Openreach response to questions in Ofcom's consultation document

"Fixed access market reviews: Approach to setting LLU and WLR Charge Controls"

30 September 2013

NON CONFIDENTIAL VERSION

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Introduction

On 3 July 2013, Ofcom published its provisional conclusions on the Fixed Access Market Reviews (the "FAMR Consultation"). It subsequently published its consultation on the charge controls for Wholesale Line Rental ("WLR") and Local Loop Unbundling ("LLU") on 11 July 2013 (the "Consultation") and amended this on 20 August 2013 to correct errors in its cost modelling. The proposed controls are for the period from 1 April 2014 to 31 March 2017 (the "Control Period").

This submission is provided on behalf of British Telecommunications plc ("BT") by Openreach, a line of business within BT, in response to the Consultation as amended on 20 August 2013 (the "Response").

Openreach has provided a separate response to the service issues raised in this and the FAMR Consultation (the "Service Response"). BT Group has also provided a separate response to this and the FAMR Consultation, reflecting the combined views of other BT lines of business (the "BT Group Response").

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1 Executive Summary

1.1 Overview

1. The UK has one of the most competitive and dynamic markets in the world for the provision of fixed line data and voice services. Competition in these markets is underpinned by the provision of regulated wholesale inputs by Openreach in the form of wholesale line rental ("WLR") and local loop unbundling ("LLU") services. There are over 24 million LLU and WLR lines currently provided to Openreach's communications provider ("CP") customers in the UK.

2. The forthcoming WLR and LLU charge controls (the "Charge Controls") should provide the appropriate incentives and pricing flexibility to allow Openreach to continue to respond to changing market demand and the needs of its customers. It is therefore crucial that Openreach is able to fully recover its forward looking efficiently-incurred costs, including a reasonable return on capital, across its copper access products throughout the Charge Controls. As evidenced in this response, to underpin such cost recovery, there needs to be an increase in the price of the key wholesale services, for example metallic path facilities ("MPF") rentals.

3. A fundamental outcome of Charge Controls should be to ensure that service delivery is properly funded such that a high quality of service can be guaranteed to Openreach's industry customers and end users. Ofcom's consultation explicitly addresses the relationship between funding and quality of service, against a backdrop of increasing end user expectations. This provides an opportunity for an outcome that reflects the trade-offs between cost and service and ensures a charge control that enables a consistent level of service to be delivered. In Openreach's view, this must be underpinned by:

    - appropriate recognition in the Charge Controls of Openreach's efficiently incurred costs of service delivery in 2012/13, which is the most representative base year;
    - recognition and proper funding of the cost of any required increase in service level performance over and above the baseline; and
    - effective capture and analysis of current and future systemic trends impacting fault rates and service costs throughout the duration of the Charge Controls.

4. Openreach is separately providing a detailed evidence-based submission addressing all aspects of its quality of service (the "Service Response").

5. Before considering the issue of funding a consistent level of service delivery, Ofcom should recognise, and address, that Openreach is starting from a position where service delivery is increasingly challenging and some key LLU and WLR prices are below cost. For example, Ofcom's own modelling shows that MPF rental prices are below cost; see table 1.1.

    Table 1.1: Ofcom's modelled MPF Rental costs and prices

Ofcom Model Base Case Forecast Cost vs. Price					
	2012/13	**2013/14**	**2014/15**	**2015/16**	**2016/17**
FAC + LRIC Adjustments	[✂]	[✂]	£92.25	£90.23	£88.25
Actual Prices	£87.41	£84.26	-	-	-
Base Case Price Glide	-	-	£85.50	£86.74	£88.00

6. This response also demonstrates that Ofcom's cost modelling significantly understates the LLU and WLR cost base, in particular by:

    - assuming unsustainably high efficiency targets;

- assuming unrealistically high forecast volumes of fixed lines;
- inconsistently applying inflation in the weighted average cost of capital ("WACC") calculation; and
- adopting an ill-conceived modelling approach to co-mingling charges.

7. We also highlight a number of inappropriate and/or erroneous cost adjustments, some of which reflect out-dated decisions to assist LLU market entry, something no longer justified given the scale of the growth of MPF in the UK market over the current charge control period. Furthermore, we have identified a number of errors with Ofcom's costs modelling which also significantly understate the cost base going forward.

8. On 20 August 2013, Ofcom corrected a significant modelling error in its Charge Control proposals. The accompanying revision of its base cases provides a more appropriate starting point than Ofcom's original base case, but there are compelling reasons for further reducing the absolute values of X(s).

9. The price for some key copper access services, such as MPF and WLR rentals, will need to increase so that they properly reflect efficiently incurred costs and Ofcom should not be afraid to support such proper and appropriate price increases. Setting controls which understate those costs through flawed modelling assumptions would undermine investment incentives across regulated services. However, we recognise that price increases at the wholesale level may raise concerns about short-term impacts on consumers. We would highlight several points in this context.

10. First, MPF and WLR prices have fallen over time, with significant price reductions since 2010. Openreach's prices are generally well below the European average with MPF rental charges are at the very bottom end of the 8 to 10 euro per month benchmark referenced in the recently adopted European Commission Recommendation.

11. Secondly, previous changes in wholesale access price are not always passed directly onto end customers as the relationship between Openreach's wholesale charges and the retail prices faced by individual customers is complex. For example, consumers have seen reductions in headline prices for broadband access on top of line rental and deals in relation to broader bundles of communications services – e.g. including TV services – and the inclusion of unlimited call packages. The cost of Openreach inputs is a smaller share of the overall costs of providing such bundles.

12. Finally, we would note that wholesale price increases are necessary to deliver the more reliable service levels demanded by our CPs. Overall, consumer interests are best served in the long run by ensuring that regulation allows Openreach to recovers its efficiently incurred costs.

1.2 Key issues

13. There are a number of issues, which are fundamental to achieving the correct outcome in these Charge Controls. We cover these in detail in our response.

1.2.1 Efficiency

14. Best practice dictates that a balance should be struck between the 'carrot' under a price control (making over-achievement possible) and the 'stick' (requiring efficiency improvements to recover costs). The target *should* be challenging, but the target should not be such that "yet further savings" over and above the target cannot be identified and realised. Ofcom has not got this

balance right when setting the 5% overall efficiency target. Moreover, this target is not substantiated by the evidence Ofcom puts forward in the consultation[1].

15. The 5% overall efficiency target proposed by Ofcom is too high - the evidence set out in this response supports a lower overall efficiency target for the following reasons:

    - Ofcom references historic efficiency derived from BT's regulatory financial statements (the "RFS") as being 6%[2]. BT commissioned Oxera[3] to review Ofcom's methods and they found that, as a significant proportion of the Openreach cost base is made up of common costs "consumed" by many products spread across a variety of markets, considering WLA/WFAEL services only may be unreliable for use on a top-down basis. The RFS data does not support the rate of 6% historically, and in any case there is a downwards trend which suggests that historical rates are unlikely to be achieved in future.

    - In setting the target, Ofcom relies heavily on Openreach's own 'Price Volume Efficiency Other' ("PVEO") analysis of actual and forecast efficiencies.

        - BT commissioned Oxera[4] to review Ofcom's methodology. They found that there is effectively double counting of some of the reported savings as a result of Ofcom using an unadjusted reported efficiency as a direct input assumption in its model. Aligning the price and volume impacts in Openreach's PVEO with Ofcom's cost modelling approach would significantly reduce the implied rate of efficiency (in the order of 1.5% p.a.[5]).

        - Ofcom places most weight on Openreach's 2012/13 forecast of efficiency. Openreach now has draft figures which will be provided to Ofcom; these show that the efficiency achieved in 2012/13 was less than forecast. This is unsurprising and a contingency was held in recognition of the aggressive nature of the targets. In particular the adverse impacts of weather on service continued longer than assumed[6]. On a cash basis, this results in efficiency c. 2% below that used by Ofcom.

    - Ofcom's analysis does not reference up-to-date benchmarking. BT commissioned Deloitte to undertake an analysis of European operators which shows that BT's network business is highly efficient compared to a representative group of European operators[7]. Deloitte analysed several companies, including Telefonica, France Telecom and Telecom Italia.

    - Ofcom asserts that quotes from BT's senior management about the level of future savings that are possible justify the high target[8]. These quotes have been taken out of context and therefore should be given lower weight when assessing target efficiency[9]. Similarly, Ofcom asserts that analyst opinion supports its assessment of the massive scope for future efficiency savings. However, the consensus view is that Openreach will hold costs approximately flat in nominal terms over the period to 2016/17, with a small

[1] As explained further in table 4.1 in Section 4.4.1.

[2] Consultation, paragraph A7.24

[3] Annex C

[4] Annex C

[5] Opex only

[6] See Openreach's separate Service Response

[7] BT Wholesale's response to Review of Wholesale Broadband Access Markets, Annex 4: Analysis of the Efficiency of BT's Regulated Operations. A report by Deloitte, 25 September 2013

[8] Consultation, paragraph A7.33

[9] For further details see section 4.4.1

nominal decrease in the first two years being offset by small rises in the last two years and the overall reduction being under 1%[10].

16. Ofcom applies the same average rate of efficiency to both Opex and Capex. Ofcom must set and apply a differential rate for operational expenditure ("Opex") and capital expenditure ("Capex") efficiency. Ofcom's charge control model assesses charges on an accounting basis but then applies an average efficiency target assessed on a cash basis. The result of this inconsistency is that Ofcom's forecast of costs will be lower than the costs reported in the RFS. This is clearly wrong and forecast costs should be higher than Ofcom estimates. To assess efficiency in a way consistent with its cost modelling approach Ofcom should assess Opex and Capex efficiency separately and set and apply an appropriate target for each. Such an approach would provide a better estimate of future costs. We note that Ofcom's model is already designed to allow different Opex and Capex efficiency targets and therefore adopting the correct approach should be a straightforward exercise.

1.2.2 Volumes

17. The forecast volumes of copper lines that Ofcom uses are too high overall, which results in forecast unit costs and proposed MPF/WLR rental prices in 2016/17 being too low. In particular, Ofcom's assumption of the growth in the number of new households is too high and its assumption regarding the level of substitution to mobile only homes is too low. Given the significant financial impact, c. £0.30 per line for every 100,000 MPF/WLR lines, Ofcom must reduce its forecast in line with the evidence set out in this response.

    - Ofcom's forecast of new households uses a government projection[11] that is unconstrained by the future supply of residential properties[12]. To believe Ofcom's forecast, actual new homes growth in the UK would have to be implausibly high compared with expert independent forecasts[13]. This flaw results in an overstatement of 360,000 Openreach fixed lines in 2016/17[14].

    - Ofcom assumes that the proportion of mobile only homes will remain flat at 15% of the total number of households. This assumption runs counter to the trend in the past[15]. More worryingly, Ofcom seems to ignore the impact of the 4G launch in the UK; in countries where 4G has been launched the evidence shows a material increase in the growth of mobile only homes[16]. BT commissioned Sweeney Pinedo to carry out market research to understand the impact of 4G on mobile only homes in the UK[17]. This found that the launch of 4G in the UK would inevitably increase the propensity for consumers to switch to mobile: between 3% and 10% of people sampled were likely to consider taking up a mobile broadband service for in-home use and substitute their fixed broadband connection. A 3% increase in mobile only homes (from 15% to 18%) by 2016/17 would result in c. 750,000 less Openreach fixed lines.

[10] BT, Pre Q2 2013-14 Consensus, July 25, 2013 available at http://www.btplc.com/Sharesandperformance/Quarterlyresults/Quarterlyresults.htm

[11] DCLG, Live tables on household projections, https://www.gov.uk/government/statistical-data-sets/live-tables-on-household-projections

[12] BT has confirmed that this is the position directly with statisticians at the DCLG

[13] Leading Edge Management Consultancy Limited, Construction Output Forecast 2013 – 2017 GB Sectors, July 2013.

[14] Annex A

[15] Mobile-only homes have risen from 10% in 2006 to 15% in 2012, available at http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf

[16] Plum Consulting, Future evolution of fibre regulation, September 2013

[17] Please refer to Annex B for further details

1.2.3 WACC

18. Overall, Ofcom is proposing to estimate the BT WACC in way that is generally consistent in approach with previous regulatory decisions[18]. BT is broadly supportive of this consistency, subject to the following:

    - Ofcom must adjust the Retail Price Index ("RPI") inflation assumption of 2.8% used to set the nominal WACC to ensure consistency with RPI inflation assumptions used elsewhere in the charge control models (frequent reference is made, for instance, to 3.3% as the consensus view during the period).

    - In particular, Ofcom has to use a consistent RPI figure in deriving the nominal WACC calculation and in determining final year asset inflation which drives final year holding gains and cost allowances.

    - Consistency of approach with earlier decisions means that the disaggregated WACCs estimated for Openreach copper and the rest of BT ("Rest of BT") should reflect up to date data on Mean Capital Employed within Openreach relative to the Rest of BT.

    - In considering the latest spot data ahead of finalising the Charge Controls in early 2014, Ofcom should, in particular, reassess the data on the risk free rate and on equity beta where we believe more recent trends may support higher estimates.

19. BT has provided more detailed comments on WACC in the BT Group Response.

1.2.4 Co-Mingling

20. Ofcom's approach to setting the control for co-mingling products (hostel rentals, room build and tie cables) is flawed and the X for the co-mingling basket should be significantly reduced:

    - Ofcom should use current pricing for the start prices in its model, rather than using the higher historic prices[19] as it currently proposes. This will directly result in a significant reduction in the value of X for the co-mingling basket.

    - Ofcom is forecasting continued new room build during the Charge Controls, therefore the modelling outcome where these services experience 'Negative Capex' is plainly wrong; MPF lines are forecast to double over the Charge Controls and points of presence ("PoPs") will need to be expanded to accommodate them. This will require room build Capex for the installation of extra racks, shelves, back-up power etc. and new room build Capex must therefore be positive. Ofcom's approach significantly understates the forecast Capex costs in the Ofcom model for new room build services by [✂]. Ofcom should correct this.

    - Ofcom should use MPF (plus external shared MPF ("SMPF")) circuit volume forecasts to forecast MPF hostel rental costs instead of the number of POPs. This is because MPF lines are forecast to grow at a much higher rate than the number of PoPs, and MPF hostel rental costs[20] increase in line with the demand for MPF lines. Ofcom's current approach significantly understates costs and, if corrected, would alone lead to c. 2% reduction in the X for the co-mingling basket.

[18] Consultation, Annex 15

[19] Based upon fall in revenue when replacing Ofcom's forecast of prices for 2012/13 with the actual prices within the 2012/13 RFS. This was the result of various price reductions affecting co-mingling services, in particular tie cables, on 1 October 2012:
http://www.openreach.co.uk/orpg/home/products/pricing/notificationDetails.do?data=ThQLPOgdo8c%2FpcQlNXj7BVoAzMfOCIw%2B7d4ELMHNgDdhjhkYVP5xfMmu%2BBXOk1KXlmbMkfEWV9Hg%0AS5od5xPk5mMrG2JXeytL6pFJZpTLM42nMTEF%2BKjWmexJt5mYlgMVVCBTHUk%2FAkGGPXhiPyurwQ%3D%3D

[20] These include: maintenance of LLU plant, accommodation space rental charges; and LLU plant depreciation.

1.2.5 Adjusting for broadband line testing

21. [✂]

22. [✂]

23. [✂]

24. [✂]

25. Therefore Ofcom should be confident in the reasonableness of unit cost differentials and follow cost causation by immediately removing this price adjustment.

1.2.6 Use of 2012/13 financial information

26. Ofcom is undecided as to whether it will update its proposals based on published 2012/13 RFS cost data. It is important, for the reasons discussed below, that Ofcom uses the most up to date information (i.e. the published 2012/13 RFS) when reaching its final decision:

    - using the published 2012/13 RFS will make Ofcom's cost forecasting more accurate and robust whilst removing an element of forecasting error (2012/13 costs in Ofcom's model will be based on actual costs rather than forecast costs).

    - using the most up to date financial information is fundamental to Ofcom's new cost modelling approach, which it justifies on the basis that BT's published RFS comprises audited information capturing recent movements in costs and efficiencies.

        - BT takes due care and diligence to prepare its RFS in accordance with the relevant cost accounting and accounting separation framework imposed by Ofcom, and the RFS are subject to independent audit (to the highest 'fairly presents in accordance with' ("FPIA") standard required by Ofcom in the case of the WLA (LLU) and WFAEL (WLR) markets);

        - Each year the RFS reflects the latest understanding of costs and cost drivers and is therefore the most up to date information for making regulatory decisions.

    - 2012/13 is a more representative year than 2011/12 in terms of the expected levels of service that will be demanded during the Charge Controls. This is discussed further in Openreach's Service Response.

