cost forecasting is no different to that we adopt for any of BT’s other costs. By doing this we address Vodafone and TalkTalk’s concerns that BT might make windfall gains in the future. This approach is also consistent with Openreach’s observation, and our objective in respect of cumulo costs, that we should allow it to recover its expected costs. We therefore propose to base our assessment of BT’s RV and forecast cumulo costs on an assumption that BT’s RVs will reduce at some future time in England, Scotland and Wales and this will affect what BT’s payments should have been from 1 April 2017. The only situation under which we would not use our forecast cumulo costs would be if changes to BT’s RVs were published prior to our final statement.

### Scale of reduction in BT’s RVs

- 3.41 In terms of considering what the scale of those reductions might be, we have relied on the 32% reductions that have been made to Virgin Media’s RVs for England and Wales. We believe these provide a reasonable view of the likely reductions that BT may be able to achieve given that both BT and Virgin’s assessments cover large access networks and that both have been revalued at the same time by the same rating agencies using a similar

methodology, notably the receipts and expenditure method.<sup>51</sup> It is therefore likely that considerations that led the VOA to reduce Virgin Media’s assessments will also apply to BT.

- 3.42 To further inform our view, we have undertaken some simple ratio analysis of the changes in RVs from the 2010 to 2017 rating lists for those companies assessed under the receipts and expenditure method: BT, Virgin Media and KCOM. Under the original October 2016 re-assessments Virgin Media’s RVs were set to increase significantly more than BT’s. Following the reduction to Virgin Media’s RVs the increases are more comparable, though the increase in BT’s RVs is lower. In contrast KCOM’s RVs only increased by about 20%, significantly lower than the increases for both Virgin Media and BT. The results are summarised in the Table 3.3 below. Analysing the increases in RVs per access line for each company produced similar results.

**Table 3.3: RV comparisons from 2010 to 2017 for BT, Virgin Media and KCOM**

	Rateable value			Ratio	
	End of 2010 rating list (£m)	Draft 2017 rating list (£m)	Latest 2017 rating list (£m)	From 2010 to draft RV in 2017	From 2010 to latest RV in 2017
BT	244.91	812.36	812.36	3.32	3.32
Virgin Media	77.54	386.16	272.61	4.98	3.52
KCOM	5.4	6.48	6.48	1.2	1.2

Source: Ofcom analysis of compiled RVs from the VOA, SAA and DoF and line volumes obtained from Ofcom’s market data tables, BT’s Key Performance Indicators and KCOM’s regulatory accounts.<sup>52</sup>

- 3.43 It is hard to draw firm conclusions from this simple ratio analysis. It could indicate that BT may not be able to achieve as large a reduction in cumulo costs as Virgin Media has been able to, or alternatively, given the modest increases in KCOM’s RV, that there remains considerable scope for significant reductions.
- 3.44 Drawing any conclusions from this simple ratio analysis also relies on several assumptions that might not be valid. For example, the implicit assumption is that relative movements in RVs should be similar for different companies. This in turn relies on the further assumption that the final 2010 list RVs were at the “right” level for each company and that the changes between the old 2010 rating list values and the 2017 list values should be similar. But the 2010 list RVs were produced and reassessed using economic assumptions and business

<sup>51</sup> The receipts and expenditure approach considers several components: revenues, operating costs, maintenance costs, capital expenditure, return on investments, etc of a business to assess its RV.

<sup>52</sup> See Ofcom’s market data tables: <https://www.ofcom.org.uk/research-and-data/data/opensource/>, BT’s Key Performance Indicators: <http://btplc.com/Sharesandperformance/Quarterlyresults/2017-2018/Q1/Downloads/KPIs/q117-KPIs.pdf> and KCOM’s regulatory accounts: <http://www.kcomplc.com/regulatory/regulatory-accounts/>

prospects at the 2010 list “Antecedent Valuation Date”<sup>53</sup> (AVD) of 1 April 2008; whereas the 2017 list values have been based on economic assumptions and business prospects at the 2017 list AVD of 1 April 2015. The impact of changes in the economic and business prospect assumptions from 2008 to 2015 may be very different for the different companies.

- 3.45 For this reason, we have given less weight to this ratio analysis compared to the actual reductions made to Virgin Media’s RVs, although it has influenced us to be more cautious and assume a percentage reduction more towards the bottom of any range.
- 3.46 On balance, we believe that Virgin Media’s reductions do provide an appropriate starting point from which to inform our view of the potential future reductions to BT’s RVs. We consider it is appropriate to take account of potential RV reductions in our cumulo cost forecasts, in the event that any reductions to BT’s RVs are not published prior to our final statement. When forecasting the reduction in RV, we wish to produce an estimate that we believe is achievable for BT (in the same way as we do for our efficiency targets).
- 3.47 We consider that the reductions achieved by Virgin Media are likely to be towards the top end of the range that BT might be able to achieve. For the bottom end of the range, given the sizeable reduction in Virgin Media’s RVs, we do not consider it appropriate to assume that BT will not achieve any reductions. We are therefore proposing to set a lower bound at 20% of BT’s RV and adopt a range of 20-35% in our analysis with a base case for our modelling of 25%.
- 3.48 Before presenting our revised forecasts of BT’s payments based on this analysis, we consider two further issues. The first is the likely impact of the Government’s draft legislation on rates relief on fibre. The second is BT’s valuation in Northern Ireland.
- 3.49 As noted above, DCLG is now proposing that full rates relief will only apply to connections on new fibre installed after 1 April 2017. As BT had rolled out most of its commercial FTTC network by 1 April 2017 such new GEA connections are likely to be concentrated within any remaining roll outs in BDUK areas and any further investment in network expansion that BT may agree with the Government.
- 3.50 We have estimated the number of connections that might be subject to relief over the charge control period by applying the take-up assumptions proposed in our 2017 WLA Network Expansion Consultation for GEA services in non-superfast broadband areas to forecasts of the remaining network rollout likely to take place under the BDUK Phase 2 programme. We then forecast the potential relief BT may obtain by multiplying these demand estimates by our assumption that each new GEA rental would have attracted an RV of £18 per annum. These calculations suggest that any relief is likely to be quite small – for example BT’s total payments in 2021/22 are likely to be reduced by less than 1%.

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<sup>53</sup> In rating the Antecedent Valuation Date is the date at which rateable values are set, the date at which rental levels must be looked at when assessing the rateable value of a property, i.e. the date at which market conditions are assumed to prevail. The AVD is usually two years before the start of the rating list.

3.51 In relation to Northern Ireland, our previous forecasts of BT's payments assumed there would be no changes to BT's NAV.<sup>54</sup> However, BT's latest forecasts of its cumulo costs assume that [redacted]

] <sup>55</sup> <sup>56</sup> We are not aware of any recent changes to BT's NAVs.

3.52 We do not propose to reflect either of these issues explicitly in our forecasts of BT's cumulo payments. We consider that any impacts would be captured within the range of percentage reductions to BT's RV we have proposed above. We would however reflect any changes to BT's NAVs in Northern Ireland that are published prior to our final statement in the same way that we will take account of any changes in RVs in all of the nations.

3.53 Table 3.4 below shows a comparison of our proposals in March 2017 for 2020/21, the increase in BT's RV in England and Wales effective from 21 March 2017 and the impact on our forecasts applying a range of forecast reductions to BT's cumulo RV scenarios of 20%, 25%, 30% and 35% reductions.

**Table 3.4: Forecast of BT's cumulo payments in 2020/21 based on a range of RV scenarios**

	Cumulo payment in 2020/21 (£m nominal)	% change from March 2017 WLA Consultation
March 2017 WLA Consultation	389.96	-
Updated for 21 March 2017 increase in BT's RV	405.24	4%
20% Reduction in BT's 1 April 2017 RVs	375.41	-4%
<b>25% Reduction in BT's 1 April 2017 RVs (revised base case)</b>	<b>354.33</b>	<b>-9%</b>
30% Reduction in BT's 1 April 2017 RVs	333.25	-15%
35% Reduction in BT's 1 April 2017 RVs	312.17	-20%

#### Clarification in response to TalkTalk's concern

3.54 Lastly, we address TalkTalk's concern that our forecast increase in BT's cumulo costs in 2017/18 of 87% was overstated given the English transition scheme limited increases to

<sup>54</sup> In Northern Ireland, the RV is referred to as the net annual value (NAV).

<sup>55</sup> [redacted]

<sup>56</sup> BT response dated 31 May 2017 to question F2 of the 26<sup>th</sup> WLA s.135 request.

42% in that year. This apparent anomaly can be explained by dividing the increase into that relating to costs that are subject to the transition scheme in England and that relating to costs that are not subject to this scheme.

- 3.55 The English transition rules limiting the maximum increase in payments before inflation in 2017/18 to 42% only apply to BT's payments in England and only those that are subject to the small business rate in the pound.<sup>57</sup> Further the maximum increase is linked to the final rateable value of the previous list, which as we noted before was higher than the average rateable value over the previous year. The net effect of the 42% limit, the change in rates in the pound, the effect of MCCs and this movement in RVs means that we forecast the 83% of BT's cumulo costs in 2016/17 that were subject to the English transition rules increased by 49% in 2017/18. The remaining 17% - BT's payments in England subject to the large business supplement rate in pound and payments on its cumulo rateable assets in Scotland, Wales and Northern Ireland – are not subject to transition. The large increases in BT's RVs meant we forecast that this 17% of costs would increase by around 270%. Combining the two impacts produces an overall increase of 87%.

### Attributions of BT's cumulo costs

- 3.56 As noted above we received limited responses from stakeholders about our attribution approach. We believe Vodafone's calculations questioning our attributions of BT's cumulo costs to MPF and GEA services are flawed for several reasons. There are some consistency issues in that it used revenues, prices and unit costs from different years and calculated the share of costs by comparing "payable" unit costs with rateable values. Further, the use of service or market revenue shares is a poor proxy for the attribution because it does not reflect the relative use of those services of rateable assets. In fact, WLR, MPF and GEA services account for a much higher share of BT's cumulo costs than Vodafone estimates. A better, but still poor proxy, of shares would have been to look at the shares that these services are of total duct, fibre and copper assets: these are the main rateable assets. For example the WFAEL and WLA markets accounted for 77% of the Mean Capital Employed (MCE) of these assets in 2016/17.<sup>58</sup>
- 3.57 Given limited responses and in particular that no stakeholder proposed any alternative attribution methodology we therefore propose to continue using the existing three step approach explained in our March 2017 WLA Consultation.
- 3.58 Table 3.5 shows the impact on unit costs for MPF and GEA rentals services of applying this methodology to our revised forecasts of BT's cumulo payments.

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<sup>57</sup> The small business rate in pound is applicable to all properties. Liabilities for larger properties with RVs greater than £51,000, such as BT's cumulo assessment, are calculated using a higher rate in the pound. This higher rate is made up of the small business rate and a supplemental rate for larger properties.

<sup>58</sup> BT's Regulatory Financial Statements 2017. Section 10, Page 97.

<http://btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2017/RRD2017Final.pdf>

**Table 3.5: BT's unit LRIC cumulo costs for MPF and GEA rental services in 2020/21, based on a range of RV scenarios (£ nominal)**

	2020/21 MPF cumulo unit cost	2020/21 GEA cumulo unit cost
March 2017 WLA Consultation	£7.08	£7.70
Updated for 21 March 2017 increase in BT's RV	£7.40	£8.01
20% Reduction in BT's 1 April 2017 RVs	£6.26	£9.09
<b>25% Reduction in BT's 1 April 2017 RVs (revised base case)</b>	<b>£5.72</b>	<b>£9.09</b>
30% Reduction in BT's 1 April 2017 RVs	£5.19	£9.09
35% Reduction in BT's 1 April 2017 RVs	£4.65	£9.09

- 3.59 This shows that the MPF unit cumulo costs decrease, as expected, with higher assumed reductions in BT's RVs from 1 April 2017, whilst the GEA unit costs remain constant at £9.09, higher than we forecast in March. This increase may appear to be counterintuitive but can be explained by the effect of the English transition scheme and because our proposed attribution approach to GEA services is based on RVs, not payments.
- 3.60 Our current GEA unit cost forecasts for 2020/21 reflect our assumption that each GEA rental attracts an RV of £18, and an average rate in the pound across BT's cumulo assessments across the nations of roughly 0.505p ( $£18 \times 0.505 = £9.09$ ). Further, under any of the 20-35% RV reduction scenarios BT's payments in England in 2020/21 would no longer be subject to transition rules. However, in March we assumed that RVs would be higher and BT's payments in England in 2020/21 were affected by transition. The effect of this was to reduce the effective rate in the pound in England and hence lower the average rate in the pound across the nations to around 0.428p ( $£18 \times 0.428 = £7.07$ ).
- 3.61 The above changes in unit cumulo costs are to the unit LRICs for both copper and fibre services. This then results in further changes to the forecasted unit LRIC+ estimates, i.e. after common cost allocation via equi-proportional mark-up (EPMU<sup>59</sup>). The net effect on 2020/21 LRIC+ unit costs is to reduce MPF rentals by around £2.10 per annum and increase GEA 40/10 rentals by around £1.70 per annum.

<sup>59</sup> The EPMU approach uses the proportion of total forecast LRIC for WLA and WFAEL rental services that is due to GEA to determine the proportion of common costs (as calculated in the top-down model) to be allocated to GEA. The remainder of common costs are then allocated to copper rental services.

## Consultation question

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.

## LRIC to FAC ratios

### March 2017 WLA Consultation

- 3.62 In order to produce estimates of service costs, we need to allocate common costs<sup>60</sup> between services. In the March 2017 WLA Consultation (see paragraphs A11.47 to A11.64), we proposed to define common costs as the difference between BT's fully allocated cost (FAC) and the long-run incremental cost (LRIC).<sup>61</sup> We then proposed to allocate common costs across standard and superfast broadband and fixed voice rental services on an EPMU basis.<sup>62</sup>
- 3.63 Finally, we proposed allocations between copper services (standard broadband and fixed voice) and superfast broadband services so that:
- common costs allocated to copper services (based on EPMU) would then be allocated with the same absolute amount of common cost per line irrespective of whether the service is MPF or WLR (as per the 2014 FAMR Statement); and
  - common costs allocated to superfast broadband services (based on EPMU) would then be allocated across services with different speeds of superfast broadband based on the current observed difference in prices: the so-called 'bandwidth gradient'.

## Stakeholder responses

- 3.64 We have received several stakeholder responses on our calculation of common costs as well as our approach to allocating these costs. Both Sky<sup>63</sup> and TalkTalk<sup>64</sup> argued that certain components should be excluded when calculating common costs. CityFibre disagreed with our approach to allocating common costs across fibre and copper services.<sup>65</sup> We are

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<sup>60</sup> These are the costs shared between WFAEL (WLR) and WLA (LLU and GEA) services which cannot be attributed directly to them.

<sup>61</sup> For copper services, we have used (i) forecasted FAC based on BT's FAC (as found in the 2015/16 RFS), and (ii) BT's LRICs (as found in BT's LRIC model) with some adjustments such as the ongoing network adjustments. For fibre services, we have used BT's FAC (as found in the 2015/16 RFS) with adjustments to account for reattribution of accommodation and power costs (discussed further below), and used our bottom-up model to estimate LRIC.

<sup>62</sup> The EPMU approach uses the proportion of total forecast LRIC for WLA and WFAEL rental services that is due to GEA to determine the proportion of common costs (as calculated in the top-down model) to be allocated to GEA. The remainder of common costs is then allocated to copper rental services.

<sup>63</sup> Sky, non-confidential response to March 2017 WLA Consultation, paragraphs 72 to 76  
[https://www.ofcom.org.uk/data/assets/pdf\\_file/0013/105025/Sky.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0013/105025/Sky.pdf)

<sup>64</sup> TalkTalk, non-confidential response to March 2017 WLA Consultation, paragraphs 7.13 to 7.18  
[https://www.ofcom.org.uk/data/assets/pdf\\_file/0014/105026/TalkTalk.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0014/105026/TalkTalk.pdf)

<sup>65</sup> CityFibre, non-confidential response to March 2017 WLA Consultation, paragraphs 8.6.22 to 8.6.62  
[https://www.ofcom.org.uk/data/assets/pdf\\_file/0010/105013/Cityfibre.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0010/105013/Cityfibre.pdf)

currently considering these responses and will not make further comment on them in this consultation.

## Our analysis and proposals

- 3.65 We consider it appropriate to consult on an improvement to our modelling approach to forecasting LRICs for copper services. Our proposed changes result in greater consistency within the top-down model and so are a better approach to modelling common costs.
- 3.66 We propose two changes to the calculation of common costs within the top-down model. These changes do not impact the overall forecasted FAC, but change how the forecasted FAC is split into costs that are defined as common or incremental. This breakdown of common and incremental costs is implicitly calculated in the top-down model with the use of AVEs and CVEs.<sup>66</sup>
- 3.67 The first change concerns the calculation of 2015/16 LRIC to FAC ratios. In the March 2017 WLA Consultation top-down model we calculated the LRIC to FAC ratios using 2015/16 data for pay opex, non-pay opex, and return on capital employed (ROCE) costs. Both FAC and LRIC also include OCM depreciation<sup>67</sup> and holding gains, which we did not capture in the March 2017 WLA Consultation. We consider it is appropriate to include these cost categories when calculating the service level LRIC to FAC ratios and have done so for this consultation.
- 3.68 The second change concerns the calculation of LRIC to FAC ratios in forecast years and thus our forecasted LRICs for copper services.<sup>68</sup> The component level LRIC to FAC ratios are based on a weighted average of the operating cost LRIC to FAC ratios and the capital cost LRIC to FAC ratios. In the March 2017 WLA Consultation top-down model, we proposed using the 2015/16 weighting (by operating and capital costs) across all years. We now propose to use a different weighting for each year based on the in-year breakdown of costs by FCM depreciation<sup>69</sup>, operating costs<sup>70</sup> and ROCE.
- 3.69 We consider this change to be appropriate because it ensures that our forecasted LRICs (by component and thus by service) are consistent with the top-down model's forecasted

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<sup>66</sup> The forecast component FAC in the WLA CC top-down model already captures the different cost volume relationship for operating and capital costs, and the weighting of the two in each year.

<sup>67</sup> Operating Capability Maintenance (OCM) depreciation is the reduction in the value of assets over the course of the financial year, which is associated with the reduction in the asset's remaining life. OCM seeks to ensure that the depreciation charge to the profit and loss account relates to the current replacement cost of the firm's assets, i.e. taking account of specific and general price inflation.

<sup>68</sup> The forecasted LRIC for fibre services is determined within the bottom-up model.

<sup>69</sup> The Financial Capital Maintenance (FCM) approach seeks to maintain the financial capital of the firm, and thus the firm's ability to continue financing its functions. For modelling purposes, this involves including an allowance within the capital costs for the holding gains or losses associated with changes over the year in the value of the assets held by the firm.

<sup>70</sup> In the top-down model, we aggregate pay and non-pay costs in 2015/16 and forecast total operating costs (rather than forecasting pay and non-pay separately). Therefore, we consider it appropriate to use the weighted average 2015/16 CVE.

breakdown of capital and operating costs.<sup>71</sup> We would also note that this approach is consistent with the approach adopted in the 2016 Leased Lines Charge Control.<sup>72</sup>

- 3.70 Following the two changes set out above to our forecasted copper LRICs, our forecast LRIC+ for GEA 40/10 rental in 2020/21 is reduced by around £1.40 per annum, and our forecasted LRIC+ for MPF SL1 rental is increased by around £0.40 per annum.<sup>73</sup>

## Consultation question

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.

## Taking account of our proposed quality of service changes

- 3.71 In the March 2017 QoS Consultation, we calculated the likely impact of proposed improvements to Openreach's quality of service on the forecast costs in the charge control models.<sup>74</sup> As set out in the September 2017 QoS Consultation, we have gathered further evidence and are proposing a revised set of quality of service remedies. In this sub-section, we discuss the impact on forecast costs of the revised quality of service proposals in relation to the following areas:

- Fault volume reduction (FVR);
- Resource uplift to meet higher repair standards; and
- SLG payment forecasts.

- 3.72 For each area, we estimate the impact of the revised quality of service proposals and set out the proposed changes to our modelling approach in light of stakeholder comments or our own analysis.

## Fault volume reduction

### March 2017 WLA Consultation

- 3.73 In the March 2017 WLA Consultation, we proposed to take into account Openreach's planned investment programme in fault volume reduction (FVR) in setting the charge control for MPF and GEA services. In order to account for Openreach's plans to lower fault rates, we assumed that there is a linear relationship between the fault rate and the specific

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<sup>71</sup> This is important as capital costs tend to have significantly lower LRIC to FAC ratios than operating costs so capturing the future breakdown of FAC by capital and operating costs will result in a more consistent estimation for the weighted average LRIC to FAC ratio.

<sup>72</sup> In the top-down cost model for the LLCC, we forecasted the LRICs and FACs by component and by capital and operating costs separately before aggregating to overall component costs. This meant that the component LRICs reflected the weighting of operating and capital costs for each modelled year. See the CPI-X model for the 2016 LLCC <https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2015>.

<sup>73</sup> We note that the forecasted LRIC+ in 2020/21 for WLR rentals is around £1 per annum higher due to the change in forecasted LRIC to FAC ratios, which is greater than the change in the MPF LRIC+ in 2020/21. This is because our proposed changes to LRIC to FAC ratios results in a greater LRIC differential between the two copper rentals.

<sup>74</sup> March 2017 QoS Consultation, Annex 7, Table A7.10.

costs relevant to repair activities. We calculated that a decrease in the fault rate of c.[3< ]% (from 11.2% to [3< ] [less than 10%]) by 2020/21 would reduce the MPF rental charge by around £2.21 per line.

### Stakeholder responses

- 3.74 As set out in the September 2017 QoS Consultation, Openreach agreed with the approach of reducing repair costs to take into account expected decreases in fault rates but disagreed with our forecasts. We address Openreach’s comments on this issue in the September 2017 QoS Consultation, Section 5. Openreach also did not agree with the implementation of our fault rate forecasts in the charge control modelling. Openreach argued that our approach failed to ensure that the planned FVR investments are fully funded<sup>75</sup>, particularly in relation to the opex required to deliver the programme.
- 3.75 There were a number of additional comments from stakeholders on the proposed costs allowed in the charge control for Openreach’s planned FVR investment:
- In terms of the overall approach, Sky, Verizon and Vodafone agreed with applying a lower fault rate for the charge control and that BT should not be given an additional cost allowance in the charge control to carry out the FVR planned investment.<sup>76</sup> CityFibre said that the March 2017 WLA Consultation was unclear on whether Ofcom was allowing for Openreach’s planned FVR investment in its capex forecast and considered that it would be wrong to not allow for Openreach investing in improving its performance.<sup>77</sup>
  - Openreach argued that Ofcom needed to take into account that the FVR programme required special measures that incur additional costs (e.g. in 2017/18 the recruitment of [3< ] engineers who will be dedicated to FVR work). It also said that the increase in FVR spend would require it to operate at a different point on the payback curve meaning additional capex cover is justified, and that Ofcom did not recognise that the cost incurred commences before the start of the charge control period, but only makes allowances from 2018/19.<sup>78</sup>
- 3.76 In addition, Openreach was concerned that we might double-count the FVR impact in the charge control through both the fault volume assumptions and the efficiency assumptions. We are still considering our position on this and our analysis is ongoing. We therefore do not address comments on efficiency in this consultation but will give them full consideration in our statement.