27. Accordingly, if Ofcom chooses not to base its proposals on the 2012/13 RFS, BT would expect Ofcom to explain in detail why it intends to depart from this key tenet of best practice and set this out its autumn consultation in order to give stakeholders a chance to respond on their views.

1.2.7 Cost modelling approach

28. In its consultation, Ofcom deals with a number of key issues that underpin the cost modelling approach taken in the Charge Controls. These include:

    - *Use of costs from Openreach's management accounts or costs from the RFS*: For the proposed Charge Controls, Ofcom has departed from the modelling approach used in the current copper charge control. While this is a new approach to setting charges for LLU and WLR, the generic approach employed here has previously been adopted when setting charges for other services such as Openreach Ethernet services and Wholesale Broadband services. BT does not object to it in principle, provided the modelling is at an appropriate level of detail to capture cost movements and underlying cost drivers accurately.

- *Growth of wholesale Next Generation Access ("NGA") services:* Openreach agrees with Ofcom that an anchor pricing approach (that discounts the impact of NGA services and where each local access connection is attributed the same share of copper costs), is the right approach to adopt while NGA demand develops. This is particularly appropriate as: Current Generation Access ("CGA") will still be the dominant form of local access technology by the end of this control; NGA prices are constrained by CGA prices; and during the Charge Controls the vast majority of NGA deployment will be of the FTTC variety, requiring a copper line to supply the voice service.

- *Inflation index*: Ofcom has decided to replace RPI with the consumer price index ("CPI") in the control formula. BT considers that there is little justification for a move to CPI as the inflation index. RPI continues to be published by the Office for National Statistics and has many different uses. BT notes that Ofcom has used the RPI index as an inflation index in setting the Network Charge Control[21] consistent with its position, explained in the Leased Lines Charge Control Consultation in July 2012, that RPI continues to be the price inflation measure used in price controls. Given this, BT has to question why there is a need for a change in these Charge Controls.

  BT does appreciate that the use of CPI ought to make no difference to nominal prices which in itself seems to be another reason not to make the change as further complications are added for no benefit. That said, irrespective of the choice of index, it is essential that Ofcom is consistent in using the same inflation forecast in its cost modelling as in the calibration of X once the modelling has been completed. BT has provided more detailed comments on the choice of inflation index in the BT Group Response.

- *Modelling service costs:* Openreach evidences in the Service Response the extent to which both fault rates and the resources required to address faults are likely to increase during the Charge Controls over and above the level driven by volume growth. It is therefore important that Ofcom's charge control modelling, based primarily on cost-volume relationships, is sophisticated enough to reflect this through fault usage factors and other co-efficients.

1.3 Other assumptions and parameters

29. In addition to the points above, Openreach disagrees with a number of other assumptions and parameters used by Ofcom in its cost modelling, particularly:

    - Ofcom should assess the fixed and common costs ("FCC") of FTTC, when re-attributing these costs to WLR and MPF rather than using SMPF as a proxy.

    - Ofcom's reason(s) for adjusting the price of ISDN Transfers and WLR Transfers are analogous. The increase to WLR transfer charges should be a start price adjustment rather than a glide so that it is consistent with the immediate price reduction proposal for ISDN2 Transfers.

    - Ofcom states that it will set the MPF and SMPF Cease charges to zero and proposes that these costs should be recovered through WLR and MPF/SMPF rental charges. However, this adjustment has not been made in Ofcom's modelling. Cease costs should therefore be added to WLR rental and MPF/SMPF rental costs and recovered in the rental prices.

    - Ofcom should assess the impact of the increase in Care Level 2 ("CL 2") compared to Care Level 1 ("CL 1")on total costs in 2016/17 and the unit cost difference between CL 1 and CL 2 as part of its upcoming service consultation and use its findings to model

[21] Ofcom final statement Review of the fixed narrowband services market dated 25 September 2013.

those differences in the Charge Controls. Openreach evidences in the Service Response the growing adverse impact of CL 2 on its costs.

- Ofcom should correct the underestimate of the regulated asset valuation resulting from the exclusion of the pension component of capitalised labour costs. The exclusion of these costs leads to the amounts that are being indexed in the asset valuation being underestimated, and Ofcom's valuation therefore does not fully reflect the true cost of replacing the network.

- Openreach also has a number of detailed comments on basket structure and proposes that Ofcom modify its approach to some ancillary services so that prices can be set in an efficient way, encouraging CPs to choose the optimal product option.

1.4 TRCs and SFIs

30. In the BT Group Response, BT has commented on Ofcom's proposals with regard to a fully allocated cost ("FAC") cost orientation standard for time related charges ("TRCs") and special fault investigation ("SFIs"). BT does not agree with these proposals:

    - Ofcom should only regulate TRCs and SFIs in so far as they are "reasonably necessary" for the provision of LLU and WLR;

    - to the extent Ofcom does regulate TRCs and SFIs, it should not require these services to be cost-orientated where this means pricing at, or only just above, FAC; and

    - to the extent Ofcom regulates TRCs and SFIs, it should only do so in a way that enables BT to earn a margin, in order to provide BT with the right economic incentive to provide these services and drive efficient CP choices.

31. Ofcom has not given enough weight to the fact that these services are supplied over and above our contracted terms and that the regulated service conforms to the line testing standard (SIN349). Therefore, it seems perverse that Ofcom would seek to intervene, especially given the highly contestable nature of most of these services. Moreover, Ofcom's proposals provide no incentive for Openreach to prioritise these services.

32. That said, if Ofcom decides intervention is required, BT proposes a safeguard cap as a practical and more proportionate alternative for TRCs and SFIs in so far as they are "reasonably necessary" for the provision of LLU and WLR services. This would encourage competition for the vast majority of services (which are contestable), protect CPs from above inflation price increases, preserve the principle of regulatory consistency and still provide an incentive for Openreach to innovate and invest in these services.

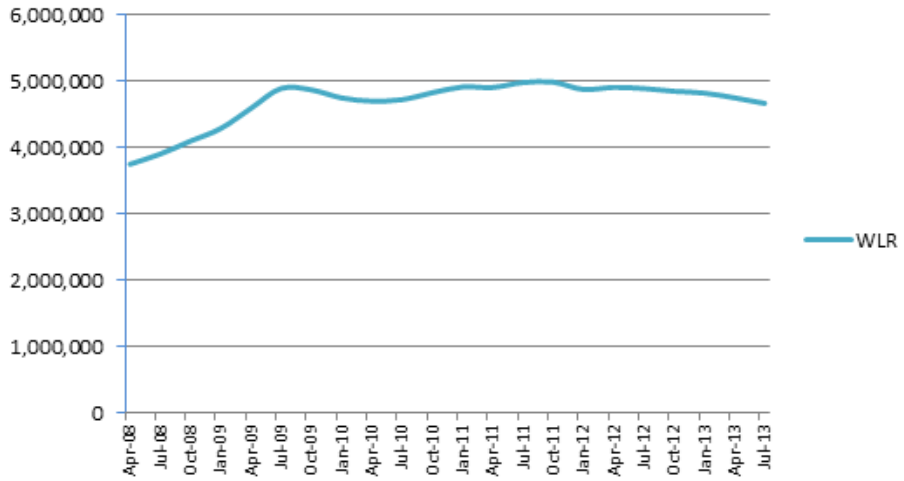
2 Market Context

2.1 Market developments

33. Ofcom seeks to promote WLR based competition alongside Metallic Path Facilities ("MPF") and WLR + Shared MPF ("SMPF") based competition. This continues to result in positive outcomes in terms of narrowband and broadband competition.

34. WLR continues to stimulate effective retail narrowband competition. There are around 400 communications providers ("CPs") using WLR as the input into their end-user offerings, and the WLR product volumes purchased by CPs (other than BT) continue to be significant, as shown in Figure 2.1 below.

Figure 2.1: Growth of WLR rental volumes by non-BT CPs[22]

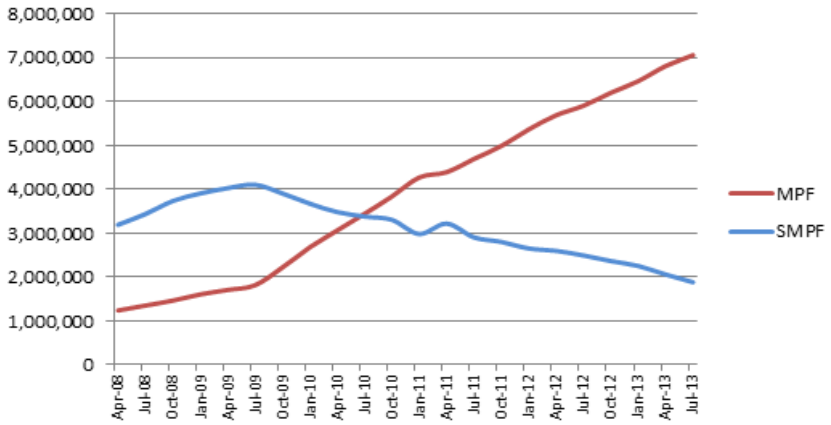


35. The growth in broadband competition in the UK has been reliant on the availability of SMPF (which is used to provide broadband-only services, with WLR used to provide voice services), as well as MPF (which is used to provide broadband and voice services).

36. UK consumers have a range of choices about how they consume fixed line data and voice services – separate broadband and narrowband providers, separate lines and calls providers, full bundle, etc. Of the total LLU lines supplied by Openreach, 55% are used to supply SMPF services and 45% are used to supply MPF services. As many as half of end-users taking their broadband service from SMPF providers take their narrowband voice service from another supplier. In contrast, MPF-based provision does not allow consumers to split their service in such a way, or have this degree of choice, as the MPF-based provider uses the line to provide both narrowband voice and broadband services to the same consumer. The growth in MPF and SMPF based competition from non-BT CPs is shown in Figure 2.2 below.

[22] WLR (PSTN GB) for external CP's

Figure 2.2: Growth of MPF and SMPF rental volumes by non-BT CPs



37. The growth of MPF rental volumes is primarily due to TalkTalk Telecom Group PLC ("TalkTalk"), and British Sky Broadcasting Limited ("Sky"), migrating from WLR+SMPF to MPF. The decline in SMPF volumes is evident from July 2009 onwards, as is the concurrent acceleration in MPF growth. During 2011 and 2012, TalkTalk further extended its unbundled network to 2,798[23] exchanges. In its latest results TalkTalk says its on-net customers now comprise 96% of its total base and the mix of customers has continued to improve, with over 82% now fully unbundled which it claims is helping it deliver its most profitable revenues[24]. In addition with Sky's continued roll-out, Openreach expects MPF volumes to continue to increase over the Control Period. However, WLR and WLR+SMPF will continue to be an important part of the market over the Control Period, delivering additional choice to end-users.

38. Openeach's next generation access ("NGA") network deployment continues at pace with 15 million homes passed in April 2013[25]. During the Control Period, the majority of broadband connections will be supplied using current generation access ("CGA") technology and the vast majority of those customers with NGA broadband services will be connected to the NGA network using either MPF or WLR i.e. the fibre to the cabinet ("FTTC") variant of generic Ethernet access ("GEA"). Therefore, MPF and WLR will continue to be vital in underpinning competition in broadband markets going forward.

39. In this response we demonstrate that the price for some key copper access services, such as MPF and WLR rentals, will need to increase so that they properly reflect efficiently incurred costs and Ofcom should not be afraid to support such proper and appropriate price increases. Setting controls which understate those costs through flawed modelling assumptions would undermine investment incentives across regulated services. However, we recognise that price increases at the wholesale level may raise concerns about short-term impacts on consumers. We would highlight several points in this context.

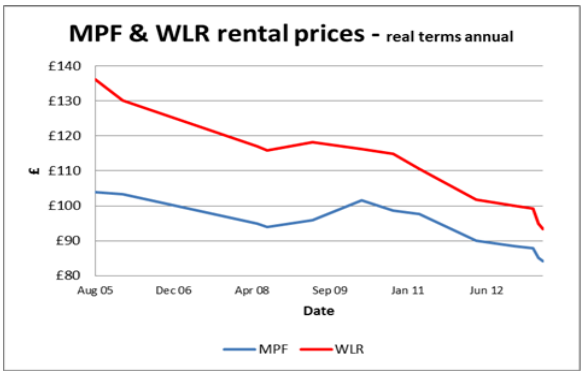
40. Firstly, MPF and WLR prices have fallen in real terms over time, with significant price reductions since 2010, as shown in Figure 2.3 below

[23] TalkTalk, Preliminary results for the 12 months to 31 March 2013 (FY13), 24 July 2013, available from: http://www.talktalkgroup.com/investors/results-centre.aspx

[24] TalkTalk, Preliminary results for the 12 months to 31 March 2013 (FY13), 16 May 2013, available from: http://www.talktalkgroup.com/~/media/Files/T/TalkTalk/pdfs/reports/2013/prelim-results-2013.pdf

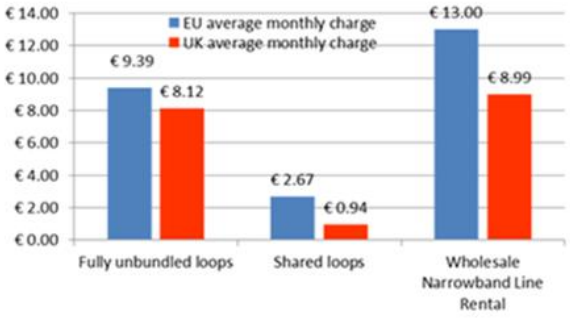
[25] BT, UK's largest wholesale fibre network continues to expand, 11 April 2013, available from: https://www.btplc.com/ngb/News/15mmilestone.htm

Figure 2.3: MPF and WLR prices over time



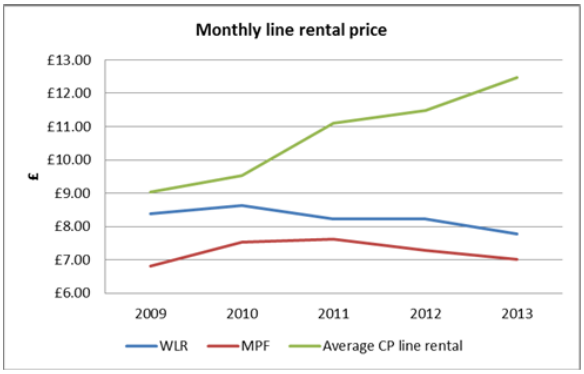
41. Secondly, Openreach's prices are well below the European average with MPF rental charges at the very bottom end of the 8 to 10 euro per month benchmark referenced in the recently adopted European Commission Recommendation. (see Figure 2.4 below)

Figure 2.4: EU and UK average monthly charges



42. Thirdly, changes in wholesale access prices are not always passed directly onto end customers. Consider, for example, what happened in the immediate aftermath of Ofcom's last LLU and WLR charge controls. On 1 April 2012 (when Ofcom's current LLU and WLR charge controls entered into force although CPs would have had notice of the planned price changes a month earlier than this with the publication of Ofcom's draft statement), the price of MPF rental dropped from £91.50 to £87.41 per annum (exclusive of VAT). This was a decrease of £4.09 per annum. On 2 April 2012, TalkTalk announced that, effective from 1 May 2012, it would increase its line rental price from £13.80 to £14.50 per month. This equates to 70p per month, or an increase of £8.40 per annum. More generally, Figure 2.5 below shows the relationship between wholesale and line rental prices.

Figure 2.5: Monthly line rental price



43. The relationship between Openreach's wholesale charges and the retail prices faced by individual customers is complex. For example, consumers have seen reductions in headline prices for broadband access on top of line rental and deals in relation to broader bundles of communications services – e.g. including TV services – and the inclusion of unlimited call packages. The cost of Openreach inputs is a smaller share of the overall costs of providing such bundles.

44. Finally, we would note that wholesale price increases are necessary to deliver the more reliable service levels demanded by our CPs. Overall, consumer interests are best served in the long run by ensuring that regulation allows Openreach to recovers its efficiently incurred costs.

3 Base Year Update

45. Ofcom's proposed approach to cost modelling in the Consultation differs from that used in previous WLR and LLU charge controls. The proposed approach consulted on here is a model based on cost components contained in BT's published regulatory financial statements ("RFS"), which are then forecast forward using asset volume elasticities ("AVEs") and cost volume elasticities ("CVEs") applied to Ofcom's forecast of service volumes.

46. The key benefits that Ofcom cites in support of this approach arise specifically because the model is based on BT's RFS: this reduces the need for complex reconciliation, allows a greater level of disclosure, and crucially involves the use of audited cost information capturing recent movements in costs and efficiencies.

47. Ofcom has used the 2011/12 RFS as the base year for its cost model in the Consultation as, at the time of publication, that was the most recent year for which the published RFS was available. BT has since published the 2012/13 RFS.

48. Ofcom has said that it will consider using the 2012/13 RFS as the base year for its cost modelling, but says "to the extent that changes in the 2012/13 RFS reflect changes in accounting methodologies (such as cost allocation rules) rather than the underlying costs" it will need to consider "if and how it is appropriate to reflect these changes in our base year costs"[26].

49. This is a matter of great concern to BT. In particular, having decided to adopt a modelling approach based on the RFS in significant part because of the particular benefits of using RFS data, including the process of audit, it would not be fair, logical or coherent for Ofcom to use an out of date set of RFS data as the base year for the forthcoming WLR and LLU charge controls (the "Charge Controls").

50. BT cannot see the justification for using cost data which relates to the year 2011/12 rather than 2012/13. The 2012/13 data is more recent and will be more representative of the position during the Control Period. That is particularly so given that 2012/13 is more likely to reflect the changing weather patterns and customer demands recently experienced.

51. Furthermore, if Ofcom adopts 2011/12 as the base year, it will inevitably be necessary to forecast the base year data forward through 2012/13 even though actual cost data is available for that latter year. This approach is illogical and introduces an unnecessary margin for error.

52. BT also notes that the caveat made by Ofcom in paragraph 6.21 of the Consultation relates only to cost allocation rules. This recognises that, as far as the underlying cost data is concerned, the 2011/12 RFS are plainly not the appropriate starting point for setting the Charge Controls.

53. Secondly, the caveat made by Ofcom in relation to such cost allocation rules is unwarranted. BT takes due care and diligence to prepare its RFS in accordance with the relevant cost accounting and accounting separation framework imposed by Ofcom, and the independent auditors to BT and Ofcom (PwC) are required to confirm whether this has been done.

    - As part of its preparation of the RFS, BT reviews and updates attribution and valuation methodologies and non-financial data sources on an ongoing basis, improving them where necessary, in order to ensure that they are appropriate.

    - As part of its audit of the RFS, PwC conducts a detailed assessment of the appropriateness of the methodologies' robustness, objectivity and granularity, considering the selection of cost driver/valuation method, key modelling assumptions and level of disaggregation of analysis.

[26] Consultation, paragraph 6.21

54. PwC provided an unqualified audit report on the 2012/13 RFS, providing assurance in respect of the WLA and WFAEL markets to the highest "fairly presents in accordance with" or "FPIA" standard, which requires extensive audit work and wide-ranging application of expert professional judgment.

55. This is the very process of audit which Ofcom has relied on in support of its decision to adopt a cost model based on the RFS. It is correct to say that the cost allocation rules in the RFS may change from year to year, but such changes are made where they are justified as improvements to the RFS, and only where they withstand the high level of scrutiny described above. The mere fact that there have been changes to the cost allocation rules is not therefore a reason not to use the 2012/13 RFS. Indeed, the fact that changes have been considered appropriate is a positive reason to use them in preference to older data which has been superseded.

56. Notwithstanding these general points, BT considers that there are compelling reasons for the particular changes in cost allocation methodology which have been adopted in the 2012/13 RFS. BT will provide to Ofcom (and publish) a separate report setting out the reasons for, and effects of, all material methodology changes made in the 2012/13 RFS. Production of such a report will provide Ofcom and all stakeholders with additional visibility of the nature and effect of the changes made, and additional assurance that the improvements made to the RFS this year are warranted.

57. In summary, an approach which uses superseded rather than most recent data cannot give proper effect to Ofcom's statutory duties, nor will it achieve the benefits which Ofcom seeks to achieve by moving to a new RFS-based cost model. Ofcom will be provided with an itemised explanation of the nature and effect of the material methodological changes which are reflected in the up to date RFS. In those circumstances, there can be no proper justification for Ofcom departing from the most recent audited data. If Ofcom is nevertheless considering doing so, it will be incumbent on Ofcom to consult further and subsequently give detailed reasons, on an item by item basis, why the most recent, audited cost allocation rules should not be adopted as the basis for the forthcoming Charge Controls.

4 Ofcom's Modelling Approach to the Charge Controls

4.1 Change of modelling approach

58. For the proposed Charge Controls, Ofcom has departed from the modelling approach used in setting the current WLR and LLU charge controls. While this is a new approach to setting charges for LLU and WLR, the generic approach employed here has previously been adopted when setting charges for other services such as Openreach Ethernet services and Wholesale Broadband services.

59. Ofcom highlights the benefits of this new modelling approach, in particular the familiarity of stakeholders with RFS cost models, its basis on audited RFS data and the greater level of disclosure it makes possible. BT agrees that the approach has merit and that in particular the level of disclosure is appropriate for the purpose of setting charges.

60. In response to Ofcom's call for inputs on the fixed access market reviews (the "CFI")[27], BT raised several concerns about Ofcom's proposed change of modelling approach[28]. Ofcom has addressed a number of these concerns in the Consultation but there remains an issue with the CVEs and AVEs used by Ofcom.

61. Ofcom uses CVEs and AVEs in its modelling: their purpose is to capture the yearly cost change due to cost component volumes changes (based on Ofcom's volume forecast). AVEs and CVEs are no more than the long run incremental cost ("LRIC") divided by fully allocated cost ("FAC") for each cost component (LRIC to FAC ratio(s)). The FAC numbers are derived from BT's ASPIRE financial system, as are the costs in the RFS, and the LRIC numbers are derived from BT's LRIC model which uses ASPIRE inputs. As such the AVEs and CVEs are estimated using a set of financial data consistent with that used in the RFS.

62. Generally, one would expect a LRIC to FAC ratio of less than one since the LRIC value is estimated by taking away fixed and common costs ("FCC") from the FAC for the cost component. Put another way, when there is an extra unit of output, that unit costs less on an incremental basis because FCC don't change with volumes. In the main, the CVEs and AVEs that Ofcom uses here preserve this relationship. In the small number of instances where the CVEs are greater than 1, the costs are not material.

63. BT has reviewed the values used by Ofcom in its cost modelling and assessed whether the CVE and AVE values are sensible given the drivers of costs for each cost component. Broadly the cost volume relationships ("CVRs") appear sensible.

64. The comments above are specific to these Charge Controls and to circumstances where the overall volumes of lines are increasing slightly. In circumstances where volumes are falling, it is not as clear cut that an unadjusted CVE model would be appropriate. In the short term, if service volumes are declining, the network used to support the services generally remains the same.

65. Such a circumstance applies to PSTN linecards. Openreach expects most costs will remain fixed over the Control Period as they relate to a relatively fixed quantity of linecards and therefore the cost will not reduce much due to the forecast decrease in WLR line volumes. Forecast WLR lines reduce during the Control Period and Ofcom uses a CVE for PSTN linecards of 0.87. In Ofcom's modelling, this means that if, for sake of argument, WLR lines decline by 1 million lines and the linecards supporting those 1 million lines cost £10 million in the base year, then PSTN linecard costs in the final year of the controls, purely associated with the 1 million decline in lines, would be £1.3million. In fact, it would be more reasonable to assume that the linecard costs in the final year would be closer to £10 million as BT has no way of avoiding most of the cost.

[27] Ofcom, Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 - Call for Inputs, 9 November 2012.

[28] Consultation, paragraph 6.35

Therefore, BT proposes that Ofcom assume a CVE nearer to 0 for PSTN linecards in order that its cost modelling makes more sense.

4.2 Anchor pricing

66. In response to the CFI, BT supported the anchor pricing approach proposed by Ofcom[29] and it remains of this view. In essence, this is because:

    - BT has no plans to close down the existing copper network[30]; and
    - it is expected still to be the primary infrastructure in the UK for carrying voice, current and next generation broadband for the foreseeable future.

67. Therefore, it is entirely appropriate that the price of NGA services should be anchored to CGA technology. This approach is in line with the prevailing view that there is no prospect of NGA becoming the Modern Equivalent Asset ("MEA") for the copper network in the foreseeable future.

68. It follows that Ofcom should model Openreach's costs of providing CGA services as if no NGA was provided – i.e. lines are entirely copper-based. This is clearly Ofcom's intention. However, Openreach is concerned that the modelling approach fails to accurately reflect the cost of such a hypothetical network.

69. Openreach's understanding is that Ofcom's model:

    - identifies the FAC of providing CGA services in the base year and generates unit FACs for WLR, MPF and SMPF rentals based on actual base-year volumes;
    - adjusts those base year costs to reflect the costs of providing the hypothetical all-copper network, with no NGA provision, by (i) increasing the volume of SMPF rentals in the base year in order to replace the actual volume of GEA FTTC in that year; and (ii) multiplying this extra volume by the unit FAC for SMPF;
    - forecasts FAC in the final year based on assumed volumes in the hypothetical all-copper world and other forecasting parameters in the model (efficiency, AVEs, CVEs, etc);
    - splits the forecast FAC between LRIC and FCC; and
    - allocates the FCC across each copper line (whether MPF, WLR-only or WLR+SMPF) in the model.

70. This approach would appear to overlook the fact that actual NGA volumes in the base year are being allocated FCC that would – absent that volume – have been allocated to CGA services. This will mean that the base year FAC data for CGA services will give an understated view of the FAC of providing the hypothetical all-copper network. Ofcom must update the base year in the model to 2012/13 ahead of finalising the Charge Controls. As part of this process, Ofcom will need to identify the FCCs across NGA and CGA services and reallocate that cost in a way that is consistent with the allocation methodologies in BT's RFS and reflects the adjusted base year volume of SMPF rentals and the removal of all NGA volume. This would increase the overall level of cost in the base year of the model as at least a proportion of the FCC shared across CGA and NGA (as well as across and other services) will be reallocated to CGA.

[29] BT, BT"s response to Ofcom"s Call for Inputs on the Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30, 8 January 2013, response to Q6.1.

[30] Answer to Question 4.15 in this Response.

71. Openreach would expect that Ofcom would identify the FCC allocated to NGA by deconstructing base year FAC data into LRIC plus FCC. The LRIC of NGA services would clearly not be included within the model as these costs would be avoided in the hypothetical all-copper world.

72. To provide some sense of the magnitude of this issue on the basis of the 2011/12 base year data used by Ofcom to generate the cost information in the Consultation, we estimate that Ofcom's approach adds an additional [✂] into the model to reflect higher base year volumes of SMPF, but that around [✂] of FCC allocated to NGA in the base year should be reallocated to CGA in the hypothetical all-copper model.

4.3 Equal cost apportionment to WLR/MPF

73. BT supports Ofcom's approach, whereby the same or similar share of common costs is recovered from an MPF line as from a WLR+SMPF line and that SMPF should be treated, for cost purposes, as an overlay service[31].

74. Given Ofcom's anchor pricing approach outlined in section 4.2 above, it follows that each line, whether copper-based, fibre-based or a hybrid of the two should recover the same or similar common costs.

4.4 Specific modelling issues

4.4.1 Efficiency

75. Ofcom has struck the wrong balance between 'carrot' and 'stick' and has set an efficiency target that is not substantiated by the evidence it puts forward in the Consultation.

Ofcom has struck the wrong balance of 'carrot' and 'stick'

76. Best practice dictates that a deliberate balance should be struck between the 'carrot' under a price control (making over-achievement possible) and the 'stick' (requiring efficiency improvements to recover costs). The target *should* be challenging, but the target should not be such that "yet further savings"[32] cannot be identified and realised. The target ought to be one which BT can reasonably be expected to exceed through very effective management and forensic attention to cost control. This was exactly the position of the Competition Commission (the "CC") when it last considered the question of BT's efficiency in 2010; having considered at a number of sources of information, the CC stated:

> *We have satisfied ourselves that the approach that we have adopted reflects a properly challenging target, recognizing the costs that may be incurred, and also that there may be scope for yet further savings.*[33] *(Emphasis added)*

77. Setting a target which is unobtainable over the timescale of the control also has serious detriments. By not permitting the recovery of efficiently-incurred costs, the funds available for the future investment needed to maintain and improve the network will be squeezed.

78. Ofcom should give proper consideration to this balance and to align its approach with those it has used in the past, and used by other UK regulators when setting price controls, to set a target it justifies as being "stretching but achievable", and which we consider is far lower than the current assumption of 5% each year.

Ofcom's application of Openreach PVEO analysis double counts efficiency savings

[31] Consultation, paragraph, 3.8

[32] The Carphone Warehouse Group plc v Office of Communications Case 1111/3/3/09, CAT Determination 31 August 20101. 2.231(d)

[33] The Carphone Warehouse Group plc v Office of Communications Case 1111/3/3/09, CAT Determination 31 August 20101. 2.231(d)

79. In setting the efficiency target, Ofcom relies heavily on Openreach's own Price Volume Efficiency Other ("PVEO") analysis of actual and forecast efficiencies. The PVEO analysis is used as a management tool by Openreach to evaluate and adapt its ongoing efficiency programmes as well as to make informed decisions about future efficiency programmes. Ofcom are trying to forecast the average cost to provide and maintain WLR or LLU services, but this internal analysis is not intended to reflect how the average cost of maintaining and supporting a line has changed.

80. The way in which the PVEO analysis works is to break down changes in total costs into those assessed as being due to Price (P) changes, Efficiency (E) changes and Volume (V) changes. The P, V and E estimates are constrained to sum to the known change in cash costs and are jointly determined. Efficiency is not a residual after P and V have been independently input into the PVEO, but is co-determined with V. Efficiency cannot therefore be used without an understanding of the corresponding V. What we term the "unadjusted E" is the E which is in BT's PVEO but which is based, for charge control purposes, on an inappropriate V[34].

81. Openreach has identified two key issues regarding the use of unadjusted E from its PVEO analysis described above.

    - Ofcom states that the efficiency rate set should be independent of volume effects and input price changes, and should capture the effect of all means of delivering efficiency savings *"including the savings that might be achieved by doing things less often (e.g. through reduced fault visits) or more quickly (e.g. through reduced task times) and for less money"* (emphasis added). Openreach has counted the things that we do more often (for example increased fault visits per line) in its V, therefore overstating efficiency for Ofcom's purposes. By using an E from Openreach's PVEO that is inconsistent with Ofcom's modelling approach, Ofcom is effectively double counting savings.

    - Ofcom's model is based on actual costs in the base year, therefore the E should be based on the change in Openreach actual costs. The PVEO analysis recognises the impact of cost avoidance actions / programmes. The approach is that the cost of faults anticipated without such actions are included in the V assessment whilst the benefits of the activity (in terms of faults assessed to have been avoided) are included in the E assessment. What this means is that the E Ofcom uses is not based on the change in actual costs (which is relevant to the modelling) but includes cost increases that we assess we have avoided.

    On a cash basis, addressing these two issues results in efficiency c. 2% below the forecast for 2012/13 used by Ofcom and this should be adjusted further so that it is consistent with the accounting basis used by Ofcom for estimating costs in its forecast model.

Senior Management statements and analyst reports

82. Ofcom quotes comments by both BT's Group Finance Director[35] and Openreach's CEO[36] to substantiate the reasonableness of its assumption of 5% efficiency gains over the period to 2016/17. Notwithstanding the methodological points made above, the comments do not provide such substantiation.

83. BT's Group Finance Director said that cost reduction programmes would continue to deliver benefits for the Group "in the next two to three years" (up to 2015/16) but no overall estimate of the total "opportunity" was given, except that the £1bn was identified as being clearly within

[34] For clarity of argument, Openreach has not referenced Other (O) although this is also estimated and has a very small impact on the Volume (V) calculations.

[35] Consultation, paragraph A7.33

[36] Consultation, paragraph A7.41

scope, and could even be exceeded. Therefore, the comments do not support an interpretation that the rate of reductions would be 5% p.a. in real terms until 2016/17[37].

84. Ofcom also asserts that analysts' views substantiate the reasonableness of its assumption of 5% p.a. efficiency gains over the period to 2016/17.

> *"In summary, analysts suggest that BT, and Openreach in particular, has the potential to continue to cut costs but that it may get increasingly difficult to achieve the reductions. This view is consistent with BT's public statements"*[38]

85. What the analysts do believe is that even though cost reduction "may get increasingly difficult", BT's track record and commitment means that it is likely that BT can deliver on its public announcements. However, the most recent consensus forecasts for Openreach are that cost savings (in nominal terms) are likely to be relatively modest, with most of the Group efficiencies being realised by Retail and Global Services. The consensus view is that Openreach will hold costs approximately flat in nominal terms over the period to 2016/17[39].

86. In terms of "real" efficiency, this implies aggregate cost savings in line with inflation (c. 2.3% measured against the consumer price index ("CPI"); or c. 3% against the retail price index ("RPI")). Of course, true economic efficiency requires an adjustment for volume changes which the analysts do not attempt.