### Our analysis and proposals

- 3.77 In this sub-section, we first set out our revised forecast of fault rates and the impact they have on forecast costs during the control period. Second, we discuss how we have

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<sup>75</sup> Openreach response to March 2017 QoS Consultation, paragraphs 92-103.

<sup>76</sup> Sky response to March 2017 QoS consultation, paragraph A6.8; Verizon response to March 2017 QoS consultation, paragraph 31; and Vodafone response to March 2017 QoS consultation, response to question 4.1 on page 50.

<sup>77</sup> CityFibre response to March 2017 WLA Consultation, paragraphs 6.4.21-6.4.25.

<sup>78</sup> Openreach response to March 2017 QoS Consultation, paragraph 92.

captured the funding for the planned FVR investment through the capex and opex forecast in the charge control. Third, we discuss the additional comments from stakeholders.

### Impact of fault reduction on forecast costs

3.78 As discussed in Section 5 of the September 2017 QoS Consultation, we have considered Openreach's submissions on the level of fault rate reduction and, having carried out further analysis, we are proposing the fault rates set out in Table 3.6 below during the charge control period.

**Table 3.6: Forecast fault rates for copper and GEA-FTTC services over the period of charge control using Openreach's actual FVR plan and our interpretation of its effects**

Charge control period	Base Year 2015/2016	Year 1 2018/2019	Year 2 2019/2020	Year 3 2020/2021
WLR	8.3%	[X]%	[X]%	[X]%
MPF	11.2%	[X]%	[X]%	[X]%
WLR+SMPF	12.0%	[X]%	[X]%	[X]%
SMPF	3.7%	[X]%	[X]%	[X]%
WLR+GEA-FTTC <sup>79</sup>	13.3%	[X]%	[X]%	[X]%
MPF+GEA-FTTC	15.6%	[X]%	[X]%	[X]%

Source: Ofcom analysis of Openreach data.

- 3.79 In the charge control modelling, as in the March 2017 WLA Consultation, we have taken account of the likely effect of a reduction in fault rates on operating costs by carrying out the following steps:<sup>80</sup>
- i. Identify base year repair-related costs: In the base year cost data, the repair-related operating costs are not separated, i.e. within cost components there is a mixture of costs related to both repair and other activities. Therefore, we need to calculate the proportion of total operating costs that are specifically due to repair activities.<sup>81</sup>
  - ii. Project repair-related costs forward: to calculate the proportion of operating costs that are repair-related during the charge control period, we forecast base year repair-related costs by applying assumptions on volume changes, cost-volume elasticities, input-price changes and efficiency. In the March 2017 WLA Consultation modelling, we also included the impact of a reduction in the fault rate when projecting these costs. We consider this to be an error as the impact of fault reduction is modelled in step (iii)

<sup>79</sup> GEA-FTTC: Generic Ethernet Access – Fibre to the Cabinet

<sup>80</sup> See March 2017 WLA Consultation, Annex 11, paragraphs A11.111 and A11.126-A11.132.

<sup>81</sup> We have determined these proportions using information provided by BT in its response to the 24<sup>th</sup> s.135 request on 8 February 2017.

of the calculation. We have therefore removed this assumption from step (ii). Instead, we forecast repair costs by applying the proportion of repair operating costs to total operating costs in the base year (calculated in the first step) to forecast total operating costs during the control period.

- iii. Apply fault reduction to reduce forecast repair costs: We calculate the proportional change in fault rates compared to the base year (2015/16) and apply this to the repair-related operating costs for each forecast year. We have assumed that there is a linear relationship between the fault rate and the repair costs.<sup>82</sup>

3.80 As shown in Table 3.7 below, the forecast reduction in faults results in a reduction of £1.59 in the MPF rental unit cost and a reduction of £0.43 in the GEA 40/10 rental unit cost in 2020/21 (compared to a counterfactual of no reduction in faults due to planned FVR investment).

**Table 3.7: Impact of forecast fault rate reduction on unit costs (£ nominal annual)**

	2018/19	2019/20	2020/21
MPF rental unit cost	-1.09	-1.42	-1.59
GEA 40/10 rental unit cost	-0.38	-0.44	-0.43

Source: Ofcom modelling

### Funding of fault reduction programme

3.81 In the March 2017 WLA Consultation, we proposed to forecast capex on the basis of an ongoing network with a steady state adjustment. The ongoing network adjustment increases the value (NRC<sup>83</sup>) of some heavily depreciated assets and the steady state adjustment equates base year capex with base year OCM depreciation. Capex for subsequent years is then forecast by applying efficiency and price change assumptions to the steady state capex and adding (or subtracting) any additional capex to meet increased (or decreased) demand. By comparing our forecast of capex for WLR and MPF services with Openreach's historical level of capex, we reached the view that Openreach's planned increase in FVR investment of £[X]m over 5 years (c.£[X]m a year) would be fully funded by the capex uplift that we proposed to allow in the charge control.<sup>84</sup>

3.82 The impact of Openreach's revised FVR plan is to smooth expenditure to c.£[X]m a year, slightly reducing total expenditure over the 5 years to c.£[X]m. We therefore maintain our view that the capex allowance in the charge control provides sufficient funding. As Figure 3.8 shows, the annual capex for WLR and MPF services forecast for the charge control would allow recovery of capex at 2015/16 levels plus an upper-bound estimate of the increase in Openreach's capex due to the investment in FVR.

<sup>82</sup> We consider this is a reasonable simplification since any non-linearity between forecasted fault rates and costs would also be reflected in forecasted QoS standards and costs. Therefore, since the two effects are working in opposite directions and we assume a linear cost trend for both, the net impact on forecasted costs is relatively small and likely to be linear.

<sup>83</sup> Net Replacement Cost.

<sup>84</sup> March 2017 QoS Consultation, paragraphs 4.30-4.50.

**Figure 3.8: Comparison of Openreach’s historical capex, planned FVR investment and capex allowed in the charge control<sup>85</sup> – per annum spend (£m) on WLR and MPF services<sup>86</sup>**

[X]

*Source: 2017 WLA charge control model and Openreach response to question 1 of the 7<sup>th</sup> QoS s.135 notice of 5 June 2017.*

*Note: Estimate is upper-bound of the impact of the FVR programme: £[X]m annual FVR covers GEA services as well as MPF and WLR, and 2015/16 capex already includes c. £[X] FVR capex.*

3.83 However, Openreach has explained that the c.£[X]m per annum comprises opex (35%) as well as capex (65%): about £[X]m opex and £[X]m capex. In light of this, we have also considered whether the opex allowance in the charge control provides sufficient funding. To get a better understanding of the FVR opex included in Openreach’s plan, we have gathered information using our statutory information gathering powers on the breakdown of FVR opex by sub-programme, as shown in Table 3.9 below.

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<sup>85</sup> Average annual capex for WLR and MPF services during the control period, as forecast in 2017 WLA charge control model.

<sup>86</sup> [X] ]

Table 3.9: Openreach FVR opex by sub-programme

Sub-programme	Description	2015/16 (£m nominal)	2016/17 (£m nominal)
B058 FVR - Joint Remakes (Non pressurised)	Visit by engineer to repair/uplift a D side joint in the cable from PCP to the distribution point. (Joints are primarily used to provide flexibility points, or when cabling length limits are reached)	[X]	[X]
B058 FVR - UELP Pressure Maintenance	Survey cables leaving the telephone exchange to try and find any leaks in the cable which may allow ingress of water. Will be fixed if simple otherwise submit proposal for renewal to planners to raise capex estimate	[X]	[X]
B058 FVR - M Side Survey <sup>87</sup>	Work by engineer to investigate M Side – anything from the exchange to the PCP – work out where the faulting part of the network is and if quick fix, fix, or if capital work, submit proposal for fix to planners to build capex estimate	[X]	[X]
B058 FVR - D Side Survey	Work by engineer to investigate D Side – anything from the PCP to the distribution point (overhead pole) – work out where the faulting part of the network is and if quick fix, fix, or if capital work, submit proposal for fix to planners to build capex estimate	[X]	[X]
Other sub-programmes		[X]	[X]
Total		[X]	[X]

Source: Openreach response to Q7 of 8<sup>th</sup> QoS s.135 notice of 23 June 2017.

- 3.84 Table 3.9 shows that the largest sub-programme, accounting for 40% of spend in 2016/17, involves repairing/uplifting D-side cable joints and that the remainder is mostly on engineers surveying different parts of the network and then either carrying out quick fixes where possible or submitting proposals to raise capex for bigger jobs like renewals. This type of expenditure is similar to capex in that it is used to upgrade the network and will prevent Openreach having to reactively repair faults. However, it would be reasonable to treat such costs as opex where a similar level of expenditure is required in each year to maintain quality levels.<sup>88</sup>
- 3.85 In this regard, we note that Openreach's plan includes maintaining a relatively constant level of FVR opex in each year over the medium term.<sup>89</sup> In addition, BT's accounting policy will consider how long the economic benefits last for when deciding whether to expense costs in-year (i.e. treating as opex) or spread them over a number of years (i.e. treating as capex).<sup>90</sup> On this basis, we consider it reasonable to include Openreach's estimates of FVR

<sup>87</sup> Openreach define M-side as anything from the exchange to the PCP, which we note this is similar to our definition of the E-side of the network.

<sup>88</sup> On the basis that you would treat expenditure that leads to benefits that will last for less than a year as opex.

<sup>89</sup> Openreach response to question 1 of the 7<sup>th</sup> QoS s.135 notice of 5 June 2017.

<sup>90</sup> For example, see 3. *Significant accounting policies*, pp.176-181 of the [2017 BT Group Annual Report](#).

opex within our operating cost forecast (in addition to the FVR capex allowed for through the steady state assumption).

- 3.86 According to the latest view of Openreach’s Mid Term Plan (MTP) provided on 9 June 2017, Openreach is expecting to spend about £[X]m FVR opex per annum during the charge control period.<sup>91</sup> Table 3.9 above shows that actual spend in 2016/17 was £[X]m. Hence, when the base year is updated to 2016/17 there should already be an appropriate allowance for FVR opex within the cost base. Table 3.9 also shows FVR opex was lower in 2015/16 at £[X]m. Therefore, for the purposes of this consultation we have estimated the impact of the increase in FVR opex by uplifting 2015/16 base year opex by c. £[X]m, which is the difference in FVR opex between 2015/16 and 2016/17. We have reflected this in the model by spreading the additional FVR opex equally across all WLA and WFAEL lines lines This results in an increase of about £0.10 per line in 2020/21 (relative to not uplifting opex to take into account additional FVR spend).

### Stakeholders’ additional comments

- 3.87 First, regarding our overall approach, stakeholders generally agreed with the principle of reducing repair costs in line with expected fault rate reductions. Sky, Verizon and Vodafone agreed that Openreach should not be given an additional cost allowance in the charge control to carry out the planned FVR investment, whereas CityFibre believed the costs of Openreach’s planned FVR investment should be included in the charge control but was not clear whether our March 2017 proposals included such an allowance.
- 3.88 For the avoidance of doubt, we are proposing to allow for the costs of Openreach’s planned FVR investment. As set out above, this is through our forecasting approach of setting capex on the basis of the ongoing network and steady state adjustments and the inclusion of a small uplift to 2015/16 base year opex. We do not think it is necessary to make any further allowances on top of this.<sup>92</sup> We consider this to be consistent with our principle of setting charge controls at a level that allows Openreach the opportunity to recover its efficiently incurred costs during the review period.
- 3.89 Second, Openreach had concerns about the funding of special measures to deliver the planned FVR investment, such as the planned recruitment of [X] FVR-only engineers in 2017/18. Based on the information Openreach has provided we consider that our forecast will allow the recovery of such costs – as this cohort of engineers will work solely on FVR activities (e.g. those set out in Table 3.9) the associated costs should be entirely captured within the c.£[X]m per annum FVR programme set out in the MTP.
- 3.90 Similarly, we note Openreach’s concerns about taking into account that the more it invests in fault prevention, the smaller the incremental gains. As set out above, we recognise that fault prevention spans both investments with short payback periods (e.g. in parts of the network that are obviously broken) and those with longer payback periods (e.g. where often more effort needs to be expended to find defects) and have ensured that both the

<sup>91</sup> Openreach response to question 1 of the 7<sup>th</sup> QoS s.135 notice of 5 June 2017.

<sup>92</sup> This is consistent with our approach in the March 2017 QoS consultation, where we proposed to include no additional capex to carry out the ‘Network Health’ programme in the charge control (paragraph 4.50, bullet point 3).

capex and opex forecasts within the charge control are sufficient. We have based the forecast fault reduction and funding of the required investment on Openreach's latest view of its planned FVR investment<sup>93</sup> and consider that this fully reflects the relationship between costs incurred and benefits realised.

3.91 In addition, Openreach was concerned that our approach did not recognise that the costs incurred to deliver its FVR plan commence before the start of the charge control period. Openreach argued that the incremental spend, above the base 2015/16 year should be funded as it represents a step change in investment. The funding of expenditure that occurs prior to the start of this charge control depends on the pricing of the relevant services during this period. In terms of GEA services, Openreach has had pricing flexibility, allowing it to make returns in excess of the cost of capital.<sup>94</sup> Prices for WLR and MPF services until the end of 2016/17 have been set on the basis of the 2014 WLR/LLU cost-based charge control:

- In terms of capex, the 2014 WLR/LLU charge control forecast the level on the basis of an ongoing network with a steady state adjustment, which aligns capex with depreciation and disposals. As discussed in the March 2017 QoS Consultation, Openreach has consistently spent less capex than its depreciation, meaning there is sufficient headroom for additional spend on fault prevention.<sup>95</sup>
- For opex, the 2014 WLR/LLU charge control forecast the level based on Openreach's actual costs in the base year (2011/12) and expected trends due to efficiency and input inflation. As shown in Table 4.6 of the March 2017 QoS consultation, in 2015/16 (the first year of the renewed FVR investment), Ofcom's forecast opex was higher than Openreach's actual opex by c. £[3< ]m.

3.92 Our view therefore is that the current pricing of WLR, MPF and GEA services will provide sufficient funding for expenditure on FVR that occurs prior to the start of this charge control.

### Summary of proposals

3.93 In summary, we have revised our forecast of fault rates and estimate that this will result in a reduction of £1.59 on the MPF rental unit cost and a reduction of £0.43 on the GEA 40/10 rental unit cost (compared to a counterfactual of no reduction in faults due to the planned FVR investment). We consider that Openreach should be allowed to recover the costs of achieving the fault reduction in line with the FVR plan it has set out. We consider that our proposed approach of forecasting capex on the basis of an ongoing network with a steady state adjustment will provide sufficient capex funding to deliver this plan. We also consider that opex associated with the planned FVR investment should be allowed and have made an upward adjustment to our base year (2015/16) costs to reflect Openreach's estimates over the control period.

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<sup>93</sup> As set out in Openreach response to question 1 of the 7<sup>th</sup> notice of 5 June 2017.

<sup>94</sup> As set out in the March 2017 WLA Consultation, Volume 1, paragraph 8.29, the return on capital employed (ROCE) was [3< ]% in 2014/15 and [3< ]% in 2015/16.

<sup>95</sup> March 2017 QoS Consultation, paragraph 4.35.

## Resource uplift to meet higher repair standards

### March 2017 WLA Consultation

- 3.94 In the March 2017 QoS consultation<sup>96</sup>, we estimated the impact of resource increases required to meet the proposed repair standards on forecast costs. This was based on our own analysis of the change in resources to meet the proposed repair standards at a given volume of repair demand.<sup>97</sup> We calculated that the uplift to repair related costs due to our proposed increase in QoS standards (4.5% for Care Level 1 and 11.3% for Care Level 2 in 2020/21) would increase the forecast MPF rental unit cost by £0.62 and the GEA 40/10 rental unit cost by £0.32 in 2020/21.<sup>98</sup>
- 3.95 We also proposed making an adjustment to BT's usage factors to account for the relative fault rates of the different services (MPF, WLR and SMPF), as well as the expected change in service level mixes. The purpose of this adjustment was to account for the changing relative usage of shared repair related components by services<sup>99</sup> but to not impact the overall forecasted cost stack. We proposed normalising the MPF usage factor to 1.21 (the unadjusted base year figure) in an attempt to maintain consistency with the 2014 FAMR model. We then proposed adjusting the WLR and SMPF usage factors to [X ] and [X ] respectively to reflect their use of shared repair costs relative to MPF (with its usage factor of 1.21).<sup>100</sup>

### Stakeholder responses

- 3.96 Only Openreach commented on the implementation of the QoS adjustments in the charge control, stating that it was not clear why Ofcom did not use QoS-adjusted usage factors to convert component costs to service costs.

### Our analysis and proposals

- 3.97 In relation to the resource uplift, as set out in the September 2017 QoS Consultation, Openreach has provided new evidence on the feasibility of different levels of service that it can provide, and its own models to estimate the costs of doing so. We have assessed this evidence and propose to amend our proposals on the level of repair standards in light of this evidence. Table 3.10 sets out the new proposed repair standards and our estimates of the uplift in engineer resource needed.

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<sup>96</sup> March 2017 QoS Consultation, Annex 7, Table A7.10.

<sup>97</sup> Our analysis was developed and refined by consultants Analysys Mason. Report: [https://www.ofcom.org.uk/data/assets/pdf\\_file/0034/99646/Analysys-Mason-report.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0034/99646/Analysys-Mason-report.pdf).

<sup>98</sup> March 2017 QoS Consultation, Annex 7, Table A7.10.

<sup>99</sup> These costs are found within the following four network cost components: D side copper current, E side copper current, Local exchanges general frames maintenance and Analogue line drop maintenance.

<sup>100</sup> March 2017 WLA Consultation, Annex 11, paragraphs A11.117-A11.119.

**Table 3.10: Revised proposed repair standards (excluding adjustment for *force majeure*<sup>101</sup>) and estimated resource uplifts to achieve them**

	2018/19	2019/20	2020/21
Repair standards (% by SLA)	83%	86%	88%
Uplift for all care levels	3.7%	7.3%	11%
Uplift for Care Level 1	1.7%	4.7%	7.6%
Uplift for Care Level 2	5.6%	10.0%	14.4%

3.98 In our charge control modelling, we have captured the effect of the resource uplift using the same approach adopted in the March 2017 WLA Consultation.<sup>102</sup> We first identify the relevant costs as the forecast repair-related costs including the cost reductions to account for the planned fault reduction. We then apply uplifts for each service level to the forecast repair costs that are based on the increasingly more demanding repair standards.

3.99 As shown in Table 3.11 below, the revised resource uplifts result in a +£0.83 impact on the MPF rental unit cost and a +£0.60 impact on the GEA 40/10 rental unit cost in 2020/21 (compared to a counterfactual of Openreach's level of resource needed for repair services activities in the base year).

**Table 3.11: Impact of Resource uplifts on unit costs (£ nominal annual)**

	2018/19	2019/20	2020/21
MPF rental unit cost	+0.34	+0.61	+0.83
GEA 40/10 rental unit cost	+0.28	+0.46	+0.60

Source: Ofcom modelling

3.100 In relation to the QoS-adjusted usage factors, we still consider our principles for making adjustments to BT's usage factors to be appropriate. However, following our internal review we consider it necessary to make changes to the calculation and application of the QoS-adjusted usage factors within the top-down model.

3.101 First, by normalising the MPF usage factor to 1.21 this results in an increase in component volumes and thus a decrease in unit costs (due to greater economies of scale). This is inconsistent with our proposed rationale for using adjusted usage factors – to change the relative allocation of costs across WLR, SMPF, and MPF but not to impact the overall cost stack.

<sup>101</sup> A fixed allowance of 3% to take account of events such as severe storms and flooding which are beyond Openreach's reasonable control.

<sup>102</sup> See March 2017 WLA Consultation, Annex 11, paragraphs A11.126-A11.132.

- 3.102 Therefore, we now propose normalising the MPF usage factor to 1.14 and adjusting the WLR and SMPF usage factors relative to this (resulting in a WLR usage factor of [X ] and SMPF usage factor of [X ])). As intended, this results in lower component volumes being attributed to MPF and more to WLR and SMPF but ensures that overall component volumes are not impacted by the QoS adjustment to the usage factors.
- 3.103 Second, we note that the QoS-adjusted usage factors were applied when converting service volumes into component volumes, but as Openreach notes, not when converting unit component costs into unit service costs. The conversion of component costs to service costs is where the allocation of repair-related costs to services occurs in the top-down model, thus we consider it appropriate to apply the adjusted usage factors at this stage of the top-down model. We have corrected this in the CPI-X model.
- 3.104 When applying the QoS-adjusted usage factors on this basis, we find the forecast MPF rental unit cost to be around £0.30 per annum lower in 2020/21, with limited impact on the forecasted GEA rental unit cost.

## SLG payment forecasts

### March 2017 WLA Consultation

- 3.105 Service Level Guarantees (SLGs) are compensation that a purchasing telecoms provider is entitled to should Openreach not provide a service to the quality specified in the Service Level Agreement (SLA), e.g. if delivery of the service was late. In the March 2017 WLA Consultation, we stated that Openreach's SLG payments in 2015/16 (the base year) were likely to exceed the efficient level for the forward look period. In order to capture the efficient level of SLG payments we proposed forecasting them separately based on assumptions on improvements in Openreach's QoS performance, such as the volume of SLGs and the average payable days<sup>103</sup>, and the level of the daily SLG payments.<sup>104</sup> This approach resulted in the following forecast SLGs for MPF, WLR, SMPF and GEA services over the charge control period.

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<sup>103</sup> For each instance where an SLG is triggered, the average number of days SLGs are payable for.

<sup>104</sup> March 2017 WLA Consultation, paragraphs A11.171-A11.181.

**Table 3.12: March 2017 forecast payments (£m nominal) by SLG type over the next charge control period**

	2018/19	2019/20	2020/21
Repairs	14.7	15.1	10.0
Provisions	15.4	19.9	20.1
FAD	0.5	0.5	0.5
Missed Appointments	7.4	9.7	10.5
Dead on Arrival	3.9	4.0	4.2
<b>Total</b>	<b>41.9</b>	<b>49.2</b>	<b>45.3</b>

Source: March 2017 WLA Consultation, Table A11.23.

### Stakeholder responses

3.106 Only Openreach commented on our SLG forecasting approach. It agreed that if there are fewer faults there might be some reduction in SLG payments but disagreed with our assumption that as performance improves, SLG payments will reduce, stating that the historical trend shows the opposite to be true: *“Since the previous FAMR, SLGs for WLR and MPF have increased from £23m in 2011/12 to £42m in 2014/15 and £49m in 2015/16 whilst at the same time performance improved.”*<sup>105</sup> Openreach also provided an additional submission where it argued that Ofcom’s approach will not enable it to fully recover the costs associated with delivering the required service levels during the control period, because:

- Ofcom’s assumption that the average payable days remains constant during a period where it will be required to repair a higher proportion of faults on time is unreasonable. Openreach believed that as a result of achieving the higher repair standards, the nature of the remaining repair jobs will mean they will take longer to resolve (i.e. a greater proportion of SLGs will be for what Openreach refers to as ‘glass ceiling jobs’).
- Ofcom’s approach of assuming the best years’ performance for average payable days on a product-by-product basis would be unachievable – *“selecting the best performing year for a product in one year and another product in another product in a different year does not y [sic] represent a position that is possible for an efficient operator to achieve due to trade-offs in resourcing decisions in delivering both of these products”*.<sup>106</sup>

### Our analysis and proposals

3.107 In this sub-section, we first consider Openreach’s comments and then discuss the impact of our revised proposals on QoS remedies on the SLG forecasts.