External benchmarking

87. Ofcom's analysis makes limited reference to external benchmarking, referring to BT's recent analyst briefing for its 2013 year end results and to "limited" data Ofcom gathered from Virgin Media and KCom regarding efficiency savings made on their own network.

88. The analyst briefing (quartile comparisons) that Ofcom describes as "External Benchmarks" give weight to financial measures of performance, such as Opex cost relative to exchange line revenue earnings and therefore provide no basis for Ofcom's task.

89. BT commissioned Deloitte to update their comparative efficiency study of major EU operators in order to evaluate how efficient BT is compared to its European peer-group and to quantify the trend rate at which efficiency is improving[40]. Deloitte's study is broadly consistent with a trend rate of efficiency improvement for BT of between 2.5% and 3.0% p.a. on a forward looking basis. This is more reliable than the limited cross checks Ofcom has done with Virgin Media and KCom[41].

Historic data and trends

90. Ofcom assumes that historical efficiency achievement is indicative of future achievement.[42] Ofcom evidences historical data over the five year period to 2011/12. Openreach now has actual rather than forecast data for 2012/13 and this should be included in Ofcom's calculation of the historical average, taking the period to 6 years.

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[37] If one considers there are £15billion of costs p.a. then using Ofcom's assumption of 5% would result in an estimate of c. £2.8bn savings (rather than £1bn).

[38] Consultation, paragraph A7.42

[39] BT, Pre Q2 2013-14 Consensus, July 25, 2013 available at http://www.btplc.com/Sharesandperformance/Quarterlyresults/Quarterlyresults.htm

[40] BT Wholesale's response to Review of Wholesale Broadband Access Markets, Annex 4: Analysis of the Efficiency of BT's Regulated Operations. A report by Deloitte, 25 September 2013 and answer to Q7.13 of BT's response to the WBA Charge Control.

[41] Consultation, paragraph A7.46

[42] Consultation, paragraph A7.21

91. Taking account of the draft BT data for 2012/13, the average cash cost efficiency, including NGA, over the last six years is [✂] (adjusted for one-off items), the range of efficiency over that period was [✂]. These figures should be reduced further to recognise the impact of the factors, including scale effects, as discussed in the Oxera report (Annex C section 3.2).

92. This draft is currently being analysed and Openreach will submit the full PVEO analysis to Ofcom in due course along with the updated forecast efficiency from BT's most recent reforecasting and medium term planning processes.

93. In paragraph A7.26 of the Consultation, Ofcom explains that it has conducted a high level analysis of BT's RFS and this indicates to Ofcom that BT has achieved an average efficiency of 6% in the WLA and WFAEL markets over the last three years.

94. BT has engaged Oxera to assess Ofcom's analysis of the RFS and the report from Oxera contained in Annex C. To summarise Oxera's findings, Ofcom are incorrect to perform the analysis on the WLA and WFAEL markets in isolation. As Ofcom has noted in other recent charge controls, to do this risks treating changes in allocation within Openreach as efficiencies and therefore analysis of Openreach's operating costs is more appropriate. Oxera has found that if performed correctly, the operating cost efficiency for Openreach, based on RFS data over the three year period, was 5%[43] as opposed to the 6% claimed by Ofcom[44] with a declining trend in 2011/12 and 2012/13, the most recent years, where the average was just over 3%. This trend can be seen in table 4.1 below.

Table 4.1: The declining trend in Efficiency

	2009/10	2010/11	2011/12	2012/13	4 Year Average	2 Year Average
Oxera Scenario 2*	-6.2%	-6.3%	-3.5%	-3.3%	-4.8%	-3.4%

A single efficiency rate is wrong

95. Ofcom's cost modelling is based on RFS costs or costs an accounting basis.

96. On an accounting cost basis, the average efficiency generated by BT would be below the average cash cost efficiency for two reasons:

    - Operating Costs ("Opex"), which represents around three quarters of the total cash costs for Openreach, has a lower efficiency rate than the average; and
    - the higher efficiency being generated on capital expenditure ("Capex") would be amortised over the lives of the respective assets.

97. The approach taken by Ofcom penalises BT and prevents it from recovering its efficiently incurred cost. This is because Ofcom is using an average efficiency rate based on cash costs but is applying that to the accounting cost in its model.

98. Therefore, BT does not support a single efficiency rate and Ofcom should assess, set and apply a separate Opex and Capex rate in its modelling.

Conclusion

99. In summary, the target range set by Ofcom is not substantiated by the evidence it has put forward, in fact, this evidence, correctly interpreted suggests a range of 2.8% to 5.0%. This is set out in table 4.2 below.

[43] Oxera Annex C, table 4.2 scenario 2, page 10

[44] Consultation, paragraph A7.24

Table 4.2: Ofcom's target range

	Lower	Average	Upper
Oxera historical RFS analysis (average)	-3.3%	-4.8%	-6.3%
Oxera Regulatory PVEO analysis (Opex only)	-2.0%	-3.3%	-3.8%
Deloitte benchmarking	-2.5%	-	-3.0%
Consensus of brokers' expectations	-	-3.0%	-
Openreach PVEO historical average (incl. draft 2012/13)*	-3.0%	-4.3%	-5.6%
[✂]	[✂]	[✂]	[✂]
Average of above	**-2.8%**	**-4.0%**	**-5.0%**

* Draft efficiency value for 2012/13, this is likely to reduce when analysis is finalised

** Openreach will submit updated forecast efficiency once BRF1 and MTP processes are completed

4.4.2 Volumes

100. Ofcom's volume forecast is that the total of all Openreach lines will grow by 0.67 million from 24.36 million lines in 2011/12 to 25.03 million lines in 2016/17. This total comprises a reduction of 0.18 million in business lines[45] which is more than offset by Ofcom's view of residential lines which are forecast to grow by 0.84 million[46].

101. BT's view is that the forecast of an increase of 850,000 new residential lines is much overstated for two reasons. First, Ofcom's assumptions regarding household growth in the UK are too high and, secondly, Ofcom does not recognise the likely growth in the level of mobile only households over the forecast period.

102. As set out in Annex A, the growth from the increase in households is likely to be 470,000 lower than assumed by Ofcom. The main reason for this is that dwellings growth (including conversions, less demolitions, and uplifted to take account of vacant properties coming back into use) is much lower than projected household growth over the forecast period. The difference between the dwellings forecast and the household projections is explained by the fact that the latter is based on population trends, which are inherently uncertain and unconstrained by the future supply of residential properties.

103. Looking over the forecast period, it is clear that a housing constraint is likely to bite – there are not enough new homes[47] to accommodate (in a self-contained unit of accommodation behind a closed door) all the projected new households. To believe Ofcom's forecast, for every year of the forecast period, household growth in the UK would have to exceed the highest year's growth in housing ever achieved in the last 20 years (with one small exception)[48]. In short, where there is no new home, there is unlikely to be the demand for a new fixed line to the home, whatever the level of projected household growth based on population trends.

104. Secondly, Ofcom assumes that that the proportion of mobile only homes will remain constant at 15% of the total number of households. The recent UK data[49] does not take account of the launch of 4G services in the UK over the forecast period. We are not suggesting that 4G is in all respects comparable to fixed copper services – 4G will offer the advantage of mobility but may be more prone to congestion, and pricing may be a relative consideration. However, for an increasing number of households, 4G reduces the need for a fixed service to such an extent that the household will decide to go mobile only even though it requires broadband connectivity.[50]

[45] That is, lines supplied to businesses.

[46] Consultation, Annex 9

[47] Including conversions, homes from change of use and making an allowance for long term empty homes being brought into the used housing stick.

[48] Department for Communities and Local Government, *Live tables on dwelling stock (including vacants)*, 21 May 2013, available at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants

[49] Ofcom technology tracker wave 2 2013 - MAIN SET, 13th May to 27th July 2013, available at: http://stakeholders.ofcom.org.uk/binaries/research/statistics/2013Sept/Ofcom_Technologyw2-2013.pdf

[50] That is, the incremental benefit of a fixed service on top of a 4G service may be les that the incremental cost

This may not be a "mass market" substitution, to use the term in the Consultation, but still a significant effect at the margin.

105. In fact, in countries where 4G has been launched[51], the evidence is of a material increase in the growth of mobile only homes. Market research commissioned by BT further supports this trend in the UK, as it suggests that certain customers do indeed see 4G as a substitute for a fixed line. This is particularly the case for households which consist of a single person or are rented properties. An increase of mobile only households by 3% to reach 18% by 2016/17 is clearly warranted.

106. We discuss these issues in more detail in Annex A of this response.

4.4.3 WACC

107. Ofcom is required to use the RPI for the purposes of the weighted average cost of capital ("WACC") calculation and this figure should be consistently applied.

108. Ofcom quotes two different rates of RPI in its Consultation: in Annex 15 it quotes RPI at 2.8 % [52] and applies it in the WACC calculation, while in section 3 it notes that the average of independent forecasts for RPI over the forecast period is 3.3%[53].

109. The latter rate of 3.3% is clearly the more up-to-date and relevant figure, and Ofcom should therefore use an RPI of 3.3% in its WACC calculation. This would result in a higher WACC being applied in the Charge Controls.

110. More detailed comments on WACC are provided in the BT Group Response.

4.4.4 Co-mingling

111. There are a large number of co-mingling services[54] in the Openreach price list (c. 100) and modelling costs is therefore a challenge.

112. There are three significant flaws in Ofcom's approach to estimating the X for the co-mingling basket:

- **The starting prices are incorrect**: Ofcom should update its modelling to take account of the latest available prices.

  Ofcom assumes that Openreach increased its prices by 1.8% in 2012/13. In fact, Openreach reduced prices overall by [✂][55]. The result of Ofcom's assumption is that prices start at least 15% higher than they actually are and the X is therefore significantly overstated. This unfairly penalises Openreach by not recognising the very large price reductions made to the co-mingling basket in 2012/13.

- **There is negative Capex associated with room build:** Ofcom should replace negative Capex of [✂] over the Control Period with positive Capex of [✂] over the Control Period.

[51] Analysys Mason, Western European telecoms market: trends and forecasts 2013–2018

[52] Consultation, table A15.1

[53] Consultation, footnote 104

[54] These services can be broken down into three broad categories: room build, hostel rentals and tie cables.

[55] Based upon fall in revenue when replacing Ofcom's forecast of prices for 2012/13 with the actual prices within the 2012/13 RFS. This was the result of various price reductions affecting co-mingling services, in particular tie cables, on 1 October 2012:
http://www.openreach.co.uk/orpg/home/products/pricing/notificationDetails.do?data=ThQLPOgdo8c%2FpcQlNXj7BVoAzMfOCIw%2B7d4ELMHNgDdhjhkYVP5xfMmu%2BBXOk1KXlmbMkfEWV9Hg%0AS5od5xPk5mMrG2JXeytL6pFJZpTLM42nMTEF%2BKjWmexJt5mYlgMVVCBTHUk%2FAkGGPXhiPyurwQ%3D%3D

Over the Control Period the volume of MPF lines is forecast to double. This significant growth will result in demand for expansion of existing points of presence ("PoPs"). The expansion of existing PoPs requires Openreach to expend capital on extra racks, shelves, mains and back-up power etc. (the room build services) in order to service the increase in MPF demand. Any reasonable forecast of Capex would therefore be positive.

The Ofcom model includes a calculation of additional gross replacement cost ("GRC") (Capex) required as a result of forecast volume changes[56]. As the forecast of new PoPs reduces from 1600 in 2013/14 to 300 in 2016/17, the model generates a negative amount for additional GRC (Capex) over that period of [✂] (Room Build cost component[57]). This is clearly incorrect as Openreach will expend capital to service each new and upgraded PoP installed.

Openreach proposes that Ofcom replace the Capex forecast in its model with a Capex forecast that more closely aligns with the expected growth in MPF volumes. Openreach estimates that the value for Capex for the room build cost component to be [✂] million over the Control Period.

- **The volume driver for MPF hostel rental costs understates expected costs**: Ofcom should use MPF and external SMPF lines as the volume driver rather than the forecast number of PoPs.

  Most LLU CPs now have established a national footprint of POPs and the rate of growth in new POPs is declining, as can be seen from the 'MPF Hostel Rental' volume forecasts in the Ofcom model. However, demand for MPF lines is forecast to grow at a much higher rate than the number of PoPs. MPF hostel rental costs[58] will increase in line with the demand for MPF lines (and external SMPF lines) because this increase in demand will be met by expansion of existing PoPs (PoP upgrades), rather than building new PoPs. Therefore, using the number of PoPs to forecast costs understates expected costs with the result that the X is overstated by c.2%. Accordingly, Ofcom should use MPF and external SMPF lines as the volume driver rather than the forecast number of PoPs.

4.4.5 CPI and RPI

113. Ofcom has decided to replace RPI with CPI in the control formula. BT considers that there is little justification for a move to CPI as the inflation index. RPI continues to be published by the Office for National Statistics and has many different uses. BT notes that Ofcom has used the RPI as an inflation index in setting the Network Charge Control[59] consistent with its position, explained in the Leased Lines Charge Control Consultation in July 2012, that RPI continues to be the price inflation measure used in price controls. Given this, BT has to question why there is a need for a change in these Charge Controls.

114. BT does appreciate that the use of CPI ought to make no difference to nominal prices which in itself seems to be another reason not to make the change as further complications are added for no benefit. That said, irrespective of the choice of index, it is essential that Ofcom is consistent in using the same inflation forecast in its cost modelling as in the calibration of X once the modelling has been completed.

[56] The formulae can be found in rows 451-483 and rows 632-663 of the worksheets called 'Unit Capital Costs' and 'Unit Capital Costs (RAV)'

[57] CL131 LLU room build

[58] These include: maintenance of LLU plant, accommodation space rental charges; and LLU plant depreciation.

[59] Ofcom final statement Review of the fixed narrowband services market dated 25 September 2013.

115. Ofcom's modelling uses *nominal* cost changes, *RPI* for capital costs and then appears to intend to frame the control in *CPI*-X terms. BT's view it would be simpler and aid transparency for Ofcom to use only one method or as a next best option a maximum of two methods.

116. Further detail on the choice and application of the inflation index has been provided in the BT Group Response.

4.4.6 Pay inflation

117. Ofcom takes the headline Communications Workers Union ("CWU") pay settlement to represent future pay increases for Openreach as a whole, but omit the pay progression awards each October. This approach results in an under assessment of pay costs and the resultant historical trend, where headline pay settlements are lower than the actual year-on-year increases in Openreach staff costs. Ofcom should make an upwards adjustment of 0.1% in pay inflation to reflect this trend. This would result in a more reasonable forecast increase in staff costs for 2013/14 of 2.9%.

4.4.7 Directories price and cost adjustment

118. Ofcom proposes to make an adjustment of £2.23 to the price of WLR rental. It appears that the £2.23 value is taken from paragraph A5.5 of Ofcom's March 2012 WLR LLU Charge Control Statement (the "March 2012 Statement") as the forecast of cost for directories in 2013/14. This is a forecast based upon 2009/10 RFS information. However, Ofcom has a more up-to-date value for the relevant cost – the £1.43 value taken from the 2011/12 RFS and quoted in table 6.7 of the Consultation.

119. Therefore, it appears that Ofcom is using an out of date forecast amount in its model, and accordingly, the start price adjustment is overstated. Ofcom should use the most up-to-date forecast of the cost for directories in 2013/14; this should now be based on the reported costs in the 2012/13 RFS i.e. £2.06.

120. If Ofcom decides not to use this more up to date figure it should explain how the adjustment it makes is related to the costs for directories.

4.4.8 Care Level 1 and Care Level 2 cost differential

121. In the RFS, when allocating repair costs to products, BT weights the volumes of all Care Level 2 ("CL 2") products by a factor of 1.2 to represent the difference in unit costs between Care Level 1 ("CL 1") and CL 2. This treatment of costs reflects BT's view that the unit cost of CL 2 is 20% higher than the unit cost for CL 1. In its model, Ofcom replaces this 20% with an uplift of 5.4% - recognising the fact that the unit cost to provide CL 2 is greater than that for CL 1, though disagreeing with Openreach on the degree of this unit cost difference.

Total repair costs

122. Ofcom does not increase total 2016/17 costs in its model to reflect the expected change in Care Level mix as, in particular, MPF volumes grow. This will result in a significant under-statement of total 2016/17 costs.

123. Clearly, given the forecast increase in the proportion of CL2 products, the overall costs for repair will grow, all else being equal. It follows, in this respect, that the total costs in the base year are not representative of the total costs to be expected in 2016/17. This is irrespective of whether the difference in unit costs is 20% (as Openreach believes) or Ofcom's 5.4%. It is therefore crucial that Ofcom adjust their modelled costs to increase overall repair costs in 2016/17 in order that Openreach can recover its efficiently incurred costs.

Allocating repair costs

124. Openreach agrees that if there are significant differences in fault rate between MPF (CL2), WLR (CL1) and SMPF services, then this should be reflected in Ofcom's modelling. Ofcom proposes to maintain the same relative fault rates of MPF, WLR and SMPF services, used in the current control. The premium Ofcom allows (5.4%) to account for the difference between CL 1 and CL 2 is almost certainly understated and should be updated based on the best available information.

125. Openreach expects Ofcom to consult on both of these issues in its upcoming service consultation and to change its modelled costs in accordance with its findings. Ofcom should consider both the level of costs to be expected in 2016/17 and separately the unit cost differential between CL 1 and CL 2.

126. Please see Openreach's Service Response for more details.

5 Cost Adjustments

5.1 Broadband Line Testing

127. [✂]

128. [✂]

129. [✂]

130. [✂]

131. [✂]

132. [✂]

133. [✂]

134. [✂]

135. [✂]

136. [✂]

137. [✂]

5.2 Cease charges

138. Ofcom proposes to add MPF and SMPF cease costs back into the MPF, SMPF and WLR rental cost stacks[60]. However, Ofcom has not made this adjustment in its model and should correct this when it finalises the Charge Controls.

139. Cease charges are split into two types:

- Soft ceases (software only)
- Jumper removal ceases (physical removal of jumper at MDF)

140. In the current WLR and LLU charge controls Ofcom decided that soft ceases would be free of charge and a final year price adjustment was made to recover relevant costs through the MPF and WLR rental charges. For these Charge Controls, Ofcom makes the following comments in the Consultation:

> *"4.163 In the March 2012 Statement we decided to set MPF Cease and SMPF Cease service charges to zero and to recover the respective CCA FACs from the respective MPF rental and SMPF rental services, to allow appropriate recovery of the incurred costs.*[205]
>
> *4.164 For the next charge control (from 2014/15 to 2016/17), we propose to set MPF Cease and SMPF Cease charges at zero*[206] *(as also under the current controls). However, we propose to recover the MPF/SMPF Cease LRICs from the respective line rental charges and their common costs from MPF and WLR line rental charges on an equivalent per line basis.*[207]
>
> ---
>
> [205] *See March 2012 Statement, paragraphs 4.113 to 4.119*

[60] Consultation, paragraphs 4.162-4.167

[206] *Note that these services are not the "MPF Ceases" and "SMPF Ceases" aggregates as in the RFS 2012. The "MPF Ceases" as in the RFS is an aggregate of three services including: MPF Cease charge (soft cease which involves no jumpering work and we propose to set at zero), MPF MDF Remove Jumper Order Singleton charge (controlled in the MPF ancillary basket) and MPF MDF Remove Jumper Order Bulk charge (controlled in the MPF ancillary basket). The "SMPF Ceases" as in the RFS is an aggregate of four services including: SMPF Cease charge (soft cease which involves no jumpering work and we propose to set at zero), SMPF MDF Remove Jumper Order Singleton charge (controlled in the SMPF ancillary basket) and SMPF Flexi Cease Fault Investigation charges (controlled in the SMPF ancillary basket)*

[207] *See above our proposal on "LLU and WLR rentals". Our proposal on cost recovery for MPF/SMPF Cease is consistent with our proposal regarding cost recovery for rentals."*

141. The proposed treatment is slightly different from that in the current charge controls and requires two adjustments in the Ofcom model – one to point LRIC costs of the soft cease to MPF Rental and SMPF Rental, and one to point common costs to MPF and WLR Rental.

142. However, a review of the Ofcom model reveals that, while the cost stack for the cease product (including soft cease and also jumper removal) has been estimated by Ofcom, the costs of the soft cease have not been reallocated at all. In the current charge controls the price adjustment for ceases was approximately £0.30 per MPF (and WLR) Rental and we estimate that an adjustment of similar monetary value should be made for these Charge Controls.

5.3 Drop wire adjustment

143. In Ofcom's 2006 WLR Statement, Ofcom excluded the costs for drop wires installed up to December 2005 from the asset base, on Ofcom's understanding that this cost would have been recovered by the previous Retail charge controls. This adjustment has continued to be made in successive charge controls.

144. These drop wire costs are capitalised over 10 years. In 2016/17, there will be no capital costs in the RFS that relate to drop wires installed prior to 2006.

145. Therefore, BT agrees with Ofcom's proposal that this adjustment should be removed.

5.4 Pair gain

146. Digital Access Carrier System ("DACS") is a system that allows a single pair of copper lines between an exchange and a pole or roadside cabinet to be used to connect two customers to the exchange; this is called "pair gain".

147. DACS cannot be used with broadband, i.e. only voice services can be provided over DACS, which means that pair gain can only be applied to WLR. Unlike normal provision where if two customers were connected to the network there would be two copper pairs from the exchange to the customer premises, in the cases where DACS is employed, there are two short pairs from the cabinet or pole to the customer premises and one pair between the cabinet and exchange. In effect, two WLR connections are made using less than two full pairs worth of copper (as in the case of normal WLR or MPF). Ofcom included an adjustment for pair gain in its modelling for the current charge controls.

148. Ofcom proposes to remove this adjustment as it does not think it will be material by the end of the Charge Controls. Therefore, Ofcom's rationale here is the same that for removing the line length adjustment, namely it is not material, which Openreach supports. Indeed the impact of the two adjustments is of a similar size. Therefore given the adjustments tend to balance each other out and Ofcom proposes to be even handed in removing both adjustments, Openreach has no objection to the removal of the pair gain adjustment once Ofcom acts in a consistent manner and also removes the line length adjustment. Should Ofcom decide not to remove the line length adjustment then BT would propose that it also includes the pair gain adjustment for consistency's sake.

5.5 Line length

149. In 2005 a 'line length adjustment' was introduced to Ofcom's charge control modelling to reflect the view that MPF lines were expected to be shorter on average than WLR lines and was also applied in the 2009 and 2012 charge controls to reduce the costs allocated to MPF, but it has become smaller with each review. The difference in line length has become smaller over time as LLU roll out has increased and technology has improved. Ofcom applied an adjustment of 1.6% in the March 2012 Statement.

150. Sky and TalkTalk appealed Ofcom's decision, saying the adjustment should be larger. BT submitted information at that time, July 2012, to the confidentiality ring for those proceedings which suggested the differential at that time was likely to be closer to just 0.2%, resulting in this ground of appeal being abandoned by Sky and TalkTalk prior to CC reference.

151. This data evidenced that there is no significant difference in line length. Sky and TalkTalk had the opportunity in their appeal to challenge this analysis but chose not to do so. It would seem extraordinary now for Ofcom to go over old ground especially as Sky and TalkTalk have failed to put forward or substantiate why they think the information submitted by BT as part of the appeal should not be relied on by Ofcom. Moreover, there has been further expansion of the LLU footprint since the data was submitted which would logically lead to a further reduction to an already negligible difference.

152. Therefore BT agrees with Ofcom's proposal that this adjustment should be removed. As explained in section 5.4 above, if Ofcom decides not to remove this adjustment Openreach would expect it to be consistent and also not remove the pair gain adjustment.

5.6 BT Pension Costs

153. BT does not agree with the approach Ofcom sets out in respect of 'BT Pension Costs'. Ofcom has misunderstood BT's arguments and should adjust the regulated asset base to correct for the underestimate of the capitalised labour asset associated with the building of the copper network.

154. As a matter of course, BT invests in capital assets used for its network business. Where labour costs are incurred in building network assets that will be used for multiple accounting periods, those labour costs are capitalised. Labour costs include the costs of each employee's salary, bonus and pension. Since a proportion of total labour costs are capitalised, if any of these elements are underestimated then the capitalised labour asset will also be underestimated.

155. Had higher ongoing pension payments been made at the time, higher levels of capitalised pay would have resulted. The fact that there is now a pension deficit indicates that payments made by BT to the BT Pension Scheme to cover earned pension benefits (under the defined benefit pension scheme, now closed to new members) were underestimated in the past.

156. Therefore the true cost of building the network (principally the copper network) has been undervalued over time. Ofcom should adjust the regulated asset base to reflect this undervaluation.

157. BT has proposed a pragmatic means of estimating the size of the adjustment to its regulated asset base, namely by reference to its pension deficit repair programme. Ofcom must re-consider the information provided by BT and adjust the capital values to allow for the material under-estimation of capital values.

6 Price Control Design

158. The proposed design of the Charge Controls is likely to result in a number of unintended consequences, preventing economically rational pricing in line with Ofcom's own stated objectives. Accordingly, Openreach considers the following changes to the design necessary to avoid these problems:

    - Single ancillary service basket - the MPF ancillary service and SMPF ancillary service baskets should be combined into a single ancillary service basket in order to allow Openreach sufficient flexibility to price rationally i.e. to drive efficient CP behaviour without distorting the market or preventing Openreach from recovering its efficiently incurred costs;

    - Less restrictive sub-caps - Ofcom should remove sub-caps applied to the MPF, SMPF and Co-mingling baskets, or at least ensure that these are set at a level of no less than 7.5%, enabling Openreach to maintain or increase prices in line with upwards movements in costs;

    - Adjust the compliance starting price – Ofcom should use the price in effect at 31 March 2013 as the starting price for demonstrating compliance rather than the weighted average price for 2013/14, in order to allow MPF and SMPF prices to remain aligned.

159. Each of these points is addressed in turn below, followed by additional comments on the rounding of X.

6.1 Single ancillary service basket

160. While almost every item in the MPF ancillary services basket has a corresponding item in the SMPF ancillary services basket, there are two additional items in MPF basket – stopped line provide ("SLP") and working line takeover ("WLTO"). In practice, this means that not only are the price reductions for comparable SMPF and MPF ancillary services aligned, but WLTO and SLP prices also need to be reduced by an average of CPI-8.5%.

161. This is problematic when one considers that MPF New Provide can be used by CPs instead of SLP or WLTO, giving rise to an unnecessary engineer visit in these circumstances. However, MPF New Provide is subject to a different control of CPI-10.25%. While a basket control is meant to provide flexibility for pricing efficiently, that is not the case here; unless Openreach fails to recover fully its efficiently incurred costs, the price differential between these two sets of products will be reduced to the point that CPs will not understand why there is such a small difference in price when an engineering visit is required for one set of products and not the other.

162. Openreach has assessed three different options for how the basket design could be changed to resolve this issue and considers the optimal solution to be combining the MPF ancillary services basket and the SMPF ancillary services basket into a single basket. This will enable:

    - a price differential between substitute products to be maintained to drive efficient use of resources and meet CPs expectations;

    - comparable SMPF and MPF ancillary services prices to be aligned, which is logical and prevents and distortion between the markets; and

    - prices to be rebalanced across the rest of the basket to allow Openreach to recover all relevant costs with no financial penalty (which would be material).

163. This is explained in further detail in the response to question 4.10 below.

6.2 Less restrictive sub-caps

164. The sub-caps proposed significantly restrict Openreach's ability to rebalance prices within the currently contemplated MPF and SMPF ancillary services and co-mingling baskets.

165. Openreach considers that the proposed sub-caps may be unnecessary as there is no failure to correct and therefore no need for regulation. In any event, the sub-caps proposed by Ofcom are unduly restrictive as they:

- impede the flexibility intended by a basket control; and
- require each price to be reduced each year, regardless of the movement in costs[61].

166. Accordingly, Openreach considers that Ofcom should ideally increase the level of the sub-caps to 10% (as in earlier controls) or at the very least maintain the level of 7.5% in order to ensure the appropriate level of pricing flexibility. These points are explained in further detail in the response to question 4.12 below.

6.3 Weighted average price should not be used for starting prices

167. The draft legal instrument at Annex 17 of the Consultation requires compliance to be demonstrated based on the movement in the weighted average price for each product. This gives rise to unintended complications within the first year of the Control Period[62].

168. As can be seen from table 6.1 below, using a weighted average price for Year 0 of the control (2013/14) means that some starting prices across comparable SMPF and MPF products no longer align. This is the result of some temporary misalignment of prices during part of 2012/13; this was necessary in order to comply with the current WLR and LLU charge control and was rectified by the end of the year.

Table 6.1: Start prices: actual versus weighted average

	Start prices based on 31 March 2014 price			**Start prices based on weighted price**		
	MPF	**SMPF**	**Difference**	**MPF**	**SMPF**	**Difference**
Remove jumper (singleton)	£23.28	£23.28	-	£24.12	£25.05	-£0.93
Cancellation of orders	£11.25	£11.25	-	£10.80	£11.44	-£0.65

169. If CPI-8% were applied to the weighted average price this misalignment would continue for the duration of the Control Period.

170. In order to align prices, Openreach would be required to make larger price reductions to MPF Remove Jumper Singleton Charge and MPF Cancellation of orders for Provide, Migration, Modification or Amend than is required under the controlling percentage of CPI-8%. This would re-establish price alignment but would result in Openreach recovering [✂] less than it is entitled to over the Control Period.

[61] This is the case across the MPF, SMPF and co-mingling baskets where sub-caps of 5% are applied. This would not be the case for the MPF and SMPF ancillary services baskets (and is unlikely to be the case for the co-mingling basket) where sub-caps of 7.5% are applied.

[62] Please also see our response to the Fixed Asset market Review on the ISDN2 and ISDN30 controls, where we argue the same proposal, but for a different reason.

171. Ofcom indicates that with the introduction of a weighted average start price it is seeking to avoid 'gaming' of the Charge Controls in the form of price increases in the final month of the year to reduce the level of reduction required. However, as prices for 2013/14 are already set in a way that complies with the current WLR and LLU charge controls, Openreach is unable to make any further price changes in 2013/14 that would have the effect of 'gaming' the first year of the Charge Controls. In any event, Ofcom could eliminate the risk of 'gaming' and of misaligned MPF and SMPF prices by specifying the start prices for basket products (i.e. prices announced to be in effect on 31 March 2014) in the legal instrument.

172. Therefore, Ofcom should use the prices announced to be in effect at 31 March 2014 as the start price criteria for demonstrating compliance rather than the weighted average price. For consistency, Ofcom should consider this for all products being charge controlled (including ISDN2 and ISDN30).

6.4 Rounding of X

173. In the Consultation, Ofcom rounds the X for the Charge Controls to the nearest 0.25%[63] rather than the nearest 0.1% as it did for the current WLR and LLU charge controls. Ofcom provides no rationale for this change in approach and Openreach considers that X should continue to be rounded to the nearest 0.1% in the interests of accuracy.

174. If one considered MPF rentals, the difference between a 0.25% and 0.1% movement in the X is roughly £6.5m. Given the number of different individual controls the potential cumulative effect could be very material across the across the Charge Controls as a whole. Therefore, in the absence of any evidence that 0.25% is a more appropriate level of rounding Ofcom should continue to round to the nearest 0.1%.

[63] Consultation, footnote 351, table 7.3 and table 7.5

7 Answers to the Ofcom questions

175. This section provides Openreach's responses to the questions raised in the Ofcom consultation.

7.1 Economic and regulatory background to the setting of cost-based charges for LLU and WLR

Question 3.1: Do you agree with our proposal to impose an inflation indexed price cap? Please provide reasons to support your views.

176. This is dealt with in the BT Group Response.

177. Ofcom prefers an inflation indexed control over the alternatives of cost-plus regulation and retail minus regulation on the basis of its incentive properties. While BT does not propose to argue that cost-plus regulation or retail minus regulation are appropriate for LLU and WLR prices, it does consider that Ofcom's approach to efficiency in the Consultation fundamentally undermines this key property of an inflation index control and thus the basis for Ofcom's choice.

178. Incentive regulation of this type should provide Openreach with a fair prospect of out-performing what are reasonable targets for cost minimisation, and thus - by meeting its own more exacting targets - earning for its shareholders a rate of return above its cost of capital. However, Ofcom proposes to set an efficiency target for cost reductions based primarily on what Openreach has challenged itself to deliver (or has achieved in the past). This results in an inappropriate distribution of the benefits of aggressive management challenges between the owners of the firm and its customers. This in turn reduces the incentives for Openreach to set itself another round of challenging targets because (i) any record of achievement will be held as evidence justifying further price cuts; and (ii) any plans to reduce costs will be used in the same way.

179. BT considers this to be a fundamental concern and it comments further on this in sections 1.2.1 and 4.4.1 above and in its response to Question A7.2 below.

Question 3.2: Do you agree with Ofcom's proposal to use a CCA FAC methodology to establish the cost base for the next LLU and WLR charge controls? Please provide reasons to support your views.