<sup>105</sup> Openreach response to March 2017 WLA Consultation- Volume 2, 22<sup>nd</sup> June 2017, paragraph 211.

<sup>106</sup> Openreach additional submission, *SLG analysis September 2017*, received on 6 September 2017.

*Our views on Openreach's comments*

- 3.108 When setting charge controls, we allow the recovery of some SLG payments in order to give Openreach the opportunity to recover its efficiently incurred costs.<sup>107</sup> Where quality of service is insufficient, we may make a downward adjustment to Openreach's actual SLG payment costs in the base year data in order to bring them into line with the level of compensation an efficient operator who is providing an appropriate level of quality would pay.
- 3.109 As set out in the March 2017 WLA Consultation, we consider that the SLG payments in the base year are likely to exceed the efficient level. Given that we are expecting Openreach to achieve a higher level of quality of service in the future, we expect that a higher quality of service will lead to fewer SLG payments. In practice, it is difficult to precisely specify the level of quality that an efficient operator would provide. However, we consider that our proposals on binding quality standards and fault rates represent the lower bound of what we would expect an efficient operator to be able to achieve. Therefore, rather than use Openreach's actual costs we have forecast SLG payments as follows:
- remove SLG payments from the base year costs<sup>108</sup>; and
  - forecast SLG payments on a bottom-up basis incorporating improvements in Openreach's QoS performance (e.g. fault rate, the proportion of repairs within SLA and average duration of SLGs), taking into account the likely impact on the daily SLG payments of the automatic compensation proposals.<sup>109</sup>
- 3.110 As set out in the March 2017 WLA Consultation, we forecast each type of SLGs using the following formula:
- Relevant volumes x SLG event rate<sup>110</sup> x average payable days x the daily SLG payment (£).
- 3.111 For repair SLGs, the SLG event rate is derived on the basis of: the fault rate x (1-repair standard %).<sup>111</sup> As set out above, we are expecting the fault rate to decrease and Openreach to meet an increased on-time repair standard during the control period. Therefore, we propose to maintain the approach set out in the March 2017 WLA Consultation of taking into account these effects leading to an SLG event rate that decreases over time.
- 3.112 In relation to average payable days, Openreach argued that assuming this stays flat throughout the period (and based on its best historical performance) is unreasonable given the increasing repair standards we have proposed. We have reviewed Openreach's additional submission which provides a breakdown of the average payable days of the SLGs

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<sup>107</sup> We would expect an efficient firm to have to make some level of SLG payments. The resource commitments required to ensure that SLAs are always met are likely to be very significant and involve QoS costs that would unlikely be at an efficient level.

<sup>108</sup> March 2017 WLA Consultation, paragraphs A11.113-A11.115.

<sup>109</sup> March 2017 WLA Consultation, paragraphs A11.162-A11.181.

<sup>110</sup> The SLG event rate = the proportion of the relevant service volumes (either rentals or connections) that will incur SLGs over the course of a year.

<sup>111</sup> For example, a fault rate of 10% and a repair standard of 85% would result in an SLG rate of:  $10\% * (1 - 85\%) = 1.5\%$ .

it actually incurred in 2016/17, depending on whether repairs are classed as ‘glass ceiling’ jobs or not (as shown in Table 3.13 below). As set out in the September 2017 QoS Consultation (Figure 3.3), Openreach considers glass ceiling jobs to include those that require civil engineering, specially skilled engineers or specialist equipment, as compared to non-glass ceiling jobs which are generally more straightforward to complete as long as there are sufficient resources.

**Table 3.13: Openreach analysis of payable days by job type using 2016/17 actual data (days)**

	WLR	MPF	GEA
Non-glass ceiling	1.87	1.65	1.73
Glass ceiling	5.18	5.58	5.34

Source: Openreach

3.113 Table 3.13 shows that the average payable days for glass ceiling jobs is 2-3 times that of non-glass ceiling jobs. As set out in the September 2017 QoS Consultation, our proposed standard of 88% on-time repair for 2020/21 reflects our view of the level of performance that is as close to Openreach’s operational limit (i.e. the glass ceiling) as is reasonably possible.<sup>112</sup> Hence, a consequence of Openreach achieving the 88% standard will be that the 12% of repair jobs that fail the SLA will predominantly be the ‘glass ceiling’ jobs that take longer to resolve. We therefore accept that an increase in the average payable days for SLGs would be expected because of this change in mix of glass ceiling jobs vs non-glass ceiling jobs.

3.114 We have amended our approach to incorporate an increase in the average payable days for repair SLGs in line with the proposed repair standards. We have used Openreach’s analysis of average payable days against the repair standard to inform our assumptions for the charge control period. Table 3.14 below sets out the average payable days we have used to forecast repair SLGs.

**Table 3.14: Revised average payable days used to forecast repair SLGs**

	Average payable days
2018/19	3.10
2019/20	3.13
2020/21	4.24

3.115 For other QoS aspects which have SLGs – on-time provision, first available date (FAD) and dead on arrival (DOA) – Openreach is currently performing close to or beyond our proposed standards.<sup>113</sup> As the standards are not requiring material performance

<sup>112</sup> September 2017 QoS Consultation, paragraphs 3.34-3.37.

<sup>113</sup> For example, as set out in the March 2017 QoS consultation, Openreach has delivered 90-95% on-time provisions (i.e. installations) since August 2012 (paragraph 6.28). We are proposing to introduce a 95% standard for on-time provision.

improvements for these aspects we consider historical performance to provide appropriate benchmarks for our assumptions for SLG event rates and average payable days.

3.116 Openreach argued that the approach proposed in the March 2017 WLA Consultation of selecting the best performing year for each product separately is unreasonable given how it allocates engineering resource in practice. As set out in the March 2017 QoS Consultation, we recognise that Openreach uses a common pool of engineer resource to carry out its operations and often flexes its resources between fault repairs and provision activities during peak times.<sup>114</sup> In light of this, we have revisited our assessment of Openreach’s historical performance:

- We agree that historical performance on SLG event rates and average payable days should be assessed for all products in aggregate (but applied separately to the relevant volumes of each product). This reflects that when Openreach is making resourcing decisions it will trade-off the resources needed to complete the work across all of its products (e.g. WLR, MPF, GEA).
- We also consider that this suggests that the base year (2015/16) is likely to represent the most appropriate benchmark. As set out in the March 2017 QoS Consultation, Openreach’s repair performance was worse in prior years.<sup>115</sup> Given the inter-related nature of Openreach repair and provisioning performance, we consider it would be inappropriate to base assumptions on provisioning performance on a year in which repair performance was worse.

3.117 We have therefore revised our approach by forecasting provision, FAD and DOA SLGs on the basis of the average SLG event rates and average payable days across all products in 2015/16. Table 3.15 below sets out our assumptions for provisions, FAD and DOA SLGs.

**Table 3.15: Assumed event rates and average payable days for provisions, FAD and DOA SLGs**

	MPF	WLR	GEA
Provision SLG event rate	[X]%	[X]%	[X]%
Provision SLG avg payable days	[X]	[X]	[X]
FAD SLG event rate	[X]%	[X]%	[X]%
FAD SLG avg payable days	[X]	[X]	[X]
DOA SLG event rate	[X]%		
DOA SLG avg payable days	[X]		

3.118 Missed appointment SLGs are slightly different in that they are a fixed one-off compensation payment when the event occurs (i.e. when an engineer misses an appointment), rather than varying by the number of payable days. Therefore, to forecast

<sup>114</sup> March 2017 QoS Consultation, paragraph 6.73.

<sup>115</sup> For example, see March 2017 QoS Consultation, Figure 5.4.

missed appointment SLGs we use the following formula: connection volume x event rate x SLG per event. Consistent with the other SLG types, we use the average event rate across all products in 2015/16. Table 3.16 sets out our assumptions for missed appointment SLGs.

**Table 3.16: Assumed event rates for missed appointment SLGs**

	MPF	WLR	GEA
Missed appointment event rate	[X]%	[X]%	[X]%

3.119 In summary, in light of Openreach's comments we propose to amend our SLG forecasting approach to take into account the likely effect of improvements to on-time repair performance on the average duration of SLGs and the inter-relationship between Openreach's repair and provisioning activities:

- for repair SLGs, we now assume the average payable days increase in line with the proposed repair standards and have used the average payable days for all products;
- for provision, FAD and DOA SLGs, we now use the event rates and average payable days for all products Openreach achieved in the base year (2015/16); and
- for missed appointment SLGs, we now use the event rates for all products Openreach achieved in the base year (2015/16).

#### *Impact of new QoS proposals*

3.120 As set out above, we derive the event rate for repair SLGs on the basis of assumptions on QoS improvements in terms of fault rates and the proportion of SLAs met in accordance with the proposed repair standards. Our revised QoS proposals are set out in the September 2017 QoS consultation and include new fault rate forecasts and repair standards during the charge control period. Tables 3.17-3.19 set out the revised fault rates, repair standards and the resulting SLG event rates we have calculated.

**Table 3.17: Assumed fault rates for SLG calculation**

	2018/19	2019/20	2020/21
WLR	7.4%	[X]%	[X]%
MPF	10.0%	[X]%	[X]%
GEA	12.0%	[X]%	[X]%

**Table 3.18: Proposed repair standards (excluding adjustments for force majeure)**

	2018/19	2019/20	2020/21
WLR	83%	86%	88%
MPF	83%	86%	88%
GEA	83%	86%	88%

**Table 3.19: Calculated repair SLG event rates (fault rate x (1-repair standard))**

	2018/19	2019/20	2020/21
WLR	1.26%	[X]%	[X]%
MPF	1.70%	[X]%	[X]%
GEA	2.04%	[X]%	[X]%

3.121 Our SLG forecasts also take into account expected changes in the daily SLG payments over the control period. The current daily SLG payments are intended to represent the detriment to telecoms providers' arising from Openreach failing to meet the SLAs and have been derived on the basis of a number of factors including current rental prices and estimates of telecoms providers' losses. In forecasting SLGs we take account of the impact of the proposed charge control on the controlled products, MPF rental and GEA 40/10 rental.<sup>116</sup> We also take into account the proposals to introduce retail automatic compensation for loss of service, late provisioning and missed appointment incidents during this period.<sup>117</sup> We have updated the assumed daily SLG payments on the basis of our latest forecasts of rental prices and retail automatic compensation payments.

3.122 Having updated these assumptions on improvements in quality of service and the daily SLG amounts, we have combined them with the assumptions on event rates and average payable days set out above to calculate the following forecast of SLG payments.

**Table 3.20: Revised forecast payments by SLG type over the charge control period for WLR, MPF, SMPF and GEA-FTTC (£m nominal)**

	2018/19	2019/20	2020/21
Repairs	14.2	24.8	26.5
Provisions	19.7	31.9	31.4
FAD	0.5	0.5	0.5
Missed Appointments	6.7	10.0	10.3
Dead on Arrival	5.3	5.2	5.2
<b>Total</b>	<b>46.5</b>	<b>72.5</b>	<b>73.9</b>

<sup>116</sup> We assume that the prices of products we have not proposed to charge control, e.g. WLR and SMPF, will stay fixed in nominal terms to the end of the charge control period.

<sup>117</sup> In our forecasting, we assume that the retail automatic compensation resulting from Openreach network faults will get fully passed through to the SLGs Openreach pays retail telecoms providers from the beginning of 2019/20 onwards.

## Consultation question

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.

## Taking account of our proposed duct and pole access remedies

3.123 In our March 2017 WLA Consultation, we included our proposals on duct and pole access. Since this time, we have issued further consultations which we take account of in this document. On 20 April 2017<sup>118</sup> and 1 August 2017<sup>119</sup> we set out proposals for our duct and pole access remedies. We now propose to update the costs we use in the charge control to take account of the proposals for DPA services as set out in the August 2017 DPA Consultation. This includes:

- **Network adjustment costs:** we have incorporated the proposed uplift to the regulatory cost base to reflect costs associated with the necessary adjustments undertaken to make Openreach's physical infrastructure ready for use.<sup>120</sup> We have included an uplift of around £10m over the charge control period compared to [3<] [c. £11.5m] in the March 2017 WLA Consultation (see CPI-X model published in March 2017) and have spread this cost across all WLA and WFAEL lines.<sup>121</sup>
- **Productisation costs:** we have updated the productisation costs in our analysis to reflect the latest proposals of around £7m over the charge control period<sup>122</sup> (compared to the proposed £30 million in the March 2017 WLA Consultation).
- **PIA rental revenue:** we have updated the expected recovery of costs from PIA rentals over the charge control period to around £3 million, compared to the £5 million forecasted in the March 2017 WLA Consultation. This reflects our assumptions in the August 2017 DPA Consultation about the phasing of premises passed.<sup>123</sup>

3.124 The overall impact of making these changes is to reduce MPF rentals by around £0.20 per annum compared to the March 2017 WLA Consultation proposal.

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<sup>118</sup> Ofcom, *Wholesale local access market review: duct and pole access remedies*, April 2017

<https://www.ofcom.org.uk/consultations-and-statements/category-2/duct-pole-access-remedies>.

<sup>119</sup> Ofcom, *WLA market review: Consultation on pricing proposals for Duct and Pole Access remedies*, August 2017

<https://www.ofcom.org.uk/consultations-and-statements/category-2/pricing-proposals-duct-pole-access>.

<sup>120</sup> Our proposals in August 2017 set out that Openreach should recover these network adjustments costs across all users of the physical infrastructure, up to a financial limit, see paragraphs 3.50-3.55 of the August 2017 DPA Consultation.

<sup>121</sup> We have not distributed this uplift evenly over the charge control, to reflect the significantly greater usage nearer the end of the charge control compared to the start of the charge control.

<sup>122</sup> As discussed at paragraphs 3.56-3.61 of the August 2017 DPA Consultation.

<sup>123</sup> See footnote 65 of the August 2017 DPA Consultation.

## Consultation question

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.

## Ongoing service costs of pensions

### March 2017 WLA Consultation

- 3.125 Ongoing pension service costs are the costs of pension scheme benefits earned by employees in the current period. It has no historical element and can be thought of as the pensions cost that would be incurred by a brand-new company with only the current employees. For the reasons given in the December 2010 Pension Review Statement<sup>124</sup> we do not include the costs of funding the pension deficit in our forecasts and we do not consider BT's pension deficit in this section.
- 3.126 In the March 2017 WLA Consultation, we included ongoing pension costs within overall pay costs, based on an estimate of the 2018/19 accounting charge. This was consistent with our approach in the July 2014 FAMR Statements<sup>125</sup> and the December 2010 Pension Review Statement in which we said that "the accounting charge, as reported in the statutory accounts is an appropriate measure of the ongoing service cost".<sup>126</sup>
- 3.127 We based our forecast of the 2018/19 costs on the accounting charge in 2015/16.

### Stakeholder responses

- 3.128 In its response to the March 2017 WLA Consultation, Openreach noted that BT's ongoing defined benefit pension scheme costs were likely to increase significantly. It stated that "Openreach will experience a significant rise in the costs of providing ongoing pensions benefits for active scheme members from 2017/18 onwards"<sup>127</sup> and that this increase in costs "reflects a decline in market conditions, our reassessment of the demographic assumptions and the impact of membership experience adjustments".<sup>128</sup>
- 3.129 Key market assumptions reflected in the latest valuation of the BT pension scheme include those set out in Table 3.21.<sup>129</sup>

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<sup>124</sup> Ofcom, Pensions Review - Statement, 15 December 2010.

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0019/47701/statement.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0019/47701/statement.pdf).

<sup>125</sup> Ofcom, 2014. Fixed Access Market Reviews: Approach to setting LLU and WLR Charge Controls – Statement (2014 FAMR Statement), Annex 13.

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0026/78812/annexes.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0026/78812/annexes.pdf).

<sup>126</sup> 2014 FAMR Statement. Paragraph 6.22.

<sup>127</sup> Openreach non-confidential response to March 2017 WLA Consultation – Volume 2, paragraph 232.

<sup>128</sup> Openreach confidential response to the March 2017 WLA Consultation – Volume 2, paragraph 233.

<sup>129</sup> BT Group plc Annual Report & Form 10-F 2017. Page 210.

<http://www.btplc.com/Sharesandperformance/Annualreportandreview/2017summary/downloads/Annual-Report-and-Form-20-F-2017.pdf>

**Table 3.21: Key actuarial assumptions**

Assumption	31 March 2015	31 March 2016	31 March 2017
Discount Rate	3.25%	3.3%	2.4%
RPI Inflation	2.85%	2.85%	3.2%
CPI inflation	1.85% (to March 2017) 1.65% (after April 2017)	1.85% (to March 2017) 1.65% (after April 2017)	2.5% (to March 2019) 2% (after April 2019)
Pensionable salary increases	1.85% (to March 2017) 1.65% (after April 2017)	1.85% (to March 2017) 1.65% (after April 2017)	2.5% (to March 2019) 2% (after April 2019)
Long-term improvements in longevity	CMI 2013 Mortality Projections model 1.25% per year long-term improvement parameter	CMI 2013 Mortality Projections model 1.25% per year long-term improvement parameter	CMI 2013 Mortality Projections model 1.25% per year long-term improvement parameter

3.130 Based on the assumptions set out in Table 3.21 Openreach provided the following estimates of the increase in the accounting charge and argued these costs should be included in the total pay costs for the relevant years of the charge control.<sup>130</sup>

**Table 3.22: BT estimates of increase<sup>131</sup>**

	Potential Increase in Openreach pension costs (£m)
2016/17	5
2017/18	52
2018/19	50
2019/20	51

3.131 In its 2016/17 Q4 results presentation, BT stated that “the 2017/18 operating charge was expected to increase by around £100m”<sup>132</sup> for BT Group.

<sup>130</sup> Openreach non-confidential response to March 2017 WLA Consultation – Volume 2, paragraph 241.

<sup>131</sup> BT response to question 7a of the 35<sup>th</sup> s135 notice dated 29 August 2017.

<sup>132</sup> BT Q4 and full year 2016/17 results. Slide 22. <http://www.btplc.com/Sharesandperformance/Quarterlyresults/2016-2017/Q4/Downloads/Slides/q417-slides.pdf>

## Our analysis and proposals

- 3.132 We remain of the view that the accounting charge, as reported in the statutory accounts is an appropriate measure of the ongoing service cost and so should be included in our cost estimates of regulated services, subject to the need for these costs to be efficiently incurred.
- 3.133 However, in light of BT's response, we recognise that the accounting charge in 2015/16 might not provide a reliable basis for forecasting the charge in 2018/19.
- 3.134 BT has estimated that an increase along the lines described in the Q4 results presentation could result in a further [X] [£20-30m] being attributed to WLA services above that indicated by our forecasts. Table 3.23 includes an estimate of the effect such an adjustment could have on unit costs.

**Table 3.23: Effect on unit costs**

	Increase to unit costs (£)
MPF rental unit cost	[X] [+0.80 to 1.20]
GEA 40/10 rental unit cost	[X] [+0.20 to 0.30]
GEA connections LRIC+	[X] [+0.70 to 1.10]

- 3.135 However, as explained below, we understand that the terms of the scheme may change by 2018/19, in which case BT's estimate would not provide a sound basis for forecasting future pension costs either.
- 3.136 On 30 May 2017, BT announced to the members of the BT Pension Scheme (BTPS), its defined benefit pension scheme, that it has commenced a review of the scheme benefits.<sup>133</sup>
- 3.137 We understand that BT has written to its employees with possible options for the future of the BTPS and BT Retirement Saving Scheme (BTRSS).<sup>134</sup> The four main options are as set out below.
- make changes to the BTPS for future service;
  - close the BTPS and move to the BTRSS for future service;
  - make changes to the BTRSS (BT is considering potential improvements); and
  - other options (BT is also considering other arrangements associated with the pension schemes and ways to give members further flexibility in how they take their pension).
- 3.138 BT have told us that at this stage no decisions have been made and therefore the scale or timing of any potential change is unknown.

<sup>133</sup> BT review of BTPS benefits. <https://www.btpensions.net/news/bt-review-of-btps-benefits>.

<sup>134</sup> BT presentation. Pensions review update. August 2017.

3.139 Using our formal powers, we asked BT to provide its assessment of the likely outcome from this review and the impact this will have on costs. Possibly because the review is at an early stage, BT was not able to provide us with information that has allowed us to determine if and how the pension costs will change. [3<

].

3.140 We understand that, later this year, BT will be publishing proposals for the future of these schemes. We therefore expect that BT will be in a position to provide us with more information ahead of our final decision, in which case we will decide whether to update our estimate of the 2018/19 accounting charge and determine whether this sits within an efficient level of total pay costs.

3.141 This could result in a change in the pension costs reflected in our final prices. However, in the absence of better information at this stage, we have 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.

## Consultation question

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?

## Speed of aligning charges with costs

### Introduction

3.142 In this section we clarify our general approach for determining when starting charge adjustments (SCAs) are appropriate and why the results of our Cost Allocation Review (CAR) of BT's costs has not led to a significant difference between the cost and current price of MPF rentals.

### March 2017 WLA Consultation

3.143 In the March 2017 WLA Consultation we proposed using glidepaths to align charges with costs for both the MPF and GEA charge controls, rather than using an SCA to bring charges immediately in line with costs. Although we sometimes use SCAs where charges were not previously regulated, in the case of GEA we considered it was more important to ensure that BT had the opportunity to realise a return consistent with the fair bet principle for its initial FTTC investment to preserve future investment incentives. In addition, we did not find a significant misalignment of charges and costs for MPF rentals and therefore considered an SCA was not necessary. We also considered that there was merit in having the same glidepath as with GEA services to ensure there are not any unintended consequences (such as under/over recovery of costs or distorted incentives for customers).

- 3.144 We therefore proposed to use one-year glidepaths for both sets of charge controls so that charges would be aligned with costs from 1 April 2019. We also considered it was appropriate that the charges for 2018/19 be set at the level they would have been at if a glidepath had been in place since 1 April 2017.

## Stakeholder responses

- 3.145 Sky<sup>135</sup> and TalkTalk<sup>136</sup> believed that we should be making SCAs to MPF prices. They argued that as a result of the CAR, there was a significant shift of cost out of the WLA market and if we had been able to take account of this shift when we set the 2014 charge control current prices would be much lower.<sup>137</sup> Sky and TalkTalk both argued that an SCA to MPF charges to account for the impact of the CAR would be consistent with the approach we took when setting the 2016 Leased Lines charge control (LLCC) as part of the BCMR.
- 3.146 In response to our proposals in March 2017 stakeholders also provided responses on other aspects of our glidepath proposals which we are still considering and will respond to in our statement.

## Explanation of our position

- 3.147 We set out in the March 2017 WLA Consultation that we have a general preference for using glidepaths when adjusting prices to costs. Glidepaths involve setting the control so that there is a gradual convergence of prices from the current level to the target level (based on our projection of the efficient level of costs).