180. BT agrees with the use of CCA FAC methodology to establish the cost base for the Charge Controls, particularly as it can be reconciled to BT's published and independently audited RFS. The Consultation refers to the fact that the CC essentially endorsed Ofcom's use of CCA FAC to establish the cost base for the current LLU and WLR charge controls[64], and BT agrees with the CC's reasoning and decision.

181. That said, CCA costs can be volatile year-to-year, which means that in any single year allowed capital costs can be unrepresentative of the average level of costs over the forecast period as a whole. This is for a number of reasons:

- CCA adjustments can sometimes crystallise underlying changes which have built up over a number of years;
- CCA costs can reflect input price volatility; and
- CCA costs may be sensitive to annual inflation, as higher inflation tends to decrease capital costs in the short term but increase them in the longer term[65].

[64] Consultation, paragraph 3.24

[65] This is because inflation increases the value of capital assets and the increase in valuation is taken as an offset against the depreciation charge.

182. As long as these issues are recognised and appropriately adjusted for, CCA costs ought to reflect underlying long-run costs of supply. For example, input price volatility can be addressed by indexation; whilst the sensitivity to annual inflation can be smoothed out by the use of average inflation over the forecast period so that an unrepresentative rate of inflation is not used.[66] In particular, an average over time should be applied, because Ofcom's approach is to base X on costs in one out of every three years i.e. costs in the final year of the control. Openreach makes a proposal in answer to Question 6.3 on this specific issue.

Question 3.3: Do you agree with our proposal that, for the purposes of these charge controls, BT's pre-1997 duct assets should continue to be valued on an indexed historic cost ("RAV") basis? Please provide reasons to support your views.

183. BT recognises that this issue has been dealt with by the CC[67] and that, regardless of BT's views to the contrary, the CC upheld Ofcom's approach.

Question 3.4: Do you agree with our proposal that, for the purposes of these charge controls, BT's post-1997 duct assets should be valued on a CCA basis based on capital expenditure indexed by RPI? Please provide reasons to support your views.

184. BT agrees that, for the purposes of these Charge Controls, BT's post-1997 copper and duct assets should be valued on a CCA basis based on capital expenditure indexed by RPI.

185. The CCA valuation of duct and copper assets in BT's RFS has recently been reviewed by BT and has been changed from an absolute basis to an indexed RPI approach for the 2012/13 RFS. BT considers this a more appropriate methodology in light of the complexity, size and nature of its access network as well as the uncertainty and volatility introduced by varying commodity prices, in particular copper.

186. In relation to duct specifically, the issue of RPI indexation was the subject of an appeal by Sky and TalkTalk (acting together) of the current LLU and WLR charge controls. In its Final Determinations of this appeal, the CC found that Ofcom did not err in using RPI for indexation[68] and BT accepts the CC's decision on this matter.

187. In any event, the choice of index does not impact the total of costs to be recovered over the lifetime of the asset, rather it influences the rate of depreciation. An index which increases faster than another will load relatively more costs into later periods, because the higher holding gain adjustment (which arises under an index which increases faster) will form a larger offset against annual depreciation. This will result in a higher Mean Capital Employed ("MCE") than under an index increasing less quickly, which eventually increases costs in such a way that the Net Present Value of allowed costs is the same under either index. Moving to CPI for indexation of capital assets from RPI for example, would increase allowed costs in 2016/17, whilst decreasing them in the longer term.

[66] Ofcom's approach is to base X on costs in one out of every three years ie costs in the final year of the control, so the third year should represent underlying costs consistent with the two years for which no modelling is conducted.

[67] British Telecommunications Plc v Office of Communications (Case1193/3/3/12) and British Sky Broadcasting Limited and TalkTalk Telecom Group Plc v Office of Communications (Case1192/3/3/12), Competition Commission Final Determinations of 27 March 2013, paragraph 8.243

[68] British Sky Broadcasting Limited and TalkTalk Telecom Group Plc v Office of Communications (Case1192/3/3/12), Competition Commission Final Determinations of 27 March 2013, paragraph 12.77

Question 3.5: Do respondents agree with our proposal to apply the anchor pricing principle by means of a model of hypothetical all-copper network? Please provide reasons to support your views.

188. In its response to the CFI, BT voiced its support for this approach[69]. BT continues to agree with Ofcom's proposal to apply the anchor pricing principle by means of a model of hypothetical all-copper network for the reasons set out in its CFI response and below.

189. The anchor pricing approach means that regulated charges for MPF, SMPF and WLR are set as if there were no deployment and take-up of NGA services.

190. Where there is an FTTC line, there will be either an MPF or a WLR line in place, so common CGA costs are already recovered in the charges for MPF and/or WLR. Accordingly, the key issue here concerns the implication for regulated costs of substituting CGA services with FTTP. Under the approach proposed, BT will be entitled to recover costs and imputed revenues on FTTP lines as if they were MPF or WLR lines.

191. Ofcom describes the benefits of such an approach at paragraphs 3.57 to 3.61 of the Consultation, and BT finds the following points particularly compelling:

- there is no need to forecast FTTP lines or attempt to estimate the MEA of a copper network based on FTTP[70];
- wholesale charges for regulated CGA services will not depend on the level of FTTP take-up as both the incremental FTTP costs and the incremental FTTP revenues are excluded from consideration; and
- BT is incentivised to invest in new technology and, in particular, to consider the economic case to provide higher quality services (for which customers must be willing to pay a premium).

192. In general, BT supports this approach as there is no prospect of NGA becoming the MEA for the copper network in the foreseeable future. However, BT would urge Ofcom to consider the following points.

- The observed volumes of WLR/LLU and NGA are likely to be affected by the fibre investment. That is, Openreach will have more working lines because the launch of GEA services makes it more competitive, resulting in less loss to cable and mobile operators.
- The anchor pricing approach would result in the removal of fibre deployment costs for NGA. In the absence of NGA, it is very likely that BT would have had to invest in copper-extension technologies instead of NGA.

193. We accept it may be difficult to accurately estimate the impact of these points. However, we would expect Ofcom to consider these issues in the round when considering what are a reasonable set of assumptions to use when estimating volumes and capital investment when ultimately setting the Charge Controls.

194. An issue beyond the scope of this response concerns the use of an anchor pricing approach in very different market circumstances, such as if the copper access network had been largely

[69] BT, BT"s response to Ofcom"s Call for Inputs on the Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30, 8 January 2013, response to Q6.

[70] Consultation, paragraph 3.38. Ofcom notes that "the scope for error in using FTTP to determine the cost of services delivered over the existing copper network would be considerable, both in determining the costs of an MEA network and also the calculation of how much to reduce (or 'abate') the costs of the FTTP assets to take account of the lower functionality of the existing copper network."

replaced by a fibre network. However, as Ofcom notes,[71] BT has no plans in the foreseeable future to replace the existing copper network and replace it with a fibre one.

195. Since this is clearly Ofcom's intention, Ofcom should model Openreach's costs of providing CGA services as if no NGA was provided – i.e. lines are entirely copper-based. However, Openreach is concerned that the modelling approach fails to accurately reflect the cost of such a hypothetical network.

196. Openreach's understanding is that Ofcom's model:

- identifies the FAC of providing CGA services in the base year and generates unit FACs for WLR, MPF and SMPF rentals based on actual base-year volumes;
- adjusts those base year costs to reflect the costs of providing the hypothetical all-copper network, with no NGA provision, by (i) increasing the volume of SMPF rentals in the base year in order to replace the actual volume of GEA FTTC in that year; and (ii) multiplying this extra volume by the unit FAC for SMPF;
- forecasts FAC in the final year based on assumed volumes in the hypothetical all-copper world and other forecasting parameters in the model (efficiency, AVEs, CVEs, etc.);
- splits the forecast FAC between LRIC and FCC; and
- allocates the FCC across each copper line (whether MPF, WLR-only or WLR+SMPF) in the model.

197. However, this approach would appear to overlook the fact that actual NGA volumes in the base year are being allocated FCC that would – absent that volume – have been allocated to CGA services. This will mean that the base year FAC data for CGA services will give an understated view of the FAC of providing the hypothetical all-copper network. Ofcom must update the base year in the model to 2012/13 ahead of finalising the Charge Controls. As part of this process, Ofcom will need to identify the FCC across NGA and CGA services and reallocate that cost in a way that is consistent with the allocation methodologies in BT's RFS and reflects the adjusted base year volume of SMPF rentals and the removal of all NGA volume. This would increase the overall level of cost in the base year of the model as at least a proportion of the FCC shared across CGA and NGA (as well as across other services) will be reallocated to CGA.

198. Openreach expects that Ofcom would identify the FCC allocated to NGA by deconstructing base year FAC data into LRIC plus FCC. The LRIC of NGA services would clearly not be included within the model as these costs would be avoided in the hypothetical all-copper world.

199. To provide some sense of the magnitude of this issue on the basis of the 2011/12 base year data used by Ofcom to generate the cost information in the Consultation, we estimate that Ofcom's approach adds an additional [✂] into the model to reflect higher base year volumes of SMPF, but that around [✂] of FCC allocated to NGA in the base year may be reallocated to CGA in the hypothetical all-copper model.

Question 3.6: Do respondents agree with our proposal that the contribution to common costs should be the same for each wholesale access line service by the end of this Control Period? Please provide reasons to support your views.

200. BT agrees that the contribution to common costs should be the same for each wholesale local access line service by the end of the Control Period. As BT indicated in response to the CFI, it is not aware of any change since the last charge control review for WLR and LLU services which would undermine Ofcom's rationale that the same or similar share of common costs should be

[71] Consultation, paragraph 3.41

recovered from an MPF line as from a WLR+SMPF line; and that SMPF should be treated, for costs purposes, as an overlay service.

201. Ofcom explained that, given that SMPF and GEA over FTTC are both currently overlay services the charges for these services should not recover any significant common costs. This is because these services are substitutes which can be used to provide downstream voice and/or broadband services[72].

202. BT agrees with Ofcom's comments at paragraph 3.81 of the Consultation. It is self-evident that Ofcom's reason for giving BT flexibility on its virtual unbundled local access ("VULA") prices was not so that BT can Ramsey price, but rather to take account of the nascent nature of NGA, the requirement to encourage BT's investment, and the fact that VULA is likely constrained by CGA and cable services. Ofcom's point is well made that the practical issues with adopting Ramsey pricing would risk undermining efficient investment and take-up of NGA.

203. BT agrees with Sky: the costing methodology should apportion common costs equally between MPF and WLR unless there is a strong case to diverge[73].

204. There are some costs which are not the same across different services, and these should be reflected in regulated costs. On this, see please refer to section 5.4 and 5.5 on pair gain and line length.

Question 3.7: Do respondents agree that we should remove the TAMs price adjustment by the end of the charge Control Period? Please provide reasons to support your views.

205. Openreach supports Ofcom's proposal to remove the price adjustment as it will promote efficiency and is very unlikely to result in distortion to investment. Ofcom should sanction the removal of this adjustment immediately rather than by the end of the Control Period.

206. In the current control Ofcom makes a price adjustment so that the costs of LLU TAMs are recovered from both MPF and SMPF services, even though LLU TAMs are only used by MPF lines. The effect of the price adjustment for TAMs is to increase the differential between MPF and WLR/WLR+SMPF charges. This adjustment was introduced in 2004 on the grounds that it promoted effective competition. Ofcom considered that removing the price adjustment for TAMs at that time would result in too rapid a reduction in the differential between MPF and WLR/WLR+SMPF, which could undermine reasonable expectations and threaten the provision of a stable regulatory framework, with consequences for investment incentives in general.

207. In the March 2012 Statement Ofcom said that the case for the adjustment, to promote competition, has become less strong as the LLU market matures and hence they placed more weight on setting charges which give incentives to minimise costs. This requires the difference between the prices of MPF and WLR/WLR+SMPF services to be brought into line with the differences between their incremental costs.

208. The price adjustment was subject of an appeal and the CC agreed that incentives to minimise costs could be improved by removing the price adjustment. However, it thought the risk of a distortion to investment occurring as a result of not doing so now was small because Ofcom had said that the price adjustment would be removed over time, and CPs would not base investment decisions only on short term price differentials[74].

209. Ofcom concludes that it is now consistent with regulatory stability and the promotion of sustainable competition to close the price differential as per the expectation set out in previous charge controls. As part of this it proposes to remove the recover TAMs costs from MPF lines only.

[72] Consultation, paragraph 3.65

[73] Consultation, paragraph 3.72

[74] Consultation, paragraph 3.89

210. It is clear from the description above that any rational investor would recognise that Ofcom's goal was to remove this adjustment and that this intention was signalled over a protracted period. Immediately removing this adjustment is therefore unlikely to undermine reasonable expectations or threaten the provision of a stable regulatory framework. In addition, removal of the adjustment, thereby aligning the price difference between MPF and WLR/SMPF with the differences in costs of providing MPF and WLR/SMPF, will promote efficient choices by CPs and ultimately consumers.

211. Given the above, it follows that Ofcom would be correct in immediately removing this unwarranted and unnecessary price adjustment in these Charge Controls.

Question 3.8: Do respondents agree that we should not make an adjustment to MPF charges to allow for shorter than average line length? Please provide reasons to support your views.

212. In 2005 a 'line length adjustment' was introduced to Ofcom's charge control modelling to reflect the view that MPF lines were expected to be shorter on average than WLR lines. It was also applied in the 2009 and 2012 WLR and LLU charge controls to reduce the costs allocated to MPF, but has become smaller with each review. The difference in line length has become smaller over time as LLU roll out has increased and technology has improved. Ofcom applied an adjustment of 1.6% in the March 2012 Statement.

213. Sky and TalkTalk appealed Ofcom's decision, saying the adjustment should be larger. BT submitted information at that time, July 2012, to the confidentiality ring in those proceedings which suggested the differential at that time was likely to be closer to just 0.2%, resulting in this ground of appeal being abandoned by Sky and TalkTalk prior to CC reference.

214. This data evidenced that there is no significant difference in line length. Sky and TalkTalk had the opportunity in the appeal to challenge this analysis but chose not to do so. It would seem extraordinary now for Ofcom to go over old ground especially as Sky and TalkTalk have failed to put forward or substantiate why they think the information submitted by BT as part of the appeal should not be relied on by Ofcom. Moreover, there has been further expansion of the LLU footprint since the data was submitted which would logically lead to a further reduction to an already negligible difference.

215. Therefore BT agrees with Ofcom's proposal that this adjustment should be removed. There is likely to be no material difference in line lengths. BT supports Ofcom's view that there is no material difference between the lengths of MPF and WLR lines[75]. As explained in 5.4 above, if Ofcom decides not to remove this adjustment Openreach would expect it to be consistent and also not remove the pair gain adjustment.

Question 3.9: Do you agree with our proposal to remove printed directory costs from WLR rental, and to do so immediately? Please provide reasons to support your views.

216. This question is dealt with in more detail in the BT Group Response.

217. Ofcom proposes to make an adjustment of £2.23 to the price of WLR rental. It appears that the £2.23 value is taken from A5.5 of the March 2012 Statement as the forecast of cost for directories in 2013/14. This is a forecast based upon 2009/10 RFS information. However, Ofcom had a more up-to-date value for the relevant cost – the £1.43 value taken from the 2011/12 RFS and quoted in table 6.7 of the Consultation.

218. Therefore, it appears that Ofcom is using an out of date forecast amount in its model, and accordingly, the start price adjustment is overstated. Ofcom should use the most up-to-date forecast of the cost for directories in 2013/14; this should now be based on the reported costs in the 2012/13 RFS i.e. £2.06.

[75] Consultation, paragraph 3.103

219. If Ofcom decides not to use this more up to date figure it should explain how the adjustment it makes is related to the costs for directories.

Question 3.10: Do you agree with Ofcom's proposal to set charge controls for LLU and WLR to expire on 31 March 2017? Please explain your answer and propose an alternative approach with supporting information if applicable.

220. BT prefers market reviews, and the period covering any resulting charge controls, to be set for a longer period than three years to encourage stability and investment. This is because the well-known incentive effects of a RPI-X (or CPI-X) control are best realised by a longer charge Control Period.

221. BT accepts, however, that Ofcom's proposals for a three year duration is consistent with the EU Common Regulatory Framework (CRF)[76]. We therefore, somewhat reluctantly, agree that this control should expire on 31 March 2017. It is important that in future Ofcom's timeline should allow subsequent controls to run for at least three years.

Question 3.11: Do you agree with our proposal to use glide paths to align charges with costs for these charge controls? Please provide reasons to support your views.