## When we would make starting charge adjustments

- 3.148 In the March 2017 WLA Consultation we explained that the change in price of MPF rentals needed to meet our forecast efficient level of costs was relatively modest and there was no major misalignment of prices that needed to be addressed through an SCA.
- 3.149 We disagree with Sky and TalkTalk's characterisation of our approach to SCAs and their conclusion that we should be using SCAs for MPF rentals. Although both Sky and TalkTalk are correct that in the 2015 BCMR consultation we referred to the CAR as a reason to make SCAs, this was not the position that we took in the final statement. In response to TalkTalk's desire for us to decompose BT's returns in excess of its WACC into the various factors causing the excess and evaluate the suitability of applying an SCA to each of these factors, we stated that:

*"We consider a judgment based approach that incorporates a broader set of criteria more appropriate than a formulaic approach. In reaching our decision on whether to have an*

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<sup>135</sup> See Sky response to the March 2017 WLA Consultation, paragraphs 69-71. See also paragraphs 17-23 of Sky's May 2017 response to Ofcom's consultation dated 31 March 2017 on its "Proposed direction specifying the fair and reasonable charge that BT may apply for MPF Rental provided at SML1":

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0022/101884/sky.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0022/101884/sky.pdf).

<sup>136</sup> See TalkTalk response to the March 2017 WLA Consultation, Section 8.0.

<sup>137</sup> TalkTalk estimates that BT will profit by a further £5.140m.

*SCA, or the level of the SCA, we have balanced a number of regulatory objectives, which do not readily lend themselves to a precise formula, whether one involving a strictly defined set of test criteria that would provide a binary answer as to whether to apply a SCA (as BT seems to prefer), or one that is based on decomposing BT's excess returns into a defined set of factors that cause them (as TalkTalk seems to propose).<sup>138</sup>*

3.150 As set out in the 2016 Business Connectivity Market Review Statement, we considered two circumstances where the balance of efficiency considerations imply that an SCA may be appropriate for the 2016 LLCC:

- **Distorted pricing signals:** where the risk to economic efficiency or competition from distorted pricing signals is particularly significant.
- **Significant price/cost differential:** where prices are significantly above or below cost for reasons other than efficiency or volume growth.<sup>139</sup>

3.151 When applying this framework in the 2016 LLCC, we considered that pricing signals could be distorted if prices were above Distributed Stand Alone Cost (DSAC) or below Distributed Long Run Incremental Cost (DLRIC). Although prices were high in the 2016 LLCC, we did not find that they were above DSAC and therefore we did not believe a SCA was required to correct for distorted pricing signals. We did consider that SCAs were appropriate to correct for a significant price/cost differential because when assessing the level of returns we found that:

- returns for the services relevant to the charge control have been exceptionally and persistently high; and
- the high rates of return do not appear to be primarily due to outperformance by BT against efficiency and volume assumptions as used when setting the charge control for the previous period.<sup>140</sup>

3.152 In the March 2017 WLA Consultation, we did not identify that charges were exceptionally high relative to cost and therefore did not need to deconstruct prices to understand why they differed from costs. Although we have proposed a glidepath that reduced prices during the charge control period, this reduction was largely driven by common costs being reallocated from copper services to GEA services rather than a fundamental misalignment of forecast costs and prices at the start of the charge control period.

### How prices compare to costs for MPF rentals

3.153 In applying our framework set out above given our new estimates of service costs, we first must consider whether there is a significant misalignment between prices and costs that would warrant an SCA. If a misalignment exists, we then need to consider if this misalignment causes distorted pricing signals and if not, but it is still significant, was it

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<sup>138</sup> Ofcom 2016 BCMR Market Review Statement, Volume 2, paragraph 4.86:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0015/72312/bcmr-final-statement-volume-two.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0015/72312/bcmr-final-statement-volume-two.pdf).

<sup>139</sup> Ofcom 2016 BCMR Market Review Statement, Volume 2, paragraph 4.94.

<sup>140</sup> Ofcom 2016 BCMR Market Review Statement, Volume 2, paragraph 7.45.

caused by BT outperforming our efficiency or volume assumptions from past charge controls.

- 3.154 Our estimate of FAC for MPF rentals in 2018/19 is above the current price for MPF rentals.<sup>141</sup> Additionally, we do not believe that the difference between the costs reported in BT's RFS and the current price means we are observing exceptionally high returns on MPF rentals and our position in this consultation therefore remains that no SCA is required either to correct for pricing distortions or significant returns that are not caused by outperformance against historical efficiency or volume assumptions.
- 3.155 TalkTalk and Sky argued that the results of the CAR should lead to an SCA. As discussed above, we do not believe that the outcome of the CAR is a determinative factor of whether an SCA is necessary. Also, our decision in 2016 that some attribution rules did not provide an appropriate basis for setting forward looking prices does not mean that it was inappropriate to have used those attribution rules in 2014. However, given that the CAR did move a significant amount of cost out of the WLA market, we believe it is helpful to explain why it does not follow that the current WLA prices would have been much lower if they had been calculated on a "post-CAR" basis, as Sky and TalkTalk suggested.
- 3.156 The attribution rules reflected in the current MPF prices are not the same as those reviewed as part of the CAR. The current prices were set in the 2014 FAMR based on cost data from BT's 2011/12 RFS, while the CAR reviewed the costs attribution approaches used by BT in its 2013/14 and 2014/15 RFS. In the intervening period, BT made significant changes to its cost attribution approach.
- 3.157 The most significant set of changes were made by BT in 2012/13. The impact of these changes on the costs attributed to each market is set out in a report published by BT on 3 October 2013.<sup>142</sup> This shows that the impact of these changes was, amongst other things, to increase the costs attributed to Fixed Access markets and reduce the costs attributed to Leased Line markets. In the 2014 FAMR statement, we explained that we were concerned that the changes appeared to be unbalanced in BT's favour.<sup>143</sup> We therefore did not update our MPF cost forecasts to reflect the 2012/13 RFS and did not reflect the increased cost attribution in the current WLA prices.
- 3.158 However, our 2016 Cost Attribution Review reviewed the way BT attributed its costs in its 2013/14 and 2014/15 RFS, so did take account of the new rules introduced by BT in 2012/13 and subsequent years.
- 3.159 Therefore, it is not possible to consider the impact of the CAR adjustment on MPF costs without also considering the impact of BT's adjustments since 2011/12 in the opposite

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<sup>141</sup> Our estimate of the FAC, with an ongoing network, for MPF SL1 rentals in 2018/19 is £87.33, compared to the current price of £84.38.

<sup>142</sup> BT, *Report requested by Ofcom describing certain changes to the Accounting Documents for the year ended 31 March 2013 and illustrating the resulting differences to the Current Cost Financial Statements had those changes not applied*, October 2013

<http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2013/ReportrequestedbyOfcomfortheyearended31March2013.pdf>

<sup>143</sup> See Annex 22 of the 2014 FAMR statement for an explanation of our approach to selecting the base year for the 2014 cost model and Annex 23 for our correspondence with BT on the base year data it had provided to us.

direction. Indeed, a significant proportion of the total of the adjustments that followed the CAR had the effect of reversing changes made by BT after 2011/12. For example, as explained in the 2016 BCMR statement, one of the most significant adjustments made following the CAR related to BT's use of an attribution rule based on pay and return on assets. As illustrated by Table 3.24 below, BT applied this rule to more cost categories and to a significantly higher level of costs in 2014/15 than it did in 2011/12. Therefore, even if it was possible and appropriate to apply the CAR adjustments to the 2011/12 costs, the adjustment would have been much smaller than it was in 2016.

**Table 3.24: Total costs subject to a pay and return on assets attribution rule in 2011/12 and 2014/15 (£m nominal)<sup>144</sup>**

Cost category	2011/12	2014/15
Corporate costs	[ <del>£</del> ] [400 to 450]	[ <del>£</del> ] [500 to 1000]
TSO support costs	-	[ <del>£</del> ] [50 to 100]
Openreach overheads	-	[ <del>£</del> ] [50 to 100]
BT Wholesale software	-	[ <del>£</del> ] [10 to 50]
Openreach software	-	[ <del>£</del> ] [50 to 100]
<b>Total</b>	[ <del>£</del> ] [400 to 450]	[ <del>£</del> ] [500 to 1000]

3.160 While it is difficult to predict what the current MPF prices might have been had they been set on a basis that reflected the findings of the CAR, our finding (set out above) that the current prices (based on forecast costs calculated on a pre-CAR basis) are not significantly different from reported costs calculated on a pre-CAR basis) indicates that the CAR adjustments offset the effects of the other adjustments to attribution rules since 2011/12.

3.161 Stakeholders are invited to provide any further submissions in relation to our glidepath proposals in light of our clarification.

<sup>144</sup> Ofcom estimates from the 2016 BCMR Market Review Statement, Annex 28, Table 2.3.  
[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0020/46622/final-annex-28.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0020/46622/final-annex-28.pdf)

## Taking account of our proposals on the impact from recovering the costs of investment in network expansion

- 3.162 In our recent WLA Network Expansion Consultation<sup>145</sup>, we set out our proposals to amend the WLA charge control in light of the additional relevant costs BT would incur, should it enter into a clear and public agreement with Government committing it to make an investment in universal broadband.
- 3.163 In the WLA Network Expansion Consultation we also set out the impact of these additional costs for network expansion on the base case proposals for the charge control set out in our March 2017 WLA Consultation. Table 3.25 below shows the illustrative impact of our proposals for the MPF and GEA 40/10 rental charge controls.<sup>146</sup>

**Table 3.25: MPF Rental and GEA 40/10 charge control proposals**

Central estimate	Annual charge with effect from 1 July 2017 (£)	Proposals for annual charge (£ – nominal)		
		2018/19	2019/20	2020/21
Additional cost for network expansion (base case)		£0.39	£1.19	£1.93
Additional cost for network expansion (range)		£0.23 to £1.57	£0.71 to £3.80	£1.14 to £5.89

<sup>145</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/wholesale-local-access-market-review-recovering-the-costs-of-investment-in-network-expansion>.

<sup>146</sup> We propose uplifting the MPF rental charge, and GEA 40/10 rental charge by the network expansion cost uplift when it is bought with WLR rather than MPF.

## Consultation question

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.

## Summary of the impact on our proposed charges for MPF and GEA 40/10 rentals

3.164 The impact of our proposed changes to the charge control modelling for MPF and GEA 40/10 rentals discussed above is set out in Tables 3.26 and 3.27 below.

**Table 3.26: March 2017 charge control proposals for MPF Rental and our revised proposals**

	Annual charge 1 July 2017	Proposals for charge control <sup>147</sup> (£ nominal per annum)		
	(£ nominal per annum)	2018/19	2019/20	2020/21
<b>MPF Rental</b>				
March 2017 proposals (base case)	84.38	83.50	82.28	81.98
<b>MPF Rental</b>				
Revised proposals (base case)		83.70	82.56	81.81
Additional cost for network expansion <sup>148</sup>		0.39	1.19	1.93
<b>Indicative breakdown of the impact of our revised proposals:</b>				
Cumulo costs				-2.10
LRIC to FAC ratio				+0.40
QoS <sup>149</sup>				+1.40
Common cost update <sup>150</sup>				+0.50
Other <sup>151</sup>				-0.30

<sup>147</sup> We have presented our estimate of the charges for 2018/19, 2019/20 and 2020/21. The actual figures will depend on the Consumer Price Index minus the 'X' applied.

<sup>148</sup> We propose uplifting the MPF rental charge, and GEA 40/10 rental charge by the network expansion cost uplift when it is bought with WLR rather than MPF.

<sup>149</sup> This includes the impact from updating SLG payments as well as our new proposals for QoS usage factors, fault rates, and standards uplift.

<sup>150</sup> Following the adjustments set out in paragraph 4.77 and footnote 222 below, the amount of costs to be reallocated to MPF and GEA rentals increases.

<sup>151</sup> This includes various other less significant adjustments as well as accounting for interdependencies that are not captured in the above breakdowns.

Table 3.27: March 2017 charge control proposals for GEA 40/10 Rental and our revised proposals

	Annual charge 1 July 2017	Proposals for charge control <sup>152</sup> (£ nominal per annum)		
	(£ nominal per annum)	2018/19	2019/20	2020/21
<b>GEA 40/10 Rental</b>				
March 2017 proposals (base case)	88.80	66.28	57.00	52.77
<b>GEA 40/10 Rental</b>				
Revised proposals (base case)		67.86	59.03	54.66
Additional cost for network expansion <sup>153</sup>		0.39	1.19	1.93
<b>Indicative breakdown of the impact of our revised proposals:</b>				
Cumulo costs				+1.70
LRIC to FAC ratio				-1.40
QoS				+1.00
Common cost update				+0.30
Other				+0.30

3.165 Following from the various adjustments to our base case, as set out above, we consider it appropriate to re-estimate ranges for our proposed charge controls. We have applied the same assumptions as set out in Annex 14 of the March 2017 WLA Consultation for our new low and high scenarios. However, we have also applied the low and high assumptions for cumulo (see Table 3.5 above) as well as the low and high QoS assumptions (see Table 4.7 of the September 2017 QoS Consultation). Our proposed ranges for MPF SL1 And GEA 40/10 rentals are set out in Table 3.28 below.

<sup>152</sup> We have presented our estimate of the charges for 2018/19, 2019/20 and 2020/21. The actual figures will depend on the Consumer Price Index minus the 'X' applied.

<sup>153</sup> We propose uplifting the MPF rental charge, and GEA 40/10 rental charge by the network expansion cost uplift when it is bought with WLR rather than MPF.

Table 3.28: March 2017 WLA Consultation ranges of our charge control proposals for MPF and GEA 40/10 rental and our revised proposals

	Annual charge 1 July 2017 (£ nominal per annum)	Proposals for charge control <sup>154</sup> (£ nominal per annum)		
		2018/19	2019/20	2020/21
<b>MPF Rental</b>				
March 2017 proposals (ranges)	84.38	83.50 (80.0 – 88.2)	CPI-3.5% (-5.6% to - 0.7%)	CPI-2.4% (-3.6% to - 0.5%)
<b>MPF Rental</b>				
Revised proposals (ranges)		83.70 (81.0 – 87.5)	CPI-3.3% (-5.0% to - 1.1%)	CPI-2.9% (-3.6% to - 1.1%)
<b>GEA 40/10 Rental</b>				
March 2017 proposals (ranges)	88.80	66.28 (54.5 – 78.1)	CPI-16.1% (-24.1% to - 8.7%)	CPI-9.4% (-11.0% to - 6.1%)
<b>GEA 40/10 Rental</b>				
Revised proposals (ranges)		67.86 (55.5 – 79.3)	CPI-15.0% (-23.4% to - 7.9%)	CPI-9.4% (-9.6% to - 7.2%)

<sup>154</sup> Should BT enter into a clear and public agreement with Government committing it to make an investment in universal broadband, the ranges set out in this table would need to be expanded to take account the ranges set out in Table 3.25.

## 4. Wholesale charges for ancillary services

### Introduction

- 4.1 In this section we set out our revised proposals for wholesale charges for ancillary services in light of stakeholder responses, and our own further analysis.
- 4.2 We set out our proposed changes with respect to:
- GEA Cablelink;
  - Tie cables;
  - Co-mingling;
  - Other MPF ancillaries;
  - GEA Cancel/Amend/Modify; and
  - Abortive Visit Charge.
- 4.3 We then discuss some additional financial reporting requirements and conclude the section with a summary of our proposed charges for the ancillary services (to the extent these have changed from the March 2017 WLA Consultation).

### GEA Cablelink and VLAN moves<sup>155</sup>

#### March 2017 WLA Consultation

- 4.4 GEA Cablelink is an essential service for telecoms providers wishing to provide superfast broadband services over BT's FTTC or FTTP networks. It provides the interconnection between BT's network and the telecoms provider's network. It is likely that demand for GEA Cablelink will increase as demand for superfast broadband grows and bandwidth demand increases, including migration from 1 Gbit/s GEA Cablelink to 10Gbit/s. We considered in the March 2017 WLA Consultation that if GEA Cablelink was not subject to a charge control, BT would be able to increase its charges and negate the full effect of a charge control on the GEA 40/10 service. We proposed that GEA Cablelink should be subject to a charge control; however, as we did not have reliable cost information for these services, we were unable to set a cost-based charge control.<sup>156</sup> We therefore proposed flat nominal caps at the prevailing charges: 1 Gbit/s GEA Cablelink (connection charge) at £2,000, and 10 Gbit/s GEA Cablelink (connection charge) at £10,000.
- 4.5 VLAN moves are used for traffic migrations within a telecoms provider's portfolio of GEA Cablelink in a given location. In the March 2017 WLA Consultation, we considered that a charge control on VLAN moves was necessary to ensure telecoms providers do not face

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<sup>155</sup> Further information regarding these services is set out in our March 2017 WLA Consultation – Volume 2, paragraphs 3.111-3.118 including that in the 2014 FAMR Statement we did not set controls on the level of any charges for GEA Cablelink or VLAN moves applied to GEA Cablelink.

<sup>156</sup> BT is not required to report volumes, revenues or costs for GEA Cablelink or VLAN moves, but did provide volumes and revenues for 2014/15 and 2015/16 in response to our 2<sup>nd</sup> joint WLA WBA s.135 to BT dated 18 August 2016, templates "Q25-GEA actuals" and "Q27-NGA Other Actuals".

excessive charges in re-arranging traffic to make efficient use of the GEA Cablelink services they purchase. As with GEA Cablelink, we were unable to set a cost-based charge control for this service as BT did not hold specific cost information for it. We therefore also proposed a flat nominal cap at current charges for VLAN moves applied to GEA Cablelink set at £15.

## Stakeholder responses

- 4.6 We received two stakeholder responses that referred to the charge control for GEA Cablelink and VLAN moves applied to GEA Cablelink.
- 4.7 Openreach<sup>157</sup> said that its preferred option was fair and reasonable charges (not a charge control) because there was extensive uncertainty regarding future GEA Cablelink costs.<sup>158</sup> Moreover, it said that if a charge control must be imposed, then Openreach preferred a flat cap in real, rather than nominal, terms given the high inflation forecasts over the charge control period.
- 4.8 TalkTalk<sup>159</sup> said that its preferred option was cost reflective charge controls as otherwise BT might (i) harm consumers, (ii) distort competition between telecoms providers, and (iii) be encouraged to not generate cost information for new services in the future. TalkTalk provided a cost breakdown (fibre cable, cable installation, port and SFP<sup>160</sup> for GEA Cablelink and estimated incremental costs of around £300 – £600 for both 1 Gbit/s and 10 Gbit/s Cablelink [£60 – £180] and suggested that Ofcom should gather more data to refine its estimates. Furthermore, TalkTalk argued that if a cost-based charge control was not possible, then a charge control at current price (£2,000) for 1 Gbit/s and at £2,000 plus the incremental costs [£60 – £180] for the 10 Gbit/s should be put in place. TalkTalk also proposed a cost-reflective price cap on VLAN moves and said that this will become increasingly important as the number of customers taking GEA, and their bandwidth demands, increase.

## Our analysis and proposals

- 4.9 On 8 September 2017 Openreach announced price reductions for GEA Cablelink, effective 6 October 2017. The current one-off connection charge is to reduce from £2,000 to £790

<sup>157</sup> Openreach response to our March 2017 WLA Consultation – Volume 2, p. 30-31, paragraphs 130-132.

<sup>158</sup> BT said that costs for Cablelink were currently uncertain because: (i) BT was moving to new equipment suppliers; (ii) costs could increase with higher capacity cablelinks and BT could need to replace part of the existing estate; and (iii) such costs were highly sensitive to the level of port utilisation, which was uncertain and largely out of BT's control as it was driven by telecoms providers' policies on contention.

<sup>159</sup> TalkTalk response to the March 2017 WLA Consultation, paragraphs 5.6-5.15.

<sup>160</sup> Small Form-factor Pluggable, a compact laser transceiver module that is attached to one end of GEA Cablelink's fibre cable; different SFPs are required for the 1Gbps and 10Gbps variants of the service.

for the 1Gbit/s service, and from £10,000 to £1,800 for the 10Gbit/s service. There remain no rental charges.<sup>161</sup>

- 4.10 We have received more detailed cost estimates (alongside volume and revenue data) from BT.<sup>162</sup> We have used this price and cost data, along with the estimates of GEA Cablelink costs supplied by TalkTalk in its response to the March 2017 WLA consultation, to inform our approach to GEA Cablelink charges.
- 4.11 We still consider that a control on GEA Cablelink charges is necessary for the reasons set out in the March 2017 WLA Consultation.
- 4.12 We have also considered whether it is appropriate to set the level of a cost based charge control at LRIC or FAC. If we considered that high GEA Cablelink charges acted as a barrier to migration to GEA services, we may consider it more appropriate to price these services at LRIC. However, as GEA Cablelink costs are generally shared over all of a telecoms provider's superfast customers, even if we were to set the price at LRIC and recover common costs across all GEA rentals, this would be unlikely to incentivise the take-up of GEA services. We also believe that the other reasons that we have used to set the level of the charge controls for some ancillary services at LRIC (i.e. to promote competition and encourage investment) do not apply to GEA Cablelink services.<sup>163</sup> We therefore consider it is appropriate to set the level of the charge control for GEA Cablelink services at FAC. This is consistent with our approach to the cost standard for leased lines Cablelink services.<sup>164</sup>
- 4.13 Openreach's recent GEA Cablelink price reductions have led to charges that are more consistent with the FAC-based costs we have obtained from Openreach for the two GEA Cablelink services. Therefore, we propose to apply a flat real cap at the charges Openreach recently announced for the 1Gbit/s and 10Gbit/s GEA Cablelink services. However, as our analysis of this cost data for GEA Cablelink is still ongoing we propose a range of starting charges which provide for the scope of our outstanding questions on the data provided by Openreach. We propose that Openreach's recently announced charges set the upper bound of the range (as well as being the base case), since we assume Openreach would not have set charges below its best view of costs. For 1Gbit/s GEA Cablelink we propose a range for the starting charge of £500 - £790 and for 10Gbit/s GEA Cablelink we propose a range for the starting charge of £1,000 - £1,800.
- 4.14 In addition, we are concerned that BT would be able to circumvent (at least to some extent) the charge control on GEA Cablelink services by charging for GEA Cablelink rentals

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<sup>161</sup> See Openreach's price list at

<https://www.openreach.co.uk/orgp/home/products/pricing/loadProductPriceDetails.do?data=0RlviN9gWGktCdDgaQ8lFObCjmFDJOVDZEidKC%2F1wh1Z6rNZuinCs99NblKJZPD9hXYmijxH6wrCQm97GZMyQ%3D%3D> and announcement: <https://www.openreach.co.uk/orgp/home/updates/briefings/super-fastfibreachbriefings/super-fastfibreachbriefingsarticles/nga02917.do>

<sup>162</sup> BT response to Section A of the 35<sup>th</sup> WLA s.135 notice.

<sup>163</sup> See paragraph 3.13 of our March 2017 WLA Consultation.

<sup>164</sup> See our April 2016 BCMR Statement – Volume II, paragraph 5.2 and Table 5.1.

(currently there is no ongoing rental charge for GEA Cablelink services). We are therefore proposing to put a cap on rental charges for GEA Cablelink services of zero.

- 4.15 We also proposed in the March 2017 WLA Consultation to cap the level of charges for VLAN moves applied to GEA Cablelink at current charges due to our lack of understanding of its costs. We note that on 1 July 2017, BT decreased the charge for VLAN moves from £15 to £11.25, i.e. the same that BT charges for GEA Bandwidth changes.<sup>165</sup> The cost of GEA Bandwidth changes should be a good proxy for VLAN moves as they both only require software changes to be made. We also consider that the appropriate cost benchmark for these services should be FAC as the circumstances where we consider LRIC is appropriate do not apply here<sup>166</sup> and this is consistent with other services used for network optimization rearrangements (e.g. in the Hard Cease Services basket). We therefore propose to require charges for VLAN moves to be aligned with the charges for GEA Bandwidth changes to 40/10 which we also propose to control at FAC.
- 4.16 In addition, we consider it is appropriate to require BT to report costs and revenues for these services separately within its Regulatory Financial Statements so that we have better cost information in the future. We also note that we would not expect BT to capitalise any labour installation or equipment costs required to provide GEA Cablelink services given its current pricing structure. We discuss these proposals more in the section below on regulatory financial reporting.

## Consultation question

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.

## Tie cables – connecting to equipment in BT’s exchange

### March 2017 WLA Consultation

- 4.17 Tie cable services allow telecoms providers to connect their equipment in an Openreach exchange to gain access to the copper access network for LLU. These services include the handover distribution frame (HDF) in a telecoms provider’s co-mingling space<sup>167</sup> and services that connect the HDF to the Main Distribution Frame (MDF).
- 4.18 We found that we could not use the cost and volume data that Openreach could provide to us for forecasting tie cable costs without making some adjustments. Openreach was unable to provide service volumes in the form that we needed to forecast unit costs.

<sup>165</sup> See Openreach’s price list at

<https://www.openreach.co.uk/orgp/home/products/pricing/loadProductPriceDetails.do?data=0RlviN9gWGktCdDgaQ8lFObCjmFDJOVDZEidKC%2F1wh1Z6rNZuinCs99NblKJZPD9hXYmiiixH6wrCQm97GZMyQ%3D%3D>.

<sup>166</sup> See paragraph 3.13 of our March 2017 WLA Consultation.

<sup>167</sup> Co-mingling space is the space in the BT exchange where the telecoms provider locates its equipment to provide LLU services. The HDF is located within the co-mingling space and is the demarcation point between the Openreach network and the telecoms provider’s equipment, where Openreach hands LLU connections to the telecoms provider.

Specifically, we found that Openreach was unable to provide service volumes (after 2013/14) at the same level of aggregation as BT's FAC in its RFS (after 2013/14). This meant that we were unable to use 2014/15 and 2015/16 service volume information to extrapolate component volume forecasts, which we would then use with our cost volume relationships (i.e. 2015/16 AVEs and CVEs) to forecast component costs.

4.19 Furthermore, the WLA tie cable component (CL133) shares its costs across services in both the 'LLU tie cables' basket (which we proposed setting a charge control on) and 'Other co-mingling and tie cables' basket (which we did not propose setting a charge control on). In order to address these issues, we proposed:

- **Using Ofcom calculated usage factors** – we calculated usage factors using base year component volumes, component level GRCs, and service volumes.<sup>168</sup>
- **Uplifting component volumes** – we uplifted total WLA tie cable component volumes in the top-down model to account for the component volumes associated with other tie cable services.<sup>169</sup>
- **Reduced component costs** – we applied a proportional reduction to WLA tie cable component costs to remove the costs for other tie cable services.
- **Adjusted AVE** – we adjusted the WLA tie cable component AVE from 0.3 to 0.87<sup>170</sup> as we considered the cost volume relationship (CVR) used by BT to be inappropriate.<sup>171</sup>

4.20 We calculated the usage factor for tie cable services in the same way as other WLA services.<sup>172</sup> However, we noted that our calculated usage factor was different to the usage factor provided by BT and that this was likely due to us making different assumptions about tie cable service volumes in 2015/16. We found that our usage factors were consistent with the base year costs and our modelled service volumes.

4.21 Additionally, WLA tie cables was one of the components that we forecast to have negative capex. As we set out in the March 2017, we forecast component capital costs by:

- considering how component costs change without any volume changes (i.e. the "steady state" costs)<sup>173</sup>; and

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<sup>168</sup> We proposed using the component volumes in 2014/15 for the modelled component volumes in 2015/16. This was to correct for the significant increase in unit component costs from 2014/15 to 2015/16 which we considered to be inconsistent with our adjusted AVE of 0.87.

<sup>169</sup> Specifically, we proposed applying an uplift to the modelled tie cable component volumes of 1.46, which was based on the ratio of 'standard' tie cable to 'other' tie cable service volumes in 2015/16. We then applied this uplift figure to tie cable volumes in all modelled years – in effect assuming that the mix between 'standard' and 'other' tie cable services remains the same over the entire period.

<sup>170</sup> See paragraphs A11.143 to A11.146 of the March 2017 WLA Consultation.

<sup>171</sup> See paragraphs A15.84 and A15.85 of the March 2017 WLA Consultation, we found that the copper asset used the same CVR as applied to the E-side and D-side access copper network. Subject to some short term modulatory effects we would expect the main copper assets to be fully variable with volumes in the long run.

<sup>172</sup> Specifically, we weighted total WLA tie cable component volumes by the relative GRCs (for this specific component) for the services that use this component (i.e. LLU tie cable services and other tie cable services).

<sup>173</sup> The steady state costs assume that the network is maintained at its current operational capability and only accounts for efficiency and input cost inflation.

- the impact to steady state costs when we allow for the modelled changes in component volumes (i.e. “additional” costs).<sup>174</sup>
- 4.22 As assets become fully depreciated, we assume that these assets are disposed of and then replaced with new assets.<sup>175</sup> Where component volumes are falling, it is likely that fewer assets are needed to be purchased to replace the (steady state) assets that have been disposed of.<sup>176</sup> This situation is represented in the top-down model by additional capex being calculated as negative. Therefore, negative additional capex for a given component does not necessarily mean that there is no longer a need for capital expenditure for that component.
- 4.23 There were two components, Pair Gain and WLA tie cables, for which total capex was negative (i.e. the sum of steady state capex and additional capex was less than zero). In this case the model assumed the disposal of some assets that are not yet fully depreciated. This was only a material issue for the WLA tie cable component.<sup>177</sup>

## Stakeholder responses

- 4.24 Only Openreach commented on our approach to forecasting tie cable costs. Openreach was concerned about our adjustments to tie cable component costs, specifically that it was unclear what our rationale was to adjust usage factors, component volumes, and the AVE for the WLA tie cable component.<sup>178</sup> Openreach also considered it unrealistic to assume that “any assets or part assets can be disposed of and the network scaled down in direct proportion”.<sup>179</sup>

## Our analysis and proposals

- 4.25 Based on Openreach’s comments and our own review using additional information from BT, we propose making the following adjustments to tie cable costs:
- **Ofcom calculated usage factors:** maintain the approach of using our calculated usage factors.
  - **Uplift component volumes:** maintain the approach of uplifting total WLA tie cable component volumes in the top-down model but adjust how we implement the uplift.<sup>180</sup>
  - **Removal of cost reduction:** we no longer consider the cost reduction to be necessary given our revised approach to the component volume uplift.

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<sup>174</sup> These additional costs are impacted by component volume growth and AVEs, as well as efficiency and price inflation.

<sup>175</sup> The top-down model assumes that steady state disposals are equal to steady state capex and so disposed assets are assumed to be replaced such that operational capability (for a given output) is maintained.

<sup>176</sup> Alternatively, the modelling approach can be interpreted as assets being utilised less for the market that is modelled and are instead being used within an alternative market.

<sup>177</sup> In 2015/16 the costs for Pair Gain were very low (less than £100,000).

<sup>178</sup> Openreach, non-confidential response to the March 2017 WLA Consultation – Volume 2, pages 52-53, paragraphs 214 to 217 [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0011/105023/Openreach-vol-2.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0011/105023/Openreach-vol-2.pdf)

<sup>179</sup> Openreach, non-confidential response to the March 2017 WLA Consultation – Volume 2, pages 54-55, paragraphs 223 to 227.

<sup>180</sup> We note that the base year WLA tie cable component costs include costs allocated to other tie cable services (which we do not propose to charge control, nor do we forecast service volumes).

- **Adjusted AVE:** maintain the approach of adjusting the WLA tie cable component AVE from 0.3 to 0.87 and continue to allow the model to forecast additional disposals.
  - **Base year adjustment:** remove labour costs that were capitalised historically and define in-year labour related capex as in-year pay opex.
- 4.26 To address the issue of other tie cable services being included in the base year costs but not being included within the modelled component volumes, we could either:
- reduce the base year costs to account for the exclusion of component volumes from other tie cable services in the top-down model; or
  - uplift the component volumes in the top-down model to ensure an appropriate unit component cost.
- 4.27 It would not be correct to make both adjustments, as we proposed in March 2017, as a reduction to costs and an uplift to volumes would cancel each other out. As to which adjustment to apply, we favour the approach of uplifting the component volumes as this will allow the cost forecasts to fully capture the economies of scale effects of all the relevant services that use the tie cables component. Our estimate of the 2015/16 tie cable service costs reconciles with those found in the 2015/16 RFS when we implement this approach.<sup>181</sup>
- 4.28 We have revisited this assumption by considering the volume trends of standard and other tie cable services. For standard tie cables, we consider the relevant service volume driver for component costs to be total LLU rentals (i.e. internal and external MPF and SMF rentals). This is because standard tie cable services are used both internally by BT downstream and externally by other telecoms providers. However, other tie cable services are only internally used thus we consider it likely that these volumes will follow the trend in internal LLU rentals.
- 4.29 We expect internal LLU rentals to have a different volume trend to total LLU rentals as they are largely driven by internal SMPF rental volumes which are forecast to decrease considerably (by c. 55% between 2015/16 and 2020/21) as [customers from standard broadband to superfast services. On this basis, we propose to continue to use the 1.46 figure to determine total tie cable component volumes in 2015/16, but will calculate the uplift in forecast years based on the ratio of total LLU rental volumes to internal LLU rental volumes (as found in the WLA Volumes Module).
- 4.30 When reviewing Tie Cable costs, we discovered that the way BT has historically reported these costs within its RFS is inconsistent with the way tie cable costs have been recovered via Openreach's wholesale charges.
- 4.31 In our 2004 review, we allowed BT to recover the manpower costs involved in connecting tie cables as part of the connection charge. The rental charge was used to recover the

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<sup>181</sup> The top-down model calculates a total service cost (excluding other tie cable services) of c. £28.6 million compared to the RFS figure of c. £28.4 million. This is calculated as £27.15 (unit service costs in 2015/16) x 1,053,609 (tie cable service volumes in 2015/16).

capitalised cost of the materials used, i.e. the tie cable itself.<sup>182</sup> This has led to connection charges for tie cables being several times higher than those for rental services.

- 4.32 Costs for Tie Cable connection and rental services (SL128 and SL133) are not currently separately identified within BT's RFS but instead are treated together. Most of the Tie Cable services' costs – over 90% in 2015/16 – are incurred within component CL133, WLA tie cables. Our analysis shows that [redacted] [roughly 90%] of the 2015/16 costs for this component are capital costs either in the form of depreciation or return on mean capital employed.<sup>183</sup> We find that this large proportion of capital costs is due to BT capitalising both the manpower and material costs associated with tie cables.
- 4.33 We believe it would be wrong to include these historical capitalised labour costs when setting charges for Tie Cables services. We consider it likely that this would lead to over-recovery of costs because these historical capitalised labour costs have already been recovered in historic connection charges. Therefore, we propose to remove the historical labour installation costs within CL133 from the base year, both from depreciation and mean capital employed. We also propose to replace these capital costs with an estimate of the in-year labour operating costs required to install tie cable services in 2015/16.
- 4.34 Using our statutory information gathering powers, we asked BT to provide information on these historical labour installation costs from 2012/13 up to now, broken down by connections and rentals. BT was not able to provide this breakdown, but it did provide a breakdown of in year capex (from 2012/13 to 2015/16) into labour – direct pay and contract pay – and material costs.<sup>184</sup> This suggested that over this period 65-75% of capex attributed to tie cables services (SL128 and SL133) was related to labour costs. This is broadly consistent with the cost split that informed our initial estimates of costs in 2004. The same analysis also suggested that labour operating costs were [redacted] [around £7 million]<sup>185</sup> for Tie Cables Services in 2015/16.
- 4.35 Our base year adjustment makes two sets of changes to the costs of the main Tie Cables component, CL133. We have:
- Reduced the GRC, NRC and OCM depreciation for copper and local exchange capital costs by 70%;<sup>186</sup> and
  - Added in [redacted] [around £7 million] to pay operating costs for services SL128 and SL133.<sup>187</sup>

<sup>182</sup> See paragraph 9.132 of our 16/12/2004 publication Review of the Wholesale local access market [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0022/37057/rwlam161204.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0022/37057/rwlam161204.pdf).

<sup>183</sup> In turn, most of these capital costs are associated with [redacted].

<sup>184</sup> BT's responses of 14 August 2017 and 18 August 2017 to questions 2, 3 and 4 of the 32<sup>nd</sup> WLA s.135 request.

<sup>185</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +- 20%) information that is confidential to BT.

<sup>186</sup> Costs in component CL133 are also attributed to service SL206. We have made our adjustment to all CL133 costs as we would expect a similar treatment of costs for all tie cable services.

<sup>187</sup> We have made this adjustment by increasing CL133 pay operating costs by [redacted] [c. £10.5 million] to ensure that [redacted] [c. £7.0 million] is attributed to services SL128 and SL133. Some of CL133 costs are also attributed to SL206, Other Tie Cable services, which is not part of the charge controlled Tie Cables basket.

- 4.36 We will update these numbers using 2016/17 costs for our final statement. We will also be proposing changes to the way BT reports Tie Cable costs within its RFS. We discuss this further in the regulatory financial reporting sub-section below.
- 4.37 We have also assessed our modelling approach to account for the risk that BT may be unable to fully recover its efficiently incurred tie cable costs due to stranded assets. It is possible that over the charge control period, BT would be able to dispose of its tie cable assets as service volumes fall. We note that due to the reduction in NRC, as set out in paragraph 4.35 above, the model forecasts £0.5-1 million additional disposals compared to the £2-4 million in the March 2017 WLA Consultation. Furthermore, we have not received any evidence to suggest that BT would be unable to dispose of its tie cable assets (whether fully or partially).
- 4.38 Therefore, we continue to consider it appropriate to model additional disposals for tie cables in the top-down model. However, we propose to make an adjustment to the top-down model that results in the additional disposals reflecting the average remaining asset life, which reduces the magnitude of additional disposals.<sup>188</sup> This is consistent with the approach taken in the 2016 LLCC when modelling additional disposals.<sup>189</sup>
- 4.39 We set out below the impact that these changes to the proposed approach in the March 2017 WLA Consultation will have on the calculated charge control X's for the LLU tie cables basket:

**Table 4.1: Calculated charge control X's for tie cables following corrections and adjustments<sup>190</sup>**

	2018/19	2019/20	2020/21
March 2017 WLA Consultation	-2.0%	-2.2%	-3.6%
+ remove cost reduction	2.8%	0.1%	-5.0%
+ adjust component volume uplift <sup>191</sup>	0.6%	-1.0%	-7.2%
+ adjusted value for additional disposals	3.2%	0.3%	-6.5%
+ base year adjustments	-8.7%	-5.7%	-3.8%
<b>September 2017 Consultation proposals</b>	<b>-8.7%</b>	<b>-5.7%</b>	<b>-3.8%</b>

Source: WLA CC top-down cost model

<sup>188</sup> In the March 2017 WLA Consultation top-down model, the additional disposals were calculated based on the asset value of a completely new asset (i.e. GRC). We consider it appropriate to assume that the additional disposals will be a mix of new and old assets. Therefore, we have adjusted the additional disposals for the WLA tie cable component to reflect the prior year NRC to GRC ratios for that component.

<sup>189</sup> Ofcom, *Business Connectivity Market Review*, 28 April 2016, Annex 26, paragraphs A26.35 to A26.41 [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0024/54645/final-annexes-26-27.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0024/54645/final-annexes-26-27.pdf).

<sup>190</sup> Changes to QoS and cumulo will also have a small impact on the tie cables basket Xs. We have not split out these impacts on tie cables (given how small they are).

<sup>191</sup> Lower component volumes, which is what happens with the adjusted component uplift, results in greater additional disposals and thus a greater reduction in capital costs. This is likely the cause for the lower charge control X's in 2020/21.

## Consultation question

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.

## Co-mingling – gaining access to BT’s exchange

### March 2017 WLA Consultation

- 4.40 Co-mingling services from BT offer telecoms providers a Point of Presence (PoP) for compliant equipment at an MDF site. These services typically include the cost to BT of installing and storing equipment for other telecoms providers to use as part of LLU.
- 4.41 As part of our analysis for the March 2017 WLA Consultation, we found several limitations with the cost and volume data available for forecasting co-mingling costs. BT was unable to provide service volumes in the form that we needed to forecast unit costs. Therefore, we used 2013/14 service volume information for forecasting volumes, as well as a modelling simplification for forecasting co-mingling connection service costs.<sup>192</sup>
- 4.42 However, we also found that costs (on a FAC basis) were significantly above revenue in the base year. This resulted in a significantly positive X in the proposed charge control of the co-mingling new provides and rentals basket in 2018/19 and 2019/20. We noted that these Xs were approximately halved if we reallocated the excess revenue found for other co-mingling services (i.e. those not charge controlled) into the co-mingling new provides and rental basket.

### Stakeholder responses

- 4.43 Only Vodafone commented on the cost modelling for co-mingling services, setting out that “MPF suppliers need accommodation (co-location) facilities within BT’s exchange buildings” and the need to ensure that Ofcom “[does] not allow scope for over-recovery or allow costs to be added without detailed scrutiny”.<sup>193</sup>

### Our analysis and proposals

- 4.44 In our analysis for the March 2017 WLA Consultation we found that the cost of services in the co-mingling and rentals basket were significantly above the revenue earned by services in those baskets. We therefore proposed significantly positive Xs for the charge control of this basket in 2018/19 and 2019/20.
- 4.45 The scale of the Xs was such that we agree with Vodafone that there is a need for detailed scrutiny of these costs, particularly to understand why costs are currently so much higher

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<sup>192</sup> We proposed, as a modelling simplification, to hold constant the component volumes for co-mingling set up (which represents the clear majority of co-mingling new provide service costs). We also proposed forecasting co-mingling rentals to follow the trend in external LLU volumes.

<sup>193</sup> Vodafone non-confidential response to the March 2017 WLA Consultation paragraph 3.10.

than revenues. We have therefore undertaken a review of our approach to co-mingling services and how BT attributes costs to these services. In the remainder of this sub-section we present our analysis and revised proposals for these baskets.

4.46 As background, there are two main co-mingling services: SL131 Co-mingling provides and SL132 Co-mingling rentals.<sup>194</sup>

- Practically all costs for SL131 (over [X] % in 2015/16) are contained within component CL131, Co-mingling set-up. [X] % of costs are recovered by connection services whereas it is rentals services that tend to recover asset costs over time.<sup>195</sup> Usually
- The majority of costs for SL132 are contained within component CL132 Co-mingling rentals, with most of the remainder (c. [X] %) captured within component CT134, Co-mingling power and vent. Other components contribute less than [X] % to costs.<sup>196</sup>

4.47 We have undertaken a review of all the above costs and our previous forecasts. We have identified three main issues:

- The extent to which costs within CL131, Co-mingling set-up, include costs for services which have already been recovered.
- The extent to which we may have overstated costs within CT134 Co-mingling power and vent by not fully recognising that they are attributed across other services.
- The extent to which base year costs for CL132 Co-mingling rentals may be too high as they may have been attributed too much ACPA costs.<sup>197</sup> This is linked to an issue we had identified within our regulatory reporting proposals in the March 2017 WLA Consultation.

4.48 We discuss each of these three issues in turn below.

### CL131 Co-mingling set-up costs

4.49 To examine the costs within CL131, Co-mingling set-up, we asked BT to detail the capital costs that had been attributed to the plant groups (PG136A LLU co-mingling surveys and PG136N LLU Co-mingling provision) that then attribute costs to this component. We also wanted to understand how the assets within these plant groups differed from the assets

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<sup>194</sup> BT Wholesale Catalogue, 28 October 2016

[https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/WSCatalogueAnnex\\_Final.xlsx](https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/WSCatalogueAnnex_Final.xlsx)

<sup>195</sup> Ofcom analysis of Additional Financial Information files that BT provided to Ofcom as part of its annual regulatory reporting requirements. See also pages 40 and 121 of BT's 2015/6 RFS.

<sup>196</sup> Ofcom analysis of Additional Financial Information files that BT provided to Ofcom as part of its annual regulatory reporting requirements. See also pages 40, 121 and 123 of BT's 2015/6 RFS.

<sup>197</sup> BT's response of 6 July 2017 to question 2(f) (1) and (ii) of the 27<sup>th</sup> s.135 WLA 2017 request. ACPA costs cover "LLU related accommodation, cables and equipment; electronics, lights, power, network cables, security works, broadband enabled equipment and overheads (i.e. travel and subsistence, material handling charges, planning team salary costs)". BT's response of 18 August 2017 to question q2f (ii) of the 27<sup>th</sup> WLA 2017 s.135 request.

that were attributed to PG132B, LLU Co-mingling recurring costs OR, the main plant group that fed costs into the component CL132, Co-mingling rentals.

- 4.50 BT provided us with general descriptions of the classes of work for the assets within these plant groups. The key class of work for PG136A and PG132B was ACPA; the attribution of this class of work is discussed in more detail below. The key class of work for PG136N was ACPN<sup>198</sup> but these assets were also included as part of the costs of plant group PG132N, LLU Co-mingling recurring costs TSO, which form part of the costs of CT134, Co-mingling power and vent. We therefore have not been able to identify what differentiates the assets that are recovered through co-mingling connection services as opposed to those recovered through co-mingling rental services.
- 4.51 BT did however tell us that “*LLU survey costs are recovered through CPs paying survey fees*” and that “*BT capitalizes the planning element of the survey costs in accordance with BT’s capitalisation guidelines. Planning activities directly related to a capital assets should be capitalised as they are directly attributable to the construction of the asset*”.<sup>199</sup>
- 4.52 Given that survey costs have already been recovered through survey fees, we believe that BT should not over-recover these historical survey costs, consistent with our approach on tie cable services. We have not been able to identify any significant revenue associated with survey fees in BT’s 2015/16 RFS. We therefore propose to remove the historical capitalised co-mingling survey and provision costs, including depreciation, from the base year costs for this component.
- 4.53 In response to the 27<sup>th</sup> s.135 request, we received evidence from BT that supported historical changes it had made to the attribution of ACPN costs that are relevant to the PG136N plant group. BT noted that [REDACTED]  
[REDACTED].<sup>200</sup> As with survey costs, we therefore consider that BT should not recover these historical capitalised costs within PG136N as our understanding is that they have already been recovered. We therefore propose making a further base year cost adjustment to remove these costs and the associated depreciation from plant group PG136N.
- 4.54 We have calculated this adjustment using the capital costs (on a FAC basis) for the two Plant Groups, LLU Comingling Surveys (PG136A) and LLU Co-mingling provision (PG136N), in the base year.<sup>201</sup> We find that the adjustments (on a FAC basis) are [REDACTED] [around

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<sup>198</sup> ACPN covers expenditure on “lifts, building work, ventilation and cooling plant, electric, light and power, fire protection, security equipment, recovery where required to facilitate provision of new assets”. BT’s response of 18 August 2017 to question q2f (ii) of the 27<sup>th</sup> WLA 2017 s.135 request.