222. This question is dealt with in the BT Group Response, extracted below.

223. BT understands the reason for Ofcom's general preference for glide paths and is generally supportive of its approach. As Ofcom states in the consultation, such an approach avoids discontinuities in prices over time and leads to a more stable and predictable regime for investors and for purchasers[77]. Crucially, it will also maintain efficiency incentives for cost reduction[78].

Question 3.12: Do you agree that CPI and RPI are the main indices to consider for the LLU and WLR charge controls proposed in this consultation? Please provide reasons to support your views.

224. BT agrees that CPI and RPI are the main indices to consider for the Charge Controls. This is discussed in more detail in the BT Group Response.

Question 3.13: Do you consider that we should use CPI to index the LLU and WLR charge controls proposed in this consultation? If not please explain why using the factors identified above, or any others you consider important.

225. Openreach does appreciate that the use of CPI ought to make no difference to nominal prices, which seems to be another reason not to make the change as further complications are added for no benefit. That said, it is more important that Ofcom is consistent in using the same inflation forecast in its cost modelling as in the calibration of X once the modelling has been completed.

226. Ofcom's modelling uses *nominal* cost changes, *RPI* for capital costs and then appears to intend to frame the control in *CPI*-X terms. BT's view it would be simpler and aid transparency for Ofcom to use only one method or as a next best option a maximum of two methods.

227. BT has provided a more detailed response in the BT Group Response.

[76] The CRF consists of a number of Directives, the most relevant of which are Directive 2002/21/EC on the common regulatory framework for electronic communications networks and services (the Framework Directive, as amended) and Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive, as amended).

[77] Consultation, paragraph 3.143

[78] Consultation, paragraph 3.144

7.2 Charge control design

Question 4.1: Do you agree that we should set separate line rental charge controls for (i) MPF rental, (ii) SMPF rental and (iii) WLR rental? Please provide reasons to support your views.

228. Given that (i) MPF and WLR/WLR+SMPF are the core services to promote competition, and (ii) MPF and WLR/WLR+SMPF are mutually exclusive product choices, Openreach understands that Ofcom may find it necessary to control them separately in order to allay stakeholder concerns that Openreach could favour one product choice over another.

229. However, Openreach's general preference is to have broad baskets to give greater flexibility in setting prices to reflect market demand and so as to align prices with costs over the Control Period.

Question 4.2: Do you agree that the price differences between MPF and WLR/WLR+SMPF new connections should be equal to the difference in LRIC in the last year of the new charge control (i.e., 2016/17)? Please provide reasons to support your views.

230. For the avoidance of doubt, this answer addresses the following three services only: MPF New Provide, SMPF New Provide and WLR New Connection. Ofcom proposes that the SMPF New Provide charge is based on the LRIC of that service and that the common costs are attributed to MPF and WLR and recovered in the MPF and WLR rental charges rather than the MPF New Provide or WLR New Connection charge.

231. There is consistency between this approach and Ofcom's approach to SMPF rental charges where it prices SMPF Rental charges on a LRIC basis and attributes the SMPF Rental common costs to WLR and MPF Rentals. However, Ofcom does not explain why it is preferable to attribute these costs to rentals rather than provisions except to say that it would increase the charge for MPF New Provides. BT would welcome further explanation by Ofcom as to why this is better from an economic perspective than the alternative of allocating the common costs to connection charges e.g. that this would create less distortion.

232. In this case, Openreach has no strong objections to the proposal if Ofcom can evidence that recovering the common costs in rentals is superior. If Ofcom cannot do this, then as the costs were attributed to a connection service it would be better if these costs are recovered through the MPF New Provide and WLR New Connection charge; this would result in more consistent pricing for connection services.

Question 4.3: Do you agree with our proposed approach to estimating the costs of the simultaneous provision of WLR Conversion and SMPF New Provide? Please provide reasons to support your views.

233. Migration from MPF to WLR+SMPF involves the provision by Openreach of two separate services: WLR Conversion and SMPF New Provide. In October 2012, Openreach introduced a special offer discount on the combined prices of WLR Conversion and SMPF New Provide when purchased simultaneously (the "SIM Provide Special Offer").

234. Ofcom proposes to obtain the incremental cost of WLR+SMPF Simultaneous Provide by:

- calculating the LRIC differences across four major cost components: MDF Hardware Jumpering, Services Centres – Provision, LLU Systems Development and Sales Product Management;
- adding the incremental cost difference above to the incremental cost of MPF Single Migration; and

- further adding the annual unit cost relating to the automated billing system.

235. The cost analysis produced by Ofcom in the Consultation is consistent with the conclusions it has reached in relation to relative cost differences between WLR Conversion and SMPF New Provide (when provided together) and MPF single migration in the recent SIM Provide dispute[79]. We broadly agree with Ofcom's calculations of the incremental costs to MPF Single Migrations for the SIM Provide product, both of which are based, theoretically, on the same number of jumpers. Openreach is broadly in agreement with Ofcom's assessment of cost contributions and differentials for the four cost components (MDF Hardware Jumpering Costs, Service centres – provision costs, LLU Systems Development and Sales Product Development costs).

236. Ofcom has recognised that the additional cost of manual processing of special offer rebates would contribute in full to the difference in incremental costs between MPF Single Migrations and the SIM Provide Special Offer, which Openreach agrees with. Ofcom also recognises that the cost of a billing system development, which would replicate the billing in the special offer if it were made a permanent service, should be taken into account when determining the costs of SIM Provide.

237. The system development that would be required is expected to be more expensive than the one envisaged at the time Openreach ran the special offer. Therefore, Openreach would want to be able to take account of additional costs. A more appropriate billing solution to fully meet Ofcom's combined product requirements would cost [✂].

238. Openreach agrees that automation of the billing system will allow it to minimise inefficiencies, and provide a long term solution to special offer rebates. However, Openreach disagrees with Ofcom's assessment that automation would only be done if the unit cost of automation is lower than that of manual billing[80] as the current manual rebate solution is unlikely to be an acceptable billing method to Openreach's customers on an ongoing basis. This is because:

    - the customer is billed the full price list amount and a rebate then applied in subsequent bills against lines which were simultaneously provided - CPs therefore have to track and monitor the correct level of rebates between bills, leading to a negative customer experience;

    - manual billing does not provide line by line details of the rebates applied, which results in inefficiencies for both CPs and Openreach as they seek to reconcile rebates and allocate additional resources to activities like revenue assurance; and

    - a retrospective billing solution results in adverse cash flow scenarios for CPs, impacting the timing of cash flows.

239. That said, Openreach disagrees with Ofcom's assumption that the full savings in cost can be realised from the start of the Charge Controls.

240. Openreach had provided costs of £75k - £150k, for an automated billing process, based on the assumption that the development would be complete by 2014/15. However, this is likely to cost more as mentioned above and is expected to be delayed until 2015/16 to address issues in the downstream provisioning process[81].

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[79] Ofcom, Dispute between BT and TalkTalk relating to MPF to WLR + SMPF simultaneous migration offer, Determination of 23 April 2013.

[80] Consultation, paragraph 4.64

[81] During the design phase, Openreach discovered that the special offer rebates process introduces inefficiencies in downstream provisioning process. During provisioning, the two tasks included in the SIM Provide Special Offer are linked using an order reference number, which then separate during downstream delivery causing additional activity to track and reconcile these two orders. This happens for c.35% of the orders. In order to reduce this issue Openreach has planned (but not yet scheduled) additional systems developments for 2014/15, which would mean the earliest implementation date would be 2015/16

241. In this context, Ofcom should delay the introduction of a one-off price adjustment until 1 April 2015 in order to mitigate the under-recovery of costs that would otherwise result in the first year of the Charge Controls.

242. Separately, Openreach agrees with Ofcom that the reduction should apply only to a WLR conversion + SMPF new provide when ordered correctly (simultaneously with linked order references). For the avoidance of doubt this means that it is a CP's responsibility to link orders that are meant to be simultaneous and if they don't do this the un-discounted price will apply to the two services.

243. Finally, whenever possible Openreach's engineers will co-ordinate the jumpering activity for the WLR Conversion and SMPF New Provide. Therefore, the costs that are in BT's RFS will already reflect some of the cost savings from the reduced jumpering activity. Ofcom propose to remove these engineering costs, for example, travel time and jumpering, which are not in the cost base. This results in the costs and hence subsequent savings being spread across products thereby resulting in an understatement of costs for the simultaneous provision of WLR Conversion and SMPF New Provide. In order for Openreach to recover its efficiently incurred costs, Ofcom should adjust their proposals to either:

    - reduce the price of simultaneous provision of WLR Conversion and SMPF New Provide as proposed but increase the cost of other ancillary products; or

    - increase the proposed price of simultaneous provision of WLR Conversion and SMPF New Provide.

Question 4.4: Do you agree with our proposed approach to estimating the costs of provision of a WLR Conversion? Please provide reasons to support your views and if applicable please explain your preferred approach.

244. Ofcom is proposing to use the costs of SMPF New Provides as a proxy for WLR Conversions given:

    - the lack of cost information in BT's RFS for WLR Conversions; and

    - that SMPF New Provides costs are based on the same number of jumpers (3 added / removed).

245. Openreach has no objection to Ofcom using the costs of SMPF New Provides as a proxy for WLR Conversions; this is a reasonable approach given the lack of cost information in BT's RFS specific to WLR Conversions and the processes to provide the services are similar.

Question 4.5: Do you agree that we should control WLR Conversion and its simultaneous provision with SMPF New Provide using an indexed type of control? Please provide reasons to support your views.

246. Ofcom proposes that WLR Conversion and its simultaneous provision with SMPF New Provide has an CPI-X control where the X value is the same as all other migration and conversion products. In principle Openreach does not object to this approach.

247. However, as explained in Openreach's response to question 4.3, it would be preferable to delay the introduction of a one-off price adjustment to WLR Conversion and its simultaneous provision with SMPF New Provide until 1 April 2015.

248. Openreach proposes that Ofcom set a separate control for WLR Conversion and its simultaneous provision with SMPF New Provide to start on 1 April 2015. This would ensure that the systems are in place to realise the savings Ofcom have assumed in their costings.

Question 4.6: Do you agree that we should charge control migration services at incremental cost? Please provide reasons to support your views.

249. Ofcom proposes to regulate all migration charges on a consistent basis and, on balance, prefer to align migration charges to incremental costs rather than to CCA FAC. Ofcom proposes that the difference between the incremental cost and the FAC of migration charges is recovered from MPF and WLR rental charges on an equivalent per line basis.[82]

250. We agree with Ofcom that the dynamic benefits of setting these charges at LRIC are modest; a key reason for Ofcom adopting this proposed approach. Moreover, migration services are services in their own right and are not strictly speaking incremental to the existing service. Ofcom has not outlined how its proposal ensures that the users of the migration service experience the cost of that service in this pricing proposal i.e. this approach could introduce an externality as the FCC of migration services would be recovered via the rental charge. This could have a distortionary effect and lead to inefficient outcomes. As per our answer to question 4.2 above, Openreach has no strong objections to the proposal if Ofcom can evidence that recovering the common costs in rentals is superior.

251. We would also point out that recovering costs as Ofcom suggest, risks stimulating inefficient demand for migration services. At a time when expected demands upon BT's engineering resources are expected to increase, setting a price which risks inefficient demand for migration services is counter to Ofcom's policy objectives of ensuring consistent levels of service. Ofcom should consider this further before deciding to adopt its proposal.

Question 4.7: Do you agree that we should align all migration charges involving jumpering to a single target price ceiling by the end of the charge Control Period in 2014 and set a separate target price ceiling for WLR Transfers to its incremental cost using glide paths? Please provide reasons to support your views.

252. Ofcom sets out two options for aligning migration charges:

- Option 1: the price control of the services is based on the individual costs of each service; and
- Option 2: the price control is based on the overall average costs of all the services.

253. Openreach's preference is for costs and prices to be aligned, and it therefore considers Option 1 to be the best approach. That said, Ofcom should delay the price reduction for WLR Conversion and its simultaneous provision with SMPF New Provide, adopting Option 1 only when Openreach is in a position to support the service in the manner proposed by Ofcom (see response to question 4.3).

WLR Transfer

254. There are circumstances where it might be appropriate to depart from the use of a glide path and to make one-off reductions and in particular where there are allocative efficiency arguments for bringing prices into line with cost sooner. In its FAMR Consultation Ofcom proposes to bring down ISDN2 transfer prices to be in line with costs and argues that this is proportionate because it reduces switching costs and promotes competition[83]. In a similar circumstance, where Ofcom assesses the costs of WLR Transfer to be less than the costs of its provision, however, it proposes to glide up to cost over three years. Ofcom assesses that both sets of prices are similarly out of line with incremental cost (roughly a factor of 3) but in the case of the ISDN2, where the price is above cost, it proposes an immediate reduction and in the case of WLR Transfer where it is below cost, it proposes a glide. This seems inconsistent and therefore

[82] Consultation, paragraph 4.114

[83] FAMR Consultation, paragraph 15.118

Openreach proposes that Ofcom immediately increase the WLR transfer price from £3.38 to £9.75 rather than glide to £9.75 over 3 years.

Table 7.1: Ofcom's proposed price adjustments

Product	Current Price	FACC	Ofcom Proposal
ISDN2 Transfers	£30.00	£10[84]	Immediate reduction[85]
WLR Transfers	£3.39	£9.75[86]	3-year upwards glide

Question 4.8: Do you agree that we should align MPF and SMPF Bulk Migration charges to a single target price based on the volume weighted average forecast LRIC by the end of the charge Control Period in 2016/17 using glide paths? Please provide reasons to support your views.

255. Ofcom sets out two alternative options for controlling Bulk Migrations:

- Option 1 – a single MPF and SMPF basket covering New Provides, Migrations and Ancillary services;
- Option 2 – separately control MPF and SMPF Bulk Migrations to align their charges.

256. Openreach had proposed Option 1[87] given the very small difference in costs between MPF and SMPF Bulk Migrations.

257. It is self-evidently preferable that there should be a large enough difference between the MPF/SMPF Bulk Migrations and Singleton Migrations prices to encourage CPs to choose Bulk Migrations where it is operationally appropriate. The current WLR and LLU charge control makes it impossible to maintain a sensible difference between the MPF/SMPF Bulk Migrations and the Singleton Migrations prices and therefore results in sub-optimal product choices by CPs.

258. Ofcom's proposal to remove MPF and SMPF Bulk Migrations from the ancillary services basket will go some way in addressing this issue and Openreach supports Ofcom's proposal in this respect.

Question 4.9: Do you agree that the charge for MPF and SMPF cease should be zero and costs recovered from MPF and WLR rental charges on an equivalent per line basis? Please provide reasons to support your views.

259. Openreach has a preference for aligning costs and charges. However, as long as the costs are fully recovered through other charges, Openreach does not object to the current approach of zero MPF Cease and SMPF cease charges.

260. As explained above in sections 1.3 and 5.2 above, Ofcom has failed to apply the cease cost adjustment in the charge control model, so that cease costs are recovered through the WLR, SMPF and MPF rental charges. If Ofcom maintains zero cease charges then it must adjust its cost modelling accordingly, so that Openreach can recover the cost of ceases.

Question 4.10: The complete list of ancillary services considered in the MPF, SMPF and Co-Mingling baskets for the charge Control Period 2014/17 is included in the "Legal Instruments" Annex. Do you agree with our proposal to control three ancillary services baskets and with the proposed lists of

[84] Based upon CPI+40.25% from Ofcom Correction Notice of 20th August 2013 applied to current price

[85] FAMR Consultation, paragraph 15.119

[86] Condition 7E.1 Fixed Asset Market Review consultation annexes

[87] Openreach Ofcom meeting, WLR LLU CC Basket Design, 16 April 2013

ancillary services for the MPF, SMPF and Co-Mingling baskets? Please provide reasons to support your views.

261. We agree that a charge control is an appropriate way to regulate prices for these types of items, but specific comments are included below on the structure and contents of the baskets.

Ancillary baskets

262. Openreach prefers a single ancillary basket combining the SMPF ancillary basket and MPF ancillary basket. This is to allow comparable products to have the same price, while allowing prices of substitute products to be set in a way to drive optimal CP product choices and thereby maximise the use of resources. While Openreach welcomes Ofcom's proposed changes to the basket design, it could do more to address remaining unresolved issues.

263. At paragraphs 4.193-4.194 of the Consultation, Ofcom dismisses concerns regarding substitutable products being subject to different price controls. Openreach sets out below why Ofcom's analysis of this issue is flawed and why it is necessary to combine the MPF and SMPF ancillary service baskets in order to address the relevant concerns.