<sup>199</sup> BT’s response of 6 July 2017 to question 2(h) of the 27<sup>th</sup> WLA 2017 s.135 request.

<sup>200</sup> BT’s response of 14 July 2017 to question 2(c) of the 27<sup>th</sup> WLA 2017 s.135 request.

<sup>201</sup> We have not removed other base year pay and non-pay costs from these plant group as it is unclear whether these costs are linked to the observed issue that we found with capitalised survey costs.

7.0 million]<sup>202</sup> and £[redacted] [around 10.2 million]<sup>203</sup> for surveys and provisions respectively.<sup>204</sup>

- 4.55 In addition to removing historical capitalised costs, we propose to allow the in-year capex in the base year but, to be consistent with the current charging approach, to treat this expenditure as opex. This is consistent with our treatment of in-year capitalised labour costs for WLA tie cables as set out in paragraphs 4.33 to 4.35 above. We have estimated the capex in 2015/16 to be [redacted] [around 3.2 million]<sup>205</sup> on PG136A and [redacted] [around 3.2 million]<sup>206</sup> on PG136N.<sup>207</sup> Our proposed base year adjustment increases pay and non-pay costs in the base year model for component CL131 (co-mingling set up) by these amounts.<sup>208</sup>

### CL134 Co-mingling power and vent costs

- 4.56 The costs for this component are attributed across both the SL132 Co-mingling rentals, and SL207 Other co-mingling and tie cables' services.<sup>209</sup> The base year costs within the top-down model include costs for both services. However, our component volume forecast for CL134, Co-mingling power and vent, only covers SL132 service volumes, i.e. it does not include volumes for SL207. We therefore consider that our forecasts of unit component costs of CL134 and by extension the unit costs of SL132 comingling rentals services were overstated in the March 2017 WLA Consultation top-down model.
- 4.57 To address this understatement of component volumes, and thus overstatement of unit costs, we propose uplift component volumes to reflect the use of this component by SL207.<sup>210</sup> We apply the same uplift in all years as we expect SL207 to broadly follow the same volume trend as SL132.
- 4.58 We have also examined the attribution of these costs between the two services, SL132 and SL207. BT explained that both services are "heavily reliant on electricity, hence the use of electricity as the driver for allocating costs".<sup>211</sup> We consider this approach to be reasonable

<sup>202</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +- 20%) information that is confidential to BT.

<sup>203</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +- 20%) information that is confidential to BT.

<sup>204</sup> These costs represent the combined impact on ROCE and OCM Depreciation (on a FAC basis) when we adjust the NRC and GRC.

<sup>205</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +- 20%) information that is confidential to BT.

<sup>206</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +- 20%) information that is confidential to BT.

<sup>207</sup> BT's response of 6 July 2017 to question 2(e) of the 27<sup>th</sup> s.135 WLA 2017 request.

<sup>208</sup> We split these costs between pay and non-pay using a breakdown of capex by F8 code (as defined in BT's Accounting Methodology Document). This breakdown was provided as part of BT's response of 6 July 2017 to question 2(e) of the 27<sup>th</sup> s.135 WLA 2017 request.

<sup>209</sup> Ofcom analysis of Additional Financial Information files that BT provides to Ofcom as part of its annual regulatory reporting requirements, and as suggested by BT's 2015/16 AMD.

<sup>210</sup> We note that this is consistent with our approach to tie cable component costs (see paragraphs 4.26 to 4.27 above).

<sup>211</sup> BT's response of 6 July 2017 to question 2(i) of the 27<sup>th</sup> s.135 WLA 2017 request.

and so do not propose to make any further base data adjustment to the costs of this component.

### The attribution of ACPA costs to CL132, Co-mingling rentals

4.59 The ACPA class of work includes spend on assets relating to construction provision, installation and recovery necessary for the operation of network equipment e.g. ventilation and cooling plant.<sup>212</sup> Within its RFS BT attributes ACPA spend to co-mingling services and, more recently, also to GEA services.<sup>213</sup> [X

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4.60 In our March 2017 WLA Consultation, we noted that there was no difference in the treatment of ACPA assets between those used for NGA and non-NGA (LLU co-mingling) components and we proposed a direction for BT to make a regulatory accounting change to address this.<sup>215</sup>

4.61 We expect there to have been relatively little spend on ACPA assets for co-mingling services in recent years and proportionately more on NGA services. We therefore expect ACPA assets for co-mingling services to be more heavily depreciated than ACPA assets for NGA services and that the proportion of ACPA spend on co-mingling services to be decreasing in recent years. However, when we investigated this we found that BT had attributed a higher proportion of ACPA MCE and depreciation to LLU co-mingling services in 2015/16 than in 2014/15.<sup>216</sup> We also discovered some errors within BT's current attribution.

4.62 We therefore consider BT's allocation of ACPA costs across NGA and non-NGA services to be inappropriate and that co-mingling prices set on this basis would result in recovery that is inconsistent with the way we have modelled ACPA equivalent costs within the bottom-up model (i.e. co-mingling prices would be too high). Hence, we propose to make a base year adjustment to the GRC, NRC and depreciation of ACPA spend on co-mingling rental services.

4.63 We made several attempts to obtain reliable information on BT spend on ACPA in order to inform what a better attribution might be, but we were unable to resolve all the issues we identified in time for this consultation. Therefore, to make the adjustment, we have exercised our regulatory judgement using the available cost information and are consulting on a relatively large range. We will be following up some of the issues that we have with BT's data before we publish our final statement. To inform our adjustment, we have used

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<sup>212</sup> BT's response of 18 August 2017 to question 2f (ii) of the 27<sup>th</sup> WLA 2017 s.135 request. See also page 343 of BT's 2016 AMD.

<sup>213</sup> See the description of the base PDTACPA on page 83 of BT's 2016 AMD.

<sup>214</sup> BT's response of 6 July 2017 to question 2f (iii) of the 27<sup>th</sup> WLA 2017 WLA request.

<sup>215</sup> See March 2017 WLA Consultation – Volume 1, paragraphs 10.51 to 10.54.

<sup>216</sup> We also discovered some further errors in the attribution of ACPA costs in 2016/17. We will be discussing these further with BT before we publish our statement.

information on ACPA capital costs in 2015/16 from the top-down model and elements relating to ACPA from the bottom-up model.

- 4.64 We have estimated the adjustment using two different approaches:
- Estimated the NGA and non-NGA split of GRC and NRC over time for ACPA by assuming any capital spend after 2013/14 is NGA only. This results in an estimated base year adjustment to ACPA NRC and OCM depreciation for co-mingling services.<sup>217</sup> We consider this to be the most reliable approach with the second approach below acting as a cross-check.
  - Calculated total NRC across the three relevant plant groups for ACPA,<sup>218</sup> subtracted the allocation to GEA services found in the bottom-up model and then removed survey costs within CL131 (as discussed above), and allocated the remainder to the co-mingling rental component.
- 4.65 For the first method we have extracted total NRC and GRC for ACPA from 2006/07 to 2016/17 using information BT provided to Ofcom as part of its regular financial reporting obligations.<sup>219</sup> BT has informed us that [redacted] [35-45]%<sup>220</sup> of ACPA GBV (and hence GRC) were due to NGA in 2013/14, which we consider to be a reasonable figure. We have used this to determine the 2013/14 GRC split. Although this figure ultimately impacts our 2015/16 estimate for co-mingling NRC, we do not consider it reasonable to assume that [redacted] [35-45]% of ACPA NRC is due to NGA.
- 4.66 We find that BT's figures suggest that co-mingling services are [redacted]. We consider it likely that the increases in GRC for ACPA after 2013/14 should largely be driven by NGA services (due to limited unbundling of exchanges after 2013/14).<sup>221</sup> Therefore, we have held ACPA related GRC for co-mingling services flat in nominal terms at the 2013/14 level, and allocated any remaining GRC to GEA services. We have also assumed a 50% NRC to GRC ratio for ACPA assets used for co-mingling which is consistent with our ongoing network assumption.
- 4.67 This results in an estimate of the appropriate NRC for ACPA assets used for co-mingling in 2015/16, which we then compare to BT's allocation in the 2015/16 RFS to determine the appropriate adjustment for NRC in the base year. We have applied the same proportional reduction to OCM depreciation in the base year.<sup>222</sup>
- 4.68 We have also estimated a high and low case to show the sensitivity of the estimates to our assumptions. Our low case assumes that the co-mingling GRC falls by 5% per annum after

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<sup>217</sup> We find that this adjustment is applied entirely to co-mingling rentals as the ACPA costs associated with co-mingling new provides is entirely from PG136A (LLU Co-mingling Surveys), which we propose excluding the costs from the base year.

<sup>218</sup> These are PG136A (LLU Co-mingling Surveys), PG132B (LLU Co-mingling Recurring costs OR) and PG953C (GEA DSLAM and Cabinets GEA).

<sup>219</sup> BT's Additional Financial Information Schedules AFI10 that show GBV and NBV in each year. For ACPA GBV is the same as GRC and NBC is the same as NRC as BT does not revalue ACPA assets for CCA purposes.

<sup>220</sup> BT's response of 15th of August to question 2f (iii) of 27th WLA CC s.135.

<sup>221</sup> We note that this does not mean no capex is spent on comingling services after 2013/14 but rather that any capex on comingling services after 2013/14 was predominantly to replace any disposals.

<sup>222</sup> For example, if NRC is reduced by 10% in 2015/16 then we propose reducing OCM depreciation by 10% in 2015/16.

2013/14 (rather than remaining flat in nominal terms), and assumes a 40% NRC to GRC ratio for ACPA assets used for co-mingling. Our high case assumes that the co-mingling GRC increases by 5% per annum after 2013/14, and assumes a 60% NRC to GRC ratio for ACPA assets used for co-mingling.

- 4.69 Our base case estimate of the comingling NRC for ACPA of £48.8 million is a reduction of co-mingling NRC by [REDACTED] [£51.2m]<sup>223</sup> and also reduces depreciation by [REDACTED] [£5.0m]<sup>224</sup> in the base year. Our low and high case estimates of co-mingling NRC for ACPA are £35.2m and £64.6m respectively.
- 4.70 Our second approach aims to ensure consistency of capital costs for ACPA assets across the top-down and bottom-up models. Our analysis is based on estimating the remaining NRC for ACPA once we account for the NRC recovered by GEA services within the bottom-up model. Across the three relevant plant groups in the WLA market, we find total NRC for ACPA to be £[REDACTED] in 2015/16. We also estimate that £[REDACTED] relates to survey costs which we have removed from this figure for the purposes of this analysis.<sup>225</sup> Therefore, we need to attribute £[REDACTED] of ACPA costs between NGA and co-mingling.
- 4.71 We consider there to be two network elements in the bottom-up model that are likely to include ACPA related costs.<sup>226</sup> The total NRC for these two network elements is £[REDACTED] in 2015/16, but we recognise that perhaps only a proportion of these total costs relates to ACPA:
- We consider that the CAB\_Power Connection network element is primarily ACPA related, with an NRC of £[REDACTED] in 2015/16.
  - For the other network element, CAB\_Certification Managed Service, we think it is possible that some of the costs are also relevant. We have considered two scenarios: a low case where none of these costs are ACPA-related; and a high case where all of these costs are ACPA-related.
- 4.72 Based on the above, we consider it likely that £[REDACTED] m of the total £[REDACTED] m ACPA costs (to be re-attributed) is captured within the bottom-up model. Therefore, this approach suggests a low and high case of £[REDACTED] [£36m]<sup>227</sup> and [REDACTED] [£60m]<sup>228</sup> NRC in 2015/16 for ACPA assets attributed to co-mingling services.

<sup>223</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +/- 20%) information that is confidential to BT.

<sup>224</sup> This is the figure found in the non-confidential Base Year model. In order to get to this figure, we have randomised (by +/- 20%) information that is confidential to BT.

<sup>225</sup> This analysis is to determine the appropriate split of shared costs within ACPA across NGA and non-NGA services. We do not consider survey costs relate to NGA. Furthermore, we propose removing the capitalised survey costs and so consider these costs to not be part of the 2015/16 cost stack.

<sup>226</sup> The two elements are CAB\_Power Connection and CAB\_Certification Managed Service, as defined in the Cartesian Report (30 March 2017) [https://www.ofcom.org.uk/data/assets/pdf\\_file/0036/99639/Annex-20.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0036/99639/Annex-20.pdf). We note that these two network elements represent the following costs in BT's Chief Engineer model: Power duct, power joint, survey & pre-work, electricity meter supply & install, power certification, and telemetry line costs. Openreach internal document, *Modelling Rules & Costs Version 13*, received as part of the 14<sup>th</sup> WLA CC s.135.

<sup>227</sup> In order to get to this figure, we have randomised (by +/- 20%) information that is confidential to BT.

<sup>228</sup> In order to get to this figure, we have randomised (by +/- 20%) information that is confidential to BT.

- 4.73 The second method therefore provides similar estimates to those given by our first approach. This cross check gives us more confidence that our proposed adjustments are reasonable as well as ensuring consistency between the two WLA cost models. We note that the implicit re-attribution of GRC (from co-mingling to GEA) following our adjustments to co-mingling NRC results in BT's regulated costs for GEA cabinets to be more aligned with the bottom-up model.<sup>229</sup>
- 4.74 Furthermore, we consider it useful to highlight that the bottom-up model assumes an asset life of [23] [around 23 years] compared to ACPA which has an asset life between 12 and 20 years.<sup>230</sup> We consider it likely that adjusting for the different modelled asset lives allows for a reconciliation of OCM depreciation for ACPA assets across the two WLA cost models.

### Net results of our revised proposals

- 4.75 We present in Table 4.2 below the co-mingling charge controls as proposed in the March 2017 WLA Consultation and the new proposed charge controls following our additional analysis and suggested adjustments.

**Table 4.2: calculated charge control X's for comingling following proposed adjustments<sup>231</sup>**

	2018/19	2019/20	2020/21
March 2017 WLA Consultation	54.6%	22.9%	-5.2%
+ uplift comingling power & vent component volumes	29.1%	12.2%	-6.5%
+ co-mingling survey cost adjustment	24.2%	10.0%	-6.4%
+ co-mingling provision cost adjustment	15.5%	6.1%	-6.2%
+ adjust ACPA costs (base case)	4.3%	0.8%	-6.4%
<b>September 2017 WLA Consultation</b>	<b>4.3%</b>	<b>0.8%</b>	<b>-6.4%</b>

- 4.76 As a result of the above discussion we will also be proposing some further changes to the way BT reports its costs on co-mingling services. These are discussed further in the regulatory reporting sub-section below.
- 4.77 We consider our adjustment to co-mingling ACPA costs is consistent with the bottom-up model ACPA related costs. However, we note that the 2015/16 GEA FAC (as calculated in

<sup>229</sup> We also note that the cabinet related GRC in the bottom-up model is consistent with that found in BT's Chief Engineer model (which we have used as part of our calibration process).

<sup>230</sup> BT's response to Question 2f i) of the 27<sup>th</sup> s.135 received on 6 July 2017.

<sup>231</sup> Changes to QoS and cumulo will also have a small impact on the co-mingling basket Xs. We have not split out these impacts on co-mingling (given how small they are).

the top-down model) needs to be uplifted as it is based upon BT's RFS which we find understates ACPA costs attributed to NGA. This 2015/16 FAC is used when forecasting GEA common costs, which then impacts the overall amount of common costs to be reallocated.

- 4.78 Therefore, we consider it appropriate to uplift the base year GEA FAC (in the CPI-X model) to account for the ACPA costs that we have re-attributed from co-mingling to GEA<sup>232</sup>, this increases the total amount of common costs in 2015/16 by around £9 million. This uplift to 2015/16 common costs increases the forecasted common costs which results in the MPF SL1 and GEA 40/10 rentals in 2020/21 increasing by around £0.25 and £0.15 respectively.<sup>233</sup>

### Consultation question

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.

## Other MPF ancillaries basket

### March 2017 WLA Consultation

- 4.79 In our March 2017 WLA Consultation we proposed a charge control at FAC for the "Other MPF ancillaries" basket which comprised the following services:<sup>234</sup>
- MPF Tie Pair Modification (three working day lead time Re-termination);
  - MPF Tie Pair Modification (Multiple Re-termination);
  - Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification of Amend;
  - Amend orders. Allowable change to MPF Order; and
  - MPF Standard line test.
- 4.80 We considered that without a charge control BT would be able to raise charges for the MPF services listed above and the revenues of [X ]<sup>235</sup> in 2015/16 for these services were material.

### Stakeholder responses

- 4.81 Only Openreach commented on our proposed design of the Other MPF ancillaries basket. Openreach<sup>236</sup> did not consider the design of the basket was cohesive as it combined

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<sup>232</sup> This also impacts the weighted average inflation and efficiency figures used for forecasting given that we adjust capital costs and not operating costs, which have different forecasted efficiencies and inflation.

<sup>233</sup> We also find that changing the asset price inflation for Access Fibre assets from RPI to flat (in nominal terms), as suggested in our clarifications following the March 2017 WLA Consultation, results in a further increase in GEA common costs of around £4 million. Finally, we have calculated, in each year of the charge control, the total LRIC for GEA ceases (which we proposed setting at zero in the March 2017 WLA Consultation) and recovered these from rentals (in the March 2017 model we only uplifted by the total LRIC for GEA ceases in 2015/16).

<sup>234</sup> See Annex 23, Draft Legal Instruments, page 49, in our March 2017 WLA Consultation.

<sup>235</sup> BT's 2016/17 LLU and WLR Price Control Compliance Statement (confidential version).

<sup>236</sup> Openreach's response (dated 22 June 2017) to our March 2017 WLA Consultation, paragraphs 75-79 and 83-90 on p. 21-23.

services which contained jumpering activities with those that did not, and these services could therefore have very different cost movements over the duration of the charge control. Openreach also argued that some services in the Other MPF ancillaries basket were aligned to services that were proposed to be charge controlled differently. It was concerned that this charge control structure would lead to illogical pricing.

- 4.82 Openreach suggested that MPF Tie Pair Modification (3 working days lead time Re-termination, and Multiple Re-termination) should be moved into the MPF New Provides basket. Also, it said that the MPF New Provides basket includes MPF Working Line Take Over (WLTO) and MPF Stopped Line Provide (SLP), which involve broadly similar engineering activity to MPF Tie Pair Modification and are currently priced accordingly.

## Our analysis and proposals

- 4.83 In response to Openreach's comments on the Other MPF ancillaries basket, we propose the following charge control design for these services:
- a) Move MPF Tie Pair Modification (three working day lead time Re-termination) and MPF Tie Pair Modification (Multiple Re-termination) to the MPF New Provides basket which is subject to a charge control for the basket at FAC. Table 4.3 below shows the services we propose to be included in the MPF New Provides Basket.<sup>237</sup> This change will allow for services that use similar activities like MPF Tie Pair Modifications and MPF SLP or MPF WLTO to have their charges aligned in the future. Given that similarity with MPF SLP and MPF WLTO we think that the best cost information available to charge control Tie Pair Modification services is likely the MPF New Provides basket. Based on the relatively low revenues of MPF Tie Pair Modification in 2015/16, representing less than [X] of the MPF New Provides basket (see Table 4.3 below), we do not consider this will affect the X value of the MPF New Provides basket.
  - b) Individual charge controls on: (i) "Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification of Amend", (ii) "Amend orders. Allowable change to MPF Order" and (iii) "MPF Standard line test". In principle, we would set these controls at the respective FAC of each service. However, given the absence of FAC information for each of these individual services, we propose to:
    - i) use our estimates of FAC for GEA bandwidth changes as a proxy for "Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification of Amend" and "Amend orders. Allowable change to MPF Order". We expect the cost of GEA Bandwidth changes to be a reasonable proxy for these services as the three of them only require software changes to be made and hence are similar in nature; and

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<sup>237</sup> The MPF New Provides basket proposed in this consultation would then comprise the following seven services: (i) MPF Standard New Provide; (ii) MPF Stopped Line Provide (MPF SLP); (iii) MPF Working Line Takeover (MPF WLTO); (iv) MPF SLP Left In Jumpers (LIJ); (v) MPF WLTO LIJ; (vi) MPF Tie Pair Modification (three working day lead time Re-termination); and (vii) MPF Tie Pair Modification (Multiple Re-termination).

- ii) set a flat real cap for service “MPF Standard line test”. We propose a cap that is flat in real terms<sup>238</sup> so that inflation is taken into account.<sup>239</sup>

**Table 4.3: The proposed MPF New Provides basket (base case)**

Basket	Services	X value for CPI + X control		
		2018/19	2019/20	2020/21
MPF New Provides £[X]	MPF Standard New Provide £[X] MPF Stopped Line Provide (MPF SLP) £[X] MPF Working Line Takeover (MPF WLTO) £[X] MPF SLP Left in Jumpers (LIJ) £[X] MPF WLTO LIJ £[X] MPF Tie Pair Modification (three working day lead time Re-termination) £[X] MPF Tie Pair Modification (Multiple Re-termination) £[X]	-26.2%	-15.2%	-4%

Sources: 2015/16 total revenues in square brackets. Revenues for MPF SLP LIJ and MPF WLTO LIJ from BT’s response dated 26<sup>th</sup> January 2017 to follow up question 2 relating to the 19th BT s.135 request; the remaining revenues from BT’s 2016/17 WLA Compliance Statement (confidential to BT). The X values are output from our control module.

## Consultation question

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.

## GEA Cancel/Amend/Modify and bandwidth modify

### March 2017 WLA Consultation

- 4.84 In addition to the charges incurred when a telecoms provider wishes to cancel, amend or modify an MPF order as discussed above (i.e. the “Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification or Amend” and “Amend orders. Allowable

<sup>238</sup> Given the current charge of MPF Standard line test at £3.93, a flat cap in nominal or real terms would make little difference in absolute terms.

<sup>239</sup> We note that in the March 2017 WLA consultation we proposed flat nominal caps for a limited number of services. Except for the specific proposals in this consultation we are still considering our approach to those services where we proposed to impose flat nominal caps.

change to MPF Order”), in our March 2017 WLA Consultation we explained that BT also sets charges for when a telecoms provider wishes to cancel, amend or modify a GEA order as follows:<sup>240</sup>

- GEA Cancel/Amend/Modify – CRD Amend, order notes amend, order cancellation, Care Level, etc. at £11.25; and
- GEA Cancel/Amend/Modify – Regrading of existing upstream or downstream speed, both at point of sale and in-life etc. at £11.25.

4.85 We explained that when a telecoms provider wishes to cancel, amend or modify a GEA order, it is likely that it will have to choose one of the services above<sup>241</sup> and that given the lack of alternatives to these services, there was a risk of BT setting its charges excessively above cost. This may adversely affect customers. To address our concern, we proposed that these two GEA services and the equivalent MPF services which we proposed to charge control within the “Other MPF ancillaries basket” (i.e. the “Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification or Amend” and “Amend orders. Allowable change to MPF Order” in the “Other MPF ancillaries basket”) should have their prices aligned (among themselves). This would mean that whilst the GEA service variants are not in the relevant charge control basket they would be protected by the basket control. We considered this was appropriate because these four services are similar in nature as they consist of a software activity to cancel, amend or modify an existing order and are likely to have similar costs.

## Stakeholder responses

4.86 We received one response on GEA Cancel/Amend/Modify services. Openreach<sup>242</sup> considered that the alignment of charges for the MPF and GEA services mentioned above would be difficult to achieve under our proposals which set out significantly different X values for GEA Bandwidth changes and the Other MPF ancillaries basket (which also influences the price level of GEA Cancel/Amend/Modify).<sup>243</sup>

4.87 Openreach said that GEA Bandwidth Modification to 40/10 and GEA Bandwidth Modify to other bandwidths<sup>244</sup> should be priced at the same level and thus both should be subject to

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<sup>240</sup> Openreach’s price list, <https://www.openreach.co.uk/orgp/home/products/pricing/loadPricing.do> [accessed 11 September 2017].

<sup>241</sup> We note that in the case of “GEA Cancel/Amend/Modify – Regrading of existing upstream or downstream speed, both at point of sale and in-life etc.”, it is possible that the “GEA bandwidth modify” service may be a viable alternative option to regrade the existing upstream or downstream speed.

<sup>242</sup> Openreach’s response to the March 2017 WLA Consultation - Volume 2, paragraphs 87-90 and 124-129.

<sup>243</sup> See our March 2017 WLA Consultation – Volume 2, Table 1.1 and 1.2, p. 2-3. Given the proposed alignment between GEA Cancel/Amend/Modify services and their MPF equivalents in the Other MPF ancillaries basket, the basket control would affect the charge on GEA Cancel/Amend/Modify – Regrading.

<sup>244</sup> Both GEA Cancel/Amend/Modify – Regrading and GEA Bandwidth Modification to 40/10 are currently charged at £11.25. See

<https://www.openreach.co.uk/orgp/home/products/pricing/loadProductPriceDetails.do?data=0RiViN9gWGKtCdDgaQ8lFObCjmFDJOVDZeidKC%2F1wh1Z6rNZujnCs99NbIKJZPD9hXYmijxH6wrCQm97GZMyQ%3D%3D> [accessed on 21 August 2017].

similar charge controls. This is to avoid unnecessary spend on system development (in the range £100k-£200k) to price differentiate services.<sup>245</sup>

## Our analysis and proposals

- 4.88 We consider it is appropriate to control the charges for the following services where telecoms providers use them to access a bandwidth of up to 40Mbit/s downstream and up to 10Mbit/s upstream<sup>246</sup>:
- GEA Cancel/Amend/Modify – CRD Amend, order notes amend, order cancellation, Care Level, etc; and
  - GEA Cancel/Amend/Modify – Regrading of existing upstream or downstream speed, both at point of sale and in-life etc.
- 4.89 We consider that the appropriate cost benchmark for these services listed should be FAC as the circumstances where we consider LRIC is appropriate do not apply here<sup>247</sup> and this is consistent with our approach for cancellation and amendment services for MPF (see paragraph 4.83 b) above), which have a similar nature requiring only software changes to be made.
- 4.90 However, given the absence of specific FAC information for each of those GEA services<sup>248</sup>, we propose to use our FAC estimates for GEA bandwidth changes to 40/10 as a proxy. We expect the cost of GEA Bandwidth changes to 40/10 to be a reasonable proxy for GEA Cancel/Amend/Modify services when used to access 40/10 services because, as for the equivalent MPF services, they only require software changes to be made, and hence are similar in nature to the bandwidth changes service. Moreover, we note that the current charges for GEA bandwidth changes and GEA Cancel/Amend/Modify services are aligned at £11.25 and it seems reasonable to us to keep these charges aligned.<sup>249</sup> This alignment of charges proposed also means that the different bandwidth modification services can be priced at the same level and so is sufficient to address Openreach's concern on unnecessary spend on system development to price differentiate services (see paragraph 4.87 above).
- 4.91 We consider that GEA Cancel/Amend/Modify services should only be charge controlled to allow the telecoms providers to access a bandwidth of up to 40Mbit/s downstream and up to 10Mbit/s upstream. This is consistent with our anchor pricing approach set out in our March 2017 WLA Consultation, as we considered this would incentivise investment in innovative and more efficient technology, while protecting consumers.<sup>250</sup> Also, our

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<sup>245</sup> Openreach's response to the March 2017 WLA Consultation - Volume 2, paragraph 127.

<sup>246</sup> We are no longer proposing to charge control the cancellation and amendment services for MPF in the Other MPF ancillaries basket, but rather individually at respective FAC. See paragraph 4.83 b) above.

<sup>247</sup> See paragraph 3.13 of our March 2017 WLA Consultation.

<sup>248</sup> See BT's response (2 September 2016) to our 2<sup>nd</sup> joint WLA/WBA information request to BT (dated 18 August 2016), question 27. Also, note that these services are not currently charge controlled.

<sup>249</sup> See Openreach's price list at

<https://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=0RlviN9gWGKtCdDGaQ8lFObCjmFDJOVDZEidKC%2F1wh1Z6rNZujnCs99NbiKJZPD9hXYmijxH6wrCQm97GZMyQ%3D%3D> [accessed on 11 September 2017].

<sup>250</sup> See paragraph 5.44 in our March 2017 WLA Consultation – Volume 2.

proposal is consistent with our proposed charge control on GEA bandwidth changes, which only contemplates changes to 40/10 and not to other speeds.

## Consultation question

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.

## Abortive Visit Charges

### Background

- 4.92 An Abortive Visit Charge (AVC) is applied where an appointment is agreed for work at a customer's site and the engineer arrives within the appointment slot but is unable to carry out the work at, or gain access to, the customer's site. Currently, Openreach charges £90 for AVC, which has not changed since August 2013.<sup>251</sup> In our March 2017 WLA Consultation, we did not propose to charge control AVC.
- 4.93 In response to our March 2017 WLA Consultation, TalkTalk<sup>252</sup> stated that the cost of AVC to Openreach was significantly lower than the current charge (£90), and estimated the cost should be about £25 or less. TalkTalk suggested a cost based charge control for AVC, or that the profit BT made from charging AVC above cost should be deducted from the cost of other products.
- 4.94 TalkTalk<sup>253</sup> said that in the last three financial years (2014/15 to 2016/17) it paid circa [£] in AVCs. TalkTalk also said that it attempts to [£].
- 4.95 Openreach<sup>254</sup> reported to us that AVC revenues have [£].

### Our analysis and proposals

- 4.96 We continue to consider that AVC should not be subject to a charge control. It is likely that the price for this service is set to incentivise telecoms providers to ensure that their customers are at home for the agreed time period and it is likely to be difficult to observe the opportunity costs for the other activities that the engineer might have been doing.

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<sup>251</sup> See Openreach's price list at

<https://www.openreach.co.uk/orgp/home/products/pricing/loadProductPriceDetails.do?data=GkB126nkZeU8iCLzoNC7laDd6sNMGW33hRaUUitutA4IMnGHsqdC0vzO163bJmh34D91D7M0q8u%2FIISgtIFAKw%3D%3D> [accessed on 16 August 2017] for further detail.

<sup>252</sup> TalkTalk's response (June 2011) to our March 2017 WLA Consultation, paragraph 5.27.

<sup>253</sup> TalkTalk's response (September 2017) to the 37<sup>th</sup> s.135 to TalkTalk (dated 4<sup>th</sup> of September 2017), questions 9 and 10.

<sup>254</sup> BT's response (September 2017) to our 35<sup>th</sup> s.135 to BT (dated 17<sup>th</sup> of August 2017), question 3.

- 4.97 However, consumers would be protected by the proposed general SMP remedies if implemented, i.e. price notification, no undue discrimination, fair and reasonable terms, conditions and charges. Should telecoms providers be concerned with the level of future AVCs, they should be able to challenge Openreach's charges, and absent commercial agreement, raise a dispute with Ofcom.
- 4.98 We used our statutory powers to gather information from Openreach regarding its costs and revenues for AVC.<sup>255</sup> Openreach currently records costs and revenues for AVCs within its regulatory financial systems and we consider it is important that it continues to do so. However, our understanding is that whilst BT currently charges for AVCs as they are incurred it capitalises these costs.<sup>256</sup> This leads to an inconsistency in the timing of costs and revenues and means that BT's RFS does not provide accurate estimates of the costs for AVC services, as the costs will reflect historical capitalised AVCs potentially over many years. We therefore propose to require BT not to capitalise the costs incurred on AVCs. We discuss this and other regulatory reporting proposals below.

## Regulatory financial reporting proposals for WLA ancillary services

### Summary

- 4.99 In this sub-section, we discuss the Regulatory Financial Reporting implications for our revised proposals. In some instances, our analysis is not yet complete and we are not able to present final proposals. Where this is the case we have set out our initial considerations, so that stakeholders can review them alongside the charge control proposals to which they relate. We discuss below changes to the accounting treatment of costs relating to the following services:
- Tie cables;
  - Co-mingling;
  - GEA Cablelink; and
  - Abortive Visit Charges.
- 4.100 We intend to consult more fully on these reporting proposals and provide draft directions in a separate consultation on regulatory reporting issues to be published in Autumn 2017.<sup>257</sup> When we consult on these issues any requirements will supplement the requirements proposed in the March 2017 WLA Consultation.

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<sup>255</sup> BT's response (September 2017) to our 35<sup>th</sup> s.135 to BT (dated 17<sup>th</sup> of August 2017), question 3.

<sup>256</sup> See Section 3.22 and Annex 1 of BT's Change Control Notification 2015/16, available at <https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/ChangeControlNotification201516.pdf> and <https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/CCNAnnex1-TotalMarketImpactsbyCostMCEandRevenue.xlsx> and the description of base PDTAVC on page 51 of BT's 2017 AMD. This conclusion is also supported by Ofcom's analysis of costs for component CL182 within various Additional Financial Information schedules provided by BT as part of its regular financial reporting requirements to Ofcom.

<sup>257</sup> We noted that we were planning a further financial reporting consultation in our WLA Network Expansion Consultation.

## Introduction

4.101 In the March 2017 WLA Consultation we proposed to impose regulatory financial reporting requirements on BT in the WLA market in the UK excluding the Hull area, including imposing cost accounting and accounting separation SMP conditions. These requirements included proposing certain directions on BT as to the consistency, form and content of BT's regulatory reporting.

## Consistency with Regulatory decisions

4.102 In the 2014 Regulatory Reporting Statement and the 2015 Directions Statement<sup>258</sup>, we explained that Regulatory Financial Reporting should, as far as possible, be consistent with our regulatory decisions as set out in our Regulatory Accounting Principles.<sup>259</sup> In general, we would expect regulatory decisions to be reflected in the RFS unless we consider that there were good reasons not to.

4.103 When modelling the cost of wholesale ancillary services during this review, we have identified certain costs whose treatment we consider should be reflected in changes to BT's Regulatory Financial Reporting Requirements. For tie-cable, co-mingling and GEA Cablelink services there is an inconsistency in the treatment of the timing of revenues for one-off or up-front charges and their related costs. For these services, some costs are currently capitalised when the service is provided, and expensed over the life of the assumed "asset". This is despite there either being no asset or the asset having been effectively "sold" to other telecoms providers via the connection or one-off charge.

4.104 In our view, these services' costs include historical costs that have already been recovered. We have adjusted for these timing discrepancies in our proposed charge control modelling by removing the historical costs associated with these "assets" and replacing them with estimates of the in-year expenditure, thus reducing the risk of "double recovery".

4.105 To ensure the RFS is consistent with our regulatory policy we propose the following for these services:

- BT to remove/write-off the potentially double recovered historical assets from GRCs and NRCs and the associated historical depreciation from operating costs;
- BT to treat the corresponding expenditure that had been previously treated as in year capex as operating costs; and
- BT to ensure that these services do not receive attributions of historical assets from the identified classes or work or asset types.

4.106 The services and the costs we propose BT to adjust are summarised in the table below.

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<sup>258</sup> Ofcom, May 2014. Regulatory Financial Reporting: Final Statement, [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0025/78460/financial-reporting-statement-may14.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf)

<sup>259</sup> Ofcom, March 2015. Directions for Regulatory Financial Reporting: Statement, Annex 3, [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0018/59112/statement.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0018/59112/statement.pdf)

**Table 4.4: List of services requiring amendments to GRCs, NRCs, Depreciation and operating costs**

Service	Historical assets to be removed
Tie Cables	Labour installation costs and capitalised planning costs associated with network cost component CL133.
Co-mingling	ACPA assets currently attributed to PG136A (LLU Co-mingling surveys) ACPN assets currently attributed to PG136N (LLU Co-mingling provision)
GEA Cablelink	Labour installation costs and associated capitalised planning costs and the costs of SFP. <sup>260</sup>

4.107 Following on from the March 2017 WLA Consultation there is one further change that we will propose BT makes to support a modelling change we have made on co-mingling services. This will ensure that the RFS is consistent with our regulatory policy. We propose that our direction on the attribution of ACPA costs<sup>261</sup> is further amended. The previous direction required BT to attribute the ACPA Class of Work (CoW)<sup>262</sup> to Plant Groups where they are utilised on a basis that takes account of the age of the assets within the plant group. We will also propose that assets that are required for co-mingling services are separately identified rather than, as now, assuming they are the balancing item from taking spend identified to provide GEA and other fibre broadband services away from total spend on ACPA.

### Preparation, delivery, publication, form and content of the RFS

4.108 In the following sub-section, we set out our initial thinking on the additional financial information that BT should be required to provide on certain ancillary services, both in the RFS and confidentially to Ofcom, to allow us to monitor its compliance with the proposals described above.

<sup>260</sup> Currently we understand that costs for GEA Cablelink services are included within GEA Other services however the costs incurred in installing GEA Cablelink services, including labour installation costs, planning and SFP costs, have been attributed to other services within BT's RFS. We therefore are proposing that BT should identify where these costs have been recorded and, if capitalised, to remove the historical costs and expenditure from the GRCs, NRCs and depreciation of the relevant COWs.

<sup>261</sup> See the discussion in paragraphs 10.51 -10.54 of Volume 1 of the March 2017 WLA Consultation.

<sup>262</sup> BT defines a CoWs as "a type of activity or asset type on which engineers are engaged". See page 9 of BT's 2016 AMD.

## Public Information

- 4.109 The published RFS reports financial information for specific markets at broadly three levels: market level information; service level information; and network component cost level for reported services. Of relevance here are service and network cost component level data.

### *Service level information*

- 4.110 Our initial thinking is that BT should publish revenue, volume, average price and FAC information for Tie Cable services, Co-mingling services, GEA Cablelink services (including VLAN moves where practical) in line with the basis on which the charge controls are proposed to be set (separately for internal and external customers). This would mean that BT would be required to publish revenue, volume, average price and FAC information for rental and connection services (and/or one-off charges if appropriate) for these services.

### *Network Component Cost data*

- 4.111 We will be discussing with BT whether the implementation of our proposals requires the introduction of new network components that will help demonstrate that BT no longer capitalises in-year spend on assets that we have identified above or continues to attribute costs of the removed historical assets to these services.

## Confidential Information

- 4.112 As explained in the March 2017 WLA Consultation, in addition to information reported in the published RFS, BT also provides information to us confidentially which, overall, ensures that we have the information necessary to make informed regulatory decisions; monitor compliance with SMP conditions; ensure that those SMP conditions continue to address the underlying competition issues; and investigate potential breaches of SMP conditions and anti-competitive practices.
- 4.113 BT currently provides several additional financial information (AFI) schedules confidentially to us. Given our proposals on certain Wholesale Ancillary services we consider that BT should provide one new AFI to us that demonstrates how it has removed the historical cost of assets (GRCs, NRCs and Depreciation) from these services.

## Transparency

- 4.114 We already proposed a transparency direction in respect of the WLA market in the March 2017 WLA Consultation which will also apply to these Wholesale Ancillary services. We consider that BT should update its Accounting Methodology Document (AMD) to reflect these additional reporting requirements.

## Other accounting requirements

### Changes to the basis of preparation

- 4.115 We have also identified one further area, where in our opinion the accounting treatment does not comply with our Regulatory Accounting Principles. As with co-mingling and tie cable services, we understand that BT is currently capitalising the costs of AVCs whilst charging for these services as they are incurred.<sup>263</sup> This again leads to an inconsistency between the revenues reported within the RFS and the costs, with some AVC costs reflecting historical activity stretching back over several years and again giving rise to potential double recovery of these costs in the future.
- 4.116 We therefore consider that for AVCs, BT should:
- remove/write-off the potentially double recovered historical assets from GRCs and NRCs and the associated historical depreciation from operating costs;
  - treat the corresponding expenditure that had been previously treated as in year capex as operating costs; and
  - ensure that these services do not receive attributions of historical assets from the identified classes or work or asset types.
- 4.117 We also consider that BT should report revenue, volume, average price and FAC information for AVCs within the RFS on the above basis. We will make proposals in this respect in the Autumn consultation on financial reporting.
- 4.118 Lastly there is one further issue that we will be discussing within the Autumn consultation though it relates to the treatment of BT's OSS/BSS costs and not WLA ancillaries.
- 4.119 In the March 2017 WLA Consultation<sup>264</sup> we noted that BT had only attributed a small proportion[3< ]% of NGA OSS/BSS costs to GEA services in the RFS. In the bottom-up model we decided to include all the incremental OSS/BSS costs within our costs estimates for GEA services and stated that we will review BT's cost allocations as part of our cost attribution review to avoid double recovery. We will therefore be proposing that BT changes its attribution of these costs so that it attributes all GEA OSS/BSS expenditure to GEA services.

### Next Steps

- 4.120 We are continuing to obtain information from BT to refine how we model the costs associated with these Wholesale Ancillary services based on the proposed general approach as set out in this section. Subject to this work we will set out final consultation proposals and draft directions in a wider Regulatory Financial Reporting Consultation in Autumn 2017.

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<sup>263</sup> See discussion about AVCs above.

<sup>264</sup> See March 2017 WLA Consultation, paragraph A12.171.

## Summary of the impact on our proposed charges for ancillary services

4.121 In light of our analysis above, we have re-estimated our proposed charge controls for some MPF and GEA ancillaries, with our new ranges given below in Table 4.5 and Table 4.6, respectively.<sup>265</sup> We have only listed the services where our charge control proposals have changed since the March 2017 WLA Consultation.

**Table 4.5: Base case LLU service results (range)**

Basket/service	Charges at 31 March 2017 (£)	Charge control for 2018/19	Charge control for 2019/20	Charge control for 2020/21
MPF Single Migration	30.26	£24.24 (£23.2 – £25.9)	CPI-12.9% (-14.8% to -9.9%)	CPI-4.0% (-5.6% to -1.4%)
MPF Bulk Migration	20.97	£14.94 (£14.3 – £16.0)	CPI-18.0% (-19.7% to -15.0%)	CPI-4.7% (-6.2% to -2.0%)
MPF New Provides basket	Various	CPI-26.2% (-29.3% to -21.1%)	CPI-15.2% (-17.0% to -12.3%)	CPI-4.0% (-5.6% to -1.4%)
Hard Ceases basket	Various	CPI-27.3% (-30.4% to -22.0%)	CPI-15.9% (-17.7% to -12.8%)	CPI-4.7% (-6.2% to -2.0%)
LLU tie cables basket	Various	CPI-8.7% (-11.1% to -4.6%)	CPI-5.7% (-6.9% to -3.6%)	CPI-3.8% (-4.8% to -1.6%)
LLU Co-mingling New Provides and Rentals services basket	Various	CPI+4.3% (-10.5% to +15.5%)	CPI+0.8% (-6.6% to +6.1%)	CPI-6.4% (-7.5% to -3.6%)
MPF Standard Line Test	3.93	£3.93	CPI-0%	CPI-0%
Cancellation of MPF orders	10.28	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10
Amend MPF orders	10.28	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10

Source: Output from our control module. Openreach's price list.

<sup>265</sup> MPF ancillaries are also impacted by our proposed changes to cumulo and SLG forecasts.

Table 4.6: Base case GEA service results (range)

Basket/service	Charges at 31 March 2017 (£ nominal)	Charge control for 2018/19 (£ nominal)	Charge control for 2019/20	Charge control for 2020/21
PCP Only Install	49.00	44.78 (43.4 – 46.4)	CPI-6.8% (-8.2% to -5.1%)	CPI+0.9% (-0.1% to +1.9%)
GEA Cablelink 1 Gbit/s <sup>266</sup>	2,000	790 (500 – 790)	CPI-0%	CPI-0%
GEA Cablelink 10 Gbit/s <sup>267</sup>	10,000	1,800 (1,000 – 1,800)	CPI-0%	CPI-0%
GEA Bandwidth modify to 40/10 <sup>268</sup>	11.25	7.89 (7.7 to 8.2)	CPI-18.7% (-19.8% to -17.1%)	CPI-3.4% (-4.1% to -2.4%)
VLAN moves	15 <sup>[269]</sup>	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10
GEA Cancel/Amend/Modify - CRD	11.25	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10
GEA Cancel/Amend/Modify - Regrading	11.25	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10	Aligned with GEA Bandwidth modify to 40/10

Source: Output from our control module. Openreach's price list.

<sup>266</sup> We are also proposing to set the rental charge at zero.

<sup>267</sup> We are also proposing to set the rental charge at zero.

<sup>268</sup> Our proposed charge controls for GEA bandwidth modify have changed due to a correction to the forecasting calculation for common costs allocated to these services (note that we proposed in the March 2017 WLA Consultation to set these services at FAC).

<sup>269</sup> Openreach dropped the charge for VLAN moves to £11.25 on the 1<sup>st</sup> of July 2017.

## 5. Implementation of our further proposals and legal tests

### Introduction

5.1 In this section, we explain how each of the proposals set out in this consultation would be implemented in terms of their inclusion within the legal instruments imposing SMP conditions on BT. This section is structured as follows:

- first, we address those proposals relating to the proposed charge controls to be imposed on BT for certain LLU and VULA services (namely, proposed Conditions 7A to 7C);
- secondly, we explain why we consider that:
  - the revised text of the proposed Conditions, which are set out in the schedule to the statutory notification included at Annex 5 to this consultation, satisfy the legal tests set out in the Act; and
  - in considering the proposals set out in this consultation, we have complied with our applicable duties.

### Implementation of further charge control proposals

5.2 In Section 5 of Volume 2 of the March 2017 WLA Consultation, we explained how the proposed charge controls for LLU and VULA services would work alongside the SMP conditions proposed in Volume 1 of the March 2017 WLA Consultation to address the competition concerns arising in the WLA market in which we propose that BT has SMP. We explained how Conditions 7A, 7B and 7C were structured and how they will work in practice. In particular, we discussed the following:

- how the proposed charge controls would work alongside other regulation;
- how we would calculate whether BT was complying with the charge ceilings created by the CPI-X controls, including:
  - how the Percentage Change is calculated for each service;
  - the rules that we propose to determine BT's compliance with charge controls;
  - how we will determine the overall change in charges for each service or group of services;
  - the information we would require from BT to enable us to monitor compliance with the charge controls; and
- how the conditions allow for corrections where there has been over- or under-recovery.<sup>270</sup>

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<sup>270</sup> In the WLA Network Expansion Consultation, paragraph 7.10, we set out our proposed amendments to Condition 7B and referred to the legal tests set out in the March 2017 WLA Consultation.

- 5.3 While we do not seek to repeat these explanations here, they remain relevant to the revised Conditions 7A, 7B and 7C that we propose in this consultation, since the drafting and effect of the proposed Conditions remains largely the same. We focus in this Section on the changes to the versions of the Conditions notified with the March 2017 WLA Consultation and the WLA Network Expansion Consultation.<sup>271</sup>
- 5.4 The text of the revised proposed LLU and VULA SMP Conditions is set out in Annex 5 of this consultation. Except as specified below, we are maintaining our proposals from the March 2017 WLA Consultation and the WLA Network Expansion Consultation.

## **Proposed amendments relevant to both the draft LLU and VULA charge control conditions (Conditions 7A and 7B and/or 7C)**

### **Proposed starting charges, base cases and values of 'X'**

- 5.5 In Section 3 of this consultation, we set out our revised proposals to have charge controls for certain rental services, namely MPF SML1 Rental and GEA 40/10 rentals (when provided in conjunction with MPF and when not provided in conjunction with MPF). This included revisions to proposed ranges for starting charges, base cases and ranges for values of 'X' in relation to these services.
- 5.6 We have reflected the revised figures that are set out in Section 3 for these services in proposed Conditions 7A and 7B to give effect to these proposals, specifically Conditions 7A.2 and 7A.6 (LLU services), and 7B.2 and 7B.4 (VULA services). These are set out in the draft legal instruments provided at Annex 5 to this consultation. For the purposes of the draft legal instrument, we have used figures that do not include the proposed addition for the costs of proposed network expansion. In the event that we proceed with our proposals in the WLA Network Expansion Consultation, the figures in draft Conditions 7A.2(a), 7A.6(a) fifth bullet (MPF SML1 Rental), 7B.2(aa), and 7B.4(a) second bullet (FTTC 40/10 Rental when that service is not provided in conjunction with an MPF rental service), will be adjusted to include the additional costs of network expansion set out in Table 3.25.
- 5.7 In section 4 of this consultation, we set out our revised proposals to have charge controls for certain ancillary services. This included revisions to proposed base cases and ranges for values of 'X' (and in some cases, the proposed ranges for starting charges) in relation to the ancillary services listed at Table 4.5 (LLU services) and Table 4.6 (VULA services) of Section 4.
- 5.8 To give effect to these proposals, we have reflected the revised figures that are set out in section 4 for these ancillary services in proposed Conditions 7A.6 (LLU services), and 7B.4 (VULA services). Where relevant we have also revised the ranges for the starting charges set out in proposed Conditions 7A.2 (LLU services) and 7B.2 (VULA services). These are set out in the draft legal instruments provided at Annex 5 to this consultation.

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<sup>271</sup> This does not impact our proposals for a new Condition 7D (Physical Infrastructure Charge Control) in the August 2017 DPA Consultation.

### Other MPF Ancillary Services basket

- 5.9 As explained in Section 4, we have proposed to amend our March 2017 proposals relating to the Other MPF Ancillary Services basket as follows:
- move MPF Tie Pair Modification (three working day lead time Re-termination) and MPF Tie Pair Modification (Multiple Re-termination) services to the MPF New Provide Services basket;
  - impose individual charge controls on the following services:
    - “MPF Standard line test” (defined as MPF Standard Line Test in Condition 7A);
    - “Cancellation of MPF orders for Provide, Migration, Working Line Takeover, Modification of Amend” (defined as MPF Cancellation in Condition 7C);<sup>272</sup> and
    - “Amend orders. Allowable change to MPF Order” (defined as MPF Amend in Condition 7C).
- 5.10 We have revised proposed Conditions 7A and 7C to give effect to these proposals. In particular, we have:
- Introduced provisions at Condition 7A.1, Condition 7A.2 and Condition 7A.6 relating to the new individual charge control for MPF Standard Line Test and deleted provisions in those same Conditions relating to the Other MPF Ancillaries Services basket. In the absence of specific cost information we are proposing a flat real cap set at £3.93 for the first year of the charge control, which is the current price for the MPF Standard Line Test service.
  - Amended Part 3 of the Annex to Condition 7A (Meaning of MPF New Provide Services) and deleted Part 4 of the same Annex (Meaning of Other MPF Ancillary Services) as well as dealt with related definitions at Condition 7A.12 as appropriate.
  - Introduced provisions at Condition 7C.5 to align the charge control for VULA 40/10 Bandwidth Changes with charges for MPF Cancellation and for MPF Amend and provided relevant definitions at Condition 7C.11.

### VULA Cancel/Amend/Modify

- 5.11 As explained in Section 4, we have proposed to no longer align the charges for VULA Cancel/Amend/Modify – CRD and VULA Cancel/Amend/Modify – Regarding services to the charge for MPF Cancellation. Instead, we propose to align the charges for each of these services to the charge control for VULA 40/10 Bandwidth Changes, where these services involve a change to allow access to 40/10 speeds.
- 5.12 Conditions 7B and 7C now reflect this proposed change:

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<sup>272</sup> Note that in our revised draft legal instruments MPF Cancellation is defined within both Condition 7A and 7C, whereas in the March 2017 WLA Notification a different definition for MPF Cancellation was set out in Part 2 (Interpretation) of Schedule 1. The definitions set out in the revised draft legal instruments supersedes the earlier definition and the inconsistency will be addressed in the Statement.

- the charge alignment previously set out at Condition 7C.5 has been amended and moved to Condition 7B.5, on the basis that the relevant services are now all VULA services and therefore fall under Condition 7B; and
- for the same reason, the relevant service definitions previously provided at Condition 7C.11 have been amended and moved to Condition 7B.10.

## Proposed amendments relevant to the draft VULA charge control condition (Condition 7B)

5.13 In Section 4 of this consultation, we set out our revised proposals to have charge controls for certain VULA rentals and ancillary services. We have revised proposed Condition 7B to give effect to these proposals.

### Network expansion

5.14 In August 2017 we published the WLA Network Expansion Consultation setting out how we proposed to amend our charge control proposals set out in the March 2017 WLA Consultation in light of the additional relevant costs which BT would incur, should BT enter into a clear and public agreement with Government committing BT to make an investment in network expansion to roll out at least 10Mbit/s universal broadband for the entire country by the end of 2020.<sup>273</sup>

5.15 We explained at paragraphs 6.25 to 6.28 and in Section 7 of that consultation that in order to avoid a double allocation of these costs in the case where GEA 40/10 rentals are purchased with MPF, we proposed to set two separate charge controls for GEA 40/10 rentals – one that is paid when GEA 40/10 rental is purchased with WLR or on its own, and a lower one when it is purchased with MPF rental.

5.16 The WLA Network Expansion consultation included a revised proposed Condition 7B to reflect this proposal, and this is now reflected in the draft legal instruments provided at Annex 5 to this consultation.<sup>274</sup>

### Cablelink

5.17 As explained in Section 4, we have proposed to:

- reduce the charge controls for the one-off connection charge for 1 Gbit and 10 Gbit Cablelink to a starting range of £500-£790 and a starting range of £1,000-£1,800 respectively, as well as move from flat nominal caps to flat real caps; and
- introduce a safeguard cap on rental charges for GEA Cablelink services set a £0.

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<sup>273</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-2/wholesale-local-access-market-review-recovering-the-costs-of-investment-in-network-expansion>.

<sup>274</sup> We also noted in Annex 5 to the WLA Network Expansion Consultation that we would define the values of X for GEA 40/10 rentals in this consultation (see footnote 2 in relation to Condition 7B.4). We deal with this in the “Proposed amendments relevant to the draft LLU and VULA charge control conditions” section above.

5.18 Condition 7B sets out details of these revised ranges (in particular, Conditions 7B.2 and 7B.4 which set out the relevant ranges for the charge control period and Condition 7B.10 which proposes revised definitions for Cablelink services).

### VLAN Moves

5.19 As explained in Section 4, we have proposed to align the charge for VLAN Moves to the charge control proposed for VULA 40/10 Bandwidth Changes.

5.20 In order to give effect to these revised proposals, we have:

- removed from Condition 7B.2 the flat nominal charge control initially proposed in March 2017 for VLAN Moves; and
- introduced a provision at Condition 7B.5 to align the charge control for VULA 40/10 Bandwidth Changes with charges for VLAN Moves.

### Corrections reflected in the draft legal instruments

5.21 In addition to the changes we propose in this consultation, we have also taken this opportunity to correct errors in proposed Conditions 7B and 7C which were published in the March 2017 WLA Consultation.

5.22 We are also aware of a number of minor typographical errors which will be corrected in the final legal instruments.

### Condition 7B.5

5.23 Condition 7B.5, which secures that the charges for FTTP 40/10 rentals are the same as relevant equivalent FTTC 40/10 rentals, is modelled on the same basis as Condition 7A.7, which secures that certain SMPF ancillary charges are the same as equivalent MPF ancillary charges.

5.24 In the March 2017 version of proposed Condition 7B.5, the last paragraph present at Condition 7A.7 was omitted. The last paragraph at Condition 7A.7 clarifies that nothing in the Condition shall prevent BT from increasing and/or decreasing the charges in question provided they comply with the requirements in the Condition and in Condition 7A.1.

5.25 We have corrected this error by adding a similar paragraph at the end of Condition 7B.5 in the draft legal instruments provided at Annex 5 to this consultation.

### Condition 7C.6

5.26 On 20 April 2017 we published a correction in relation to Condition 7C.6 as proposed in our March 2017 WLA Consultation.<sup>275</sup> We amended the definition of Hourly Charge and Visit Charge in Condition 7C.6. This correction has been reflected in our revised proposals in the draft legal instruments provided at Annex 5 to this consultation.

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<sup>275</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0017/101078/wla-market-review-200417.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0017/101078/wla-market-review-200417.pdf).

## Legal tests

- 5.27 In Section 8 at paragraphs 8.63 to 8.75 (VULA services) and Section 9 at paragraphs 9.23 to 9.26 (LLU services) of Volume 1 of the March 2017 WLA Consultation, we explained why we considered that the proposed imposition of a charge control for certain LLU and VULA services would be consistent with the relevant tests in the Act.
- 5.28 In Section 5 at paragraphs 5.20 to 5.76 of Volume 2 of the March 2017 WLA Consultation, we set out why we considered that the specific form of the charge controls that we were proposing meet the relevant tests and how, in formulating the proposals set out in those consultations, we had complied with our relevant statutory duties.
- 5.29 At paragraph 7.10 of the WLA Network Expansion Consultation, we stated that our proposed charge control conditions of March 2017, as amended by the Notification at Annex 5 of the WLA Network Expansion Consultation, would continue to meet those relevant legal tests for the reasons set out in the March 2017 WLA Consultation.
- 5.30 In the following, we set out why we consider that, in light of the further revisions to the proposed charge control Conditions, we continue to consider that the specific form of the charge controls that we are proposing meets the relevant tests and how, in formulating the proposals in this consultation we have complied with our relevant statutory duties. This discussion should be read in conjunction with Sections 8 and 9 of Volume 1 and Section 5 of Volume 2 of the March 2017 WLA Consultation, and we cross refer back to these where appropriate.
- 5.31 To give regulatory effect to the proposals set out in this consultation, we are proposing three SMP conditions under section 87(9) of the Act: Condition 7A (for certain LLU services), Condition 7B (for VULA) and Condition 7C (for charges straddling both LLU and VULA services). The text of these conditions is set out in the Schedule to the statutory notification published under section 48A of the Act in Annex 5 to this consultation.
- 5.32 Given the substantial overlap in our reasoning, we have set out our position on the charge controls for LLU and VULA services together below.
- 5.33 We are satisfied that our proposals continue to meet the relevant tests set out in the Act and our statutory duties. Our reasons are set out below.

## LLU and VULA charge controls

### Our duties and objectives

- 5.34 We discussed our duties and objectives specific to the LLU and VULA charge controls in detail in Section 5 of Volume 2 of the March 2017 WLA Consultation. At paragraphs 5.26 to 5.29 of Volume 2 of the March 2017 WLA Consultation we set out our opinion of the likely impact of our proposals was that the performance of our general and specific duties under section 3 and 4 of the Act are secured or furthered by our proposals.
- 5.35 We continue to consider that the charge controls being proposed in this document for LLU and VULA services will ensure that charges for wholesale services will be set at a level that

will enable telecoms providers (other than BT) to compete in the provision of downstream services. We continue to have regard to the requirement to promote competition and to secure efficient and sustainable competition for the benefit of consumers and we have placed particular emphasis on the promotion of competition. In making these proposals we have sought the least intrusive means to achieve our policy objectives.

### **Powers under sections 87 and 88**

- 5.36 Section 87(1) of the Act provides that, where Ofcom has made a determination that a person (here BT) has SMP in an identified services market (here the supply of copper loop-based, cable-based and fibre-based wholesale local access at a fixed location in the UK excluding the Hull Area), Ofcom shall set such SMP conditions authorised by that section as we consider appropriate to apply to that dominant provider in respect of the relevant network or relevant facilities and apply those conditions to that person.
- 5.37 As indicated in Section 5 of Volume 2 of the March 2017 WLA Consultation, section 87(9) authorises the setting of SMP service conditions, including price controls and the setting of rules in relation to recovery of costs and cost orientation. Further, where Ofcom seeks to set an SMP condition falling within section 87(9), it is also required to comply with the requirements of section 88.
- 5.38 Section 88 prohibits the setting of SMP conditions under section 87(9) of the Act except where it appears, from the market analysis, that there is a relevant risk of adverse effects arising from price distortion; and it appears that the setting of the condition is appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on end users.
- 5.39 We are also required to take into account the extent of BT's investment in wholesale local access.
- 5.40 In our opinion, for the reasons set out at paragraphs 5.34 to 5.46 of Volume 2 of the March 2017 WLA Consultation and in this consultation, the proposed Conditions 7A, 7B and 7C, as revised to take account of (i) corrections published on 20 April 2017 relating to Condition 7C.6, (ii) revised proposals relating to Condition 7B set out in the WLA Network Expansion Consultation and (iii) the proposals set out in this document, continue to satisfy section 88 of the Act.
- 5.41 In particular, we remain of the opinion that, absent the proposed charge control, there is a real risk of adverse effects arising from price distortion by Openreach as it might fix and maintain some or all of its prices for LLU and/or VULA services at an excessively high level and/or price in such a way as to create a margin squeeze in the downstream market.
- 5.42 Further, we continue to consider that the proposed charge control will promote efficiency and sustainable competition and confer the greatest possible benefits on the users of public electronic communications services.
- 5.43 We also remain of the view that our proposed charge controls are in line with section 88(2) of the Act which requires us to take account of the extent of the investment in the matters to which the condition relates of the person to whom the condition is to apply. In

particular, when proposing the charge controls for LLU and VULA services we have also taken into account the need to ensure that Openreach has the incentives to invest and innovate where it is efficient to do so. As discussed in paragraph 5.46 of Volume 2 of the March 2017 WLA Consultation, the charge controls are set for a fixed duration and BT can benefit under the controls if it manages to increase market share or if outturn costs are lower than anticipated when the charge controls were set.

#### **We have considered the section 47 tests**

5.44 In addition to the above, Ofcom must be satisfied that proposed Conditions 7A to 7C satisfy the test in section 47(2) of the Act.

5.45 We remain satisfied, for the reasons set out in paragraphs 5.47 to 5.58 of Volume 2 of the March 2017 WLA Consultation, that this test is met in relation to the proposed Conditions 7A, 7B and 7C, as revised to take account of the proposals in this document. In particular, we are satisfied that the proposed Conditions are:

- Objectively justifiable, in that they continue to require BT to provide wholesale services at prices that promote competition and incentivise BT to seek efficiency gains.
- Not unduly discriminatory, in that any CP (including BT) will be able to access the services in question at the levels set by the proposed charge controls. Moreover, the proposed charge controls do not discriminate unduly against BT, as BT is the only operator that we have provisionally identified as having SMP in the WLA market (for the UK excluding the Hull Area).
- Proportionate, since our proposed charge controls are appropriate to achieve the aim of addressing BT's ability and incentive to charge excessive prices for the services covered by the charge controls, necessary in that they do not, in our view, impose controls on charges that go beyond what is required to achieve the aim of addressing Openreach's ability and incentive to charge excessive prices, and they do not produce adverse effects that are disproportionate to the aim pursued.
- Transparent, in that the aims and effects if the proposed charge controls are clear and the proposed Conditions have been drafted as to secure maximum transparency.

#### **We have considered sections 3 and 4 of the Act**

5.46 We have considered our duties under section 3 and all the Community requirements set out in section 4 of the Act and, for the reasons set out at paragraphs 5.61 to 5.63 of Volume 2 of the March 2017 WLA Consultation, we continue to consider that our proposals are consistent with our duties under section 3 and 4 of the Act.

5.47 In particular, we continue to consider that our proposals will:

- promote efficient and sustainable competition for the benefit of consumers; and
- seek to ensure the availability throughout the UK of a wide range of electronic communications services, which will further citizen and consumer interests in the relevant market. This is relevant to both sections 3 and 4 of the Act.

5.48 Further, we remain of the view that, in proposing the charge controls, we have had regard to the desirability of encouraging investment and innovation in the relevant market and encouraging the availability and use of high speed data transfer services throughout the United Kingdom.

### EU Recommendations

5.49 In addition to the above, when considering our further proposals, we have also taken utmost account of all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in accordance with section 4A of the Act.

5.50 At paragraphs 5.65 to 5.73 of Volume 2 of the March 2017 WLA Consultation, we described how we had taken account in our consultation of two recommendations which we considered to be of particular relevance to the charge control aspects of our review of the WLA market, namely:

- the EC's Recommendation of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (the "2013 EC Recommendation")<sup>276</sup>; and
- the EC's Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (the "NGA Recommendation")<sup>277</sup>.

5.51 Further, where our proposals departed from the approach set out in the recommendations, we explained our reasons.

5.52 Whilst preparing this further consultation, we have taken utmost account of the 2013 EC Recommendation and the NGA Recommendation, and our position remains as set out in the March 2017 WLA Consultation.

### BEREC Common Positions

5.53 In addition to the above, when considering our further proposals, we have also taken utmost account of relevant Body of European Regulators for Electronic Communications (BEREC) Common Positions.

5.54 At paragraphs 5.74 to 5.76 of Volume 2 of the March 2017 WLA Consultation, we described which Common Positions we considered to be particularly relevant to the charge control aspects of our review of the WLA market, namely the BEREC Common Position on remedies in the market for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location imposed as a consequence of a position of significant market power in the relevant market,<sup>278</sup> and the BEREC Common

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<sup>276</sup> Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (C(2013) 5761), 11 September 2013, [http://ec.europa.eu/smartregulation/impact/ia\\_carried\\_out/docs/ia\\_2013/c\\_2013\\_5761\\_en.pdf](http://ec.europa.eu/smartregulation/impact/ia_carried_out/docs/ia_2013/c_2013_5761_en.pdf).

<sup>277</sup> Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (2010/572/EU), <http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32010H0572&from=EN>.

<sup>278</sup> BEREC, 2012. Revised BEREC common position on best practice in remedies on the market for wholesale (physical network infrastructure access (including shared or fully unbundled access) at a

Position on Layer 2 Wholesale Access Products.<sup>279</sup> We explained that for the reasons set out in the March 2017 WLA Consultation, we considered that our proposals were consistent with these Common Positions.

5.55 Whilst preparing this further consultation, we have taken utmost account of the same Common Positions, and our position remains as set out in the March 2017 WLA Consultation.

## Consultation question

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.

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fixed location imposed as a consequence of a position of significant market power in the relevant market. BoR (12) 127, 8 December 2012.

[http://www.berec.europa.eu/files/document\\_register\\_store/2012/12/20121208163628\\_BoR\\_\(12\)\\_127\\_\\_BEREC\\_\\_COMMON\\_POSITION\\_ON\\_BEST\\_PRACTICE\\_IN\\_REMEDIES\\_ON\\_THE\\_MARKET\\_FOR\\_WHOLESALER.pdf](http://www.berec.europa.eu/files/document_register_store/2012/12/20121208163628_BoR_(12)_127__BEREC__COMMON_POSITION_ON_BEST_PRACTICE_IN_REMEDIES_ON_THE_MARKET_FOR_WHOLESALER.pdf).

<sup>279</sup> BEREC, 2016. Common Position on Layer 2 Wholesale Access Products. BoR (16) 162, 6 October 2016.

[http://www.berec.europa.eu/eng/document\\_register/subject\\_matter/berec/regulatory\\_best\\_practices/common\\_approaches\\_positions/6482-berec-common-position-on-layer-2-wholesale-access-products](http://www.berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/common_approaches_positions/6482-berec-common-position-on-layer-2-wholesale-access-products).

# A1. Responding to this consultation

## How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 26 October 2017.
- A1.2 We strongly prefer to receive responses via the online form at <https://www.ofcom.org.uk/consultations-and-statements/category-2/wla-market-review-further-consultation-on-charge-control>. We also provide a cover sheet <https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet> for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work. You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to WLA2017@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>). This email address is for this consultation only, and will not be valid after 27 October 2017.
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation:
- WLA Charge Control team  
Ofcom  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA
- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact Melanie Everitt on 020 7834 4340, or email [melanie.everitt@ofcom.org.uk](mailto:melanie.everitt@ofcom.org.uk).
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 4. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Melanie Everitt on 020 7834 4340, or by email to [melanie.everitt@ofcom.org.uk](mailto:melanie.everitt@ofcom.org.uk).

## Confidentiality

- A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, [www.ofcom.org.uk](http://www.ofcom.org.uk), as soon as we receive them.
- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <https://www.ofcom.org.uk/about-ofcom/website/terms-of-use>.

## Next steps

- A1.14 Following this consultation period, Ofcom plans to publish a statement early in 2018.
- A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details please see <https://www.ofcom.org.uk/about-ofcom/latest/email-updates>

## Ofcom's consultation processes

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex x.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please email us at [consult@ofcom.org.uk](mailto:consult@ofcom.org.uk). We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings  
Ofcom  
Riverside House  
2a Southwark Bridge Road  
London SE1 9HA  
Email: [corporationsecretary@ofcom.org.uk](mailto:corporationsecretary@ofcom.org.uk)

## A2. Ofcom's consultation principles

### Ofcom has seven principles that it follows for every public written consultation:

#### Before the consultation

- A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

#### During the consultation

- A2.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A2.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.
- A2.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A2.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A2.6 If we are not able to follow any of these seven principles, we will explain why.

#### After the consultation

- A2.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

## A3. Consultation coversheet

### BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

### CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing

Name/contact details/job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts? \_\_\_\_\_

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If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

### DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

## A4. Consultation questions

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.

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.

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.

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.

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?

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.

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.

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.

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.

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.

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.

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.

## A5. Draft legal instruments

[See separate document]