264. MPF New Provide and MPF Stopped Line Provide ("SLP") or MPF Working Line Takeover ("WLTO")[88] is a good example of the unintended consequences of the proposed price control design. MPF New Provide can be used by CPs instead of SLP or WLTO, but in these circumstances it involves an unnecessary engineer visit, with the cost and inefficiency that comes with an unnecessary engineer "truck roll". Accordingly, it is appropriate and efficient for Openreach to reflect the higher cost (of the engineer visit) in the price of MPF New Provide and to maintain a price differential between the two products in order to incentivise efficient CP behaviour[89]. However, as can be seen from the scenarios below, the difference in controls for MPF New Provide and SLP/WLTO mean that either this differential cannot be maintained or that Openreach cannot recover its efficiently incurred costs.

265. Ofcom rejects Openreach's cost and efficiency concerns, noting that Openreach is able to recover the costs of an unnecessary engineer visit regardless and that CPs may be making a cost efficient choice if using SLP/WLTO would cause additional costs in their business.

266. Cost recovery is not the issue here, rather it is the productive inefficiency associated with the unnecessary engineering visit. This is not adequately reflected in Ofcom' analysis. The customer service could have been provided without a visit and the time spent visiting the premises could instead have been used to repair a line sooner or provide service to another customer. Therefore, Ofcom's proposal raises a material risk of consumer detriment and ignores the opportunity cost of this visit. As the prices diverge the impact of this could be very significant. Currently there are around [✂] non-appointed MPF provisions each week. In a worst case scenario, if all of these switched to appointed New Provides because of the small price differential, it would require an additional [✂] visits per year, equivalent to an extra [✂]engineers.

267. Moreover, such an artificial demand on Openreach resources is obviously counter to Ofcom's policy objectives in terms of ensuring regulation provides a framework for Openreach to deliver reliable and consistent service. We provide further detail in the Service Response on the need for Ofcom to consider how regulation can encourage CP choices that optimise the use of Openreach's finite resources.

268. It is missing the point somewhat to focus on whether the CP incurs costs in order to consume products that are more efficient overall. In any case, Ofcom has done no analysis to ascertain if

[88] While Single Migration might be seen as a substitute product for WLTO, New Provide is used as a substitute by CPs. There are systems and behavioural issues that drive this, and it is no doubt influenced by the lower rate of Early Life Failures on New Provides compared to non-appointed provisions.

[89] Average price difference of £7.96 maintained since 2009, with the exception of 1/4/2013 to 31/8/2013 which was necessary to fully comply with the basket control before the end of the two year control period.

this is the case. It should substantiate this claim and take account of the impact on service and the additional cost of an engineer visit.

269. Ofcom further contends that the revenues associated with SLP and WLTO are in any event likely to be immaterial during the Control Period. This is wrong and based on out-of-date information; the most recently submitted data clearly shows revenues in the region of [✂] for SLP in 2011/12 and [✂] for WLTO[90]. SLP was the single largest item within the MPF ancillary service basket in 2011/12 and its revenues increased further in 2012/13. Given the materiality of these revenues and the importance of SLP within the MPF ancillary service basket, this issue significantly and adversely limits the execution of the control.

270. This is clearly illustrated in the following scenarios modelling how the control could be compliantly executed in its current design: one seeking to maintain the price differential and the other not.

Scenario 1 – X applied to each and every basket service

271. In this scenario we execute the proposed control as Ofcom would intend:

- A weighted average price is used for Year 0;
- MPF New Provide price is reduced by CPI -10.25%; and
- SLP and WLTO are reduced by CPI-8.5%.

Table 7.2: Impact of Scenario 1 on the MPF New Provide and SLP/WLTO price differential

Price	***2013/14 (31 March 2014)***	**2013/14 (weighted average)**	**CCY1**	**CCY2**	**CCY3**
MPF New provide	*£45.53*	£45.54	£41.87	£38.51	£35.42
MPF WLTO and MPF SLP	*£37.57*	£38.94	£36.50	£34.20	£32.06
Difference	*£7.96*	£6.59	£5.33	£4.25	£3.32

272. The price differential between MPF New Provide and SLP/WLTO is reduced from the outset of the Control Period by the use of a weighted average price for Year 0. It is then further reduced for subsequent years as applying the proposed Xs as set out above results in a significantly lower price differential (less than half the original amount by the end of the Control Period). The resulting differential would be too low to reflect the cost of the unnecessary engineer visit and would not incentivise efficient CP behaviour which should be to avoid unnecessary engineer visits wherever possible.

Scenario 2 – maintaining the existing price differential

273. In this scenario:

- MPF New Provide price is reduced by CPI-10.25%;
- MPF SLP and MPF WLTO prices are reduced by applying an X of -15.4% in the first year and -12.12% and -12.35% in the subsequent years of the Control Period[91];

[90] Openreach updated this information on 3 April 2013 supplying actual revenues for 2011/12 as part of its response to Ofcom's 3rd s135 request of 18 March 2013.

[91] Higher X applied in the first year is to offset the price anomaly caused by using weighted average price instead of year end price for Year 0.

- all other MPF ancillary service basket prices are reduced by CPI-8.5% to ensure continued alignment with the comparable products in the SMPF ancillary service basket, which is subject to a CPI-8.5% control.

274. While the MPF New Provide and SLP/WLTO price differential is maintained in this scenario, this is achieved by reducing SLP and WLTO prices by more than required under the control such that Openreach recovers [✂] less cost than it is entitled to recover over the Control Period.

275. Openreach could seek to rebalance the remaining MPF ancillary service basket prices by reducing their price by less than CPI-8.5%[92] in order to address this point, but the impact of the sub-caps is such that Openreach would still recover c. £6m less than it is entitled to over the Control Period. Furthermore, this rebalancing would disrupt the alignment of prices for comparable MPF and SMPF products, creating significant variations[93] which would not be perceived favourably by CPs if the price for a SMPF product was significantly cheaper that for a comparable MFP product. This latter consequence is unlikely to be what was intended or desired by Ofcom when it set the X for the MPF and SMPF ancillary service baskets at the same level. Ofcom specifically state in the Consultation that they want to avoid the risk of Openreach favouring SMPF at the expense of MPF.[94]

Option 1 – including the Expedite products in the MPF and SMPF ancillary service baskets

276. The price of Expedite products has been used as a balancing item in the current charge control in order to maintain aligned prices for comparable SMPF and MPF products. Including the Expedite products in the MPF and SMPF ancillary service baskets could resolve the concerns identified under Scenario 2 by allowing the MPF and SMPF ancillary service baskets to be rebalanced so that the prices of comparable SMPF and MPF products could align while Openreach fully recovers its costs. However, this approach is problematic as the Expedite prices across MPF and SMPF would become too different with the large price changes needed to balance the basket given the relative weighting of Expedite within the baskets.

Option 2 - removing SLP and WLTO from the basket and controlling them individually

277. This option would treat SLP and WLTO in a similar manner to bulk migrations, which have been removed from the basket in order to allow them to be priced sensibly and efficiently relative to single migration, to incentivise CPs to take the bulk option and to reflect the cost differences in provision. However, this approach too is problematic as unlike with bulk migrations Ofcom does not have a view of FAC and LRIC for SLP and WLTO (the MPF and SMPF ancillary baskets having been modelled using ceases and provides as a proxy) and so it is not clear that these products could be individually controlled with any accuracy[95]. Ofcom could use MPF New Provide to calculate the appropriate X for SLP and WLTO, however reducing these products by the same percentage would still lead to a reduced differential[96] and would require the level of X for the ancillary basket (for MPF and SMPF) to be recalculated to allow Openreach to recover the same level of revenue as the current control.

[92] For instance; Applied X = -1.1% in the first year, X = 2.5% in the second year and X = 2.95% in the third year. The amount of X applied is restricted by sub-caps and for this scenario, we have assumed the most generous sub-caps Ofcom discuss of 7.5%

[93] For example: (i) the price of Remove Jumper Order Singleton Charge for MPF will be £24.82 and that for the similar product in SMPF basket will be £20.78 at the end of the charge control period, a 25% price difference; and (ii) the price of Tie Pair Modification (Multiple Re-termination) will be £30.35 and that for the similar product in SMPF basket will be £24.53 at the end of the charge control period, a 28% price difference.

[94] Consultation, paragraph 4.175

[95] Removing SLP and WLTO from the basket but keeping a control of CPI-8.5% would not resolve the price differential issue already described.

[96] £5.13 difference at the end of the charge control is CPI-10.25 applied to the 2013/14 weighted average prices for New Provide, WLTO and SLP.

278. Moreover, Ofcom itself notes[97] that removing products from the ancillary basket reduces how representative the costs used to model the basket will become.

Option 3 – creating a single MPF and SMPF ancillary service basket.

279. This option would address the concerns highlighted under Scenario 2 by combining the SMPF and MPF ancillary baskets as defined within the draft legal instrument (excluding MPF New Provide or Migration from the combined basket). This would allow MPF New Provide, SLP and WLTO to be priced as described in Scenario 2 (i.e. maintaining the price differential), but the remaining combined ancillary service basket products could now be rebalanced in such a way as to allow the full recovery of costs and compliance with the sub-caps, all without disrupting the alignment of comparable MPF and SMPF product prices.

280. Creating a single MPF and SMPF ancillary service basket is the preferred option for resolving the concerns highlighted under Scenarios 1 and 2 above. Although Ofcom has noted some concerns with such a broadening of the baskets at paragraphs 4.23-4.24 of the Consultation, these are addressed below.

281. Ofcom's concerns regarding Openreach being incentivised to reduce the price of its internal wholesale product are demonstrably unfounded given that Openreach's past pricing behaviour has been to align the prices of comparable SMPF and MPF products. Moreover, within the co-mingling basket, Openreach has kept the prices of internally consumed products higher than FAC (tie cables), with externally consumed products priced below FAC (room build and hostel rental). If this were insufficient comfort for Ofcom, it could consider aligning comparable SMPF and MPF products e.g. requiring SMPF and MPF prices to be within 5% of each other could be suitable. However, Ofcom itself states that a condition such as this would be disproportionate and unnecessary given Openreach's past behaviour[98].

282. Separately, notwithstanding that Openreach is not aware of any differing levels of competitive intensity for different services across the two ancillary service baskets, any such concerns would be addressed by Ofcom's proposed sub-caps. This would restrict the price movements of the different services in the combined basket and would still apply to each service individually as specified by Ofcom in section 4.26 (though as set out in 8.2 below, Openreach believes this sub-cap should allow more flexibility than Ofcom currently propose).

Co-mingling basket

283. We note that there are items listed within the legal instrument that will not be available for sale when the new control starts as their withdrawal as already been notified (effective from 01/09/2013). These items listed below should therefore be removed from the legal instrument:

- Ancillary Service Structure Fixed price to service 1-3 Rack Space Units
- Ancillary Service Structure Fixed price to service 4-6 Rack Space Units
- Upgrade of existing MCU1 product to MCU2
- Upgrade of existing BBUSS3 Point Of Presence to BBUSS7 (power and space)
- Upgrade of existing BBUSS 3 Point Of Presence to B-BUSS 7 (space only)
- Downgrade of existing BBUSS 7 Point Of Presence to B-BUSS 3 (space only)
- MCU Max upgrade to existing MCU1 / MCU2

[97] Consultation, paragraph 4.304

[98] FAMR Consultation, paragraph 4.323

- MCU Max Upgrade from MCU1 / MCU2 Out of Hours Connection Fee
- MCU Max Aux upgrade to existing MCU1 / MCU2
- MCU Max Aux Upgrade from MCU1 / MCU2 Out of Hours Connection Fee

284. In addition, the FCP products (under Accommodation in the Openreach price list) launched in May 2012 have not been included in the definition of the co-mingling basket in the legal instrument. Ofcom should confirm whether it intends for these items to be charge controlled.

- FCP (Powerbase) AC only base unit 600mm (w) x 600mm (d) to include lighting and cable management
- FCP (Powerbase) AC only base unit 800mm (w) x 600mm (d) to include lighting and cable management
- FCP (Powerbase) AC only base unit 600mm (w) x 800mm (d) to include lighting and cable management
- FCP (Powerbase) AC only base unit 800mm (w) x 800mm (d) to include lighting and cable management
- HDF sub rack (per sub rack 3x 100 pair capacity)
- HDF cabinet 800mm (w) x 600mm (d) for FCP
- HDF cabinet 800mm (w) x 800mm (d) for FCP
- Rack Space Unit (RSU) for FCP to include lighting and cable management
- MCB customisation at initial build for FCP
- Cabinet doors per pair for FCP only (where provided as an upgrade will be subject to a Site Visit charge)

Other Comments on the Legal Instrument

Weighted average price should not be used for starting prices.

285. The draft legal instrument at Annex 17 of the Consultation requires compliance to be demonstrated based on the movement in the weighted price for each product. Openreach considers that this gives rise to unintended complications within the first year of the control[99].

286. As can be seen from table 7.3 below, using a weighted average price for Year 0 of the Charge Controls (2013/14) means that some starting prices across comparable SMPF and MPF products no longer align. This is the result of some temporary misalignment of prices during part of 2012/13; this was necessary in order to comply with the current WLR and LLU charge control and was rectified by the end of the year

[99] Please also see our response to the Fixed Asset market Review on the ISDN2 and ISDN30 controls, where we argue the same proposal, but for a different reason.

Table 7.3: Start prices: actual versus weighted average

	Start prices based on 31 March 2014 price			Start prices based on weighted price		
	MPF	**SMPF**	**Difference**	**MPF**	**SMPF**	**Difference**
Remove jumper (singleton)	£23.28	£23.28	-	£24.12	£25.05	-£0.93
Cancellation of orders	£11.25	£11.25	-	£10.80	£11.44	-£0.65

287. If CPI -8.5% were applied to the weighted average price the mis-alignment would continue for the duration of the Control Period.

288. In order to align prices, Openreach would be required to make larger price reductions to "MPF Remove Jumper Singleton Charge" and "MPF Cancellation of orders" for Provide, Migration, Modification or Amend than is required under the controlling percentage of CPI-8%. This would re-establish price alignment but would result in Openreach recovering c. £1m less than it is entitled to over the Control Period.

289. Ofcom indicates that with the introduction of a weighted average start price it is seeking to avoid 'gaming' of the Charge Controls in the form of price increases in the final month of the year to reduce the level of reduction required. However, as prices for 2013/14 are already set in a way that complies with the current WLR and LLU charge controls, Openreach is unable to make any further price changes in 2013/14 that would have the effect of 'gaming'" the first year of the Charge Controls. In any event, Ofcom could eliminate the risk of 'gaming' and of misaligned MPF and SMPF prices by specifying the start prices for basket products (i.e. prices announced to be in effect on 31 March 2014) in the legal instrument.

290. Therefore, Ofcom should use the prices announced to be in effect at 31 March 2014 as the start price criteria for demonstrating compliance rather than the weighted average price. For consistency, Ofcom should consider this for all products being charge controlled (including ISDN2 and ISDN30).

Formulas

291. Separately, there are new formulas in the draft legal instrument for calculating the controlling percentage, the prior year adjustment ratio and the weighted average price.

292. Openreach agrees with the prior year adjustment ratio that has been introduced for these Charge Controls, and considers that it is preferable to the carry forward mechanism used in previous WLR and LLU charge controls, as it is mathematically more accurate.

293. These changes have also been made within the draft legal instrument of the Fixed Asset Market Review to cover ISDN2 and ISDN30[100], however while mathematically the same they have been drafted differently. For clarity and to avoid confusion, Openreach considers that the wording and formulas of both legal instruments should be aligned.

Definition of WLR

294. Openreach considers that Ofcom should, for the avoidance of doubt, change all references to WLR in the draft legal instrument to WLR Basic. Consistent with the current charge control, this is the service which is being controlled.

[100] FAMR Consultation, Annex, Condition 7D and 7E

Question 4.11: Do you consider that X in CPI-X for the ancillary service baskets should be determined as: the same X for both SMPF and MPF ancillaries baskets based on the pooled costs and pooled revenues of SMPF Ceases, MPF Ceases and MPF New Provide; and X for Co-Mingling ancillaries basket based on the pooled costs and pooled revenues of Room Build, Hostel Rentals and Tie Cables? Please provide reasons to support your views. If you consider a different basis is more appropriate please set out what this approach would be and why.

295. We agree that the X for the MPF and SMPF ancillary baskets should be the same. The rationale for this falls into two aspects:

- Basket design
- Calculation of costs for the baskets

Basket Design

296. Openreach aims to align prices across SMPF and MPF where the underlying activities and costs are similar. This has been challenging given the different level of X in the baskets in the current WLR and LLU charge control. (RPI-9% for the MPF basket and RPI-13% for the SMPF basket.) As a result, the Expedite prices for SMPF and MPF have moved apart during the course of the current WLR and LLU charge control.

297. As explained in response to question 4.10 above, Openreach's preferred solution is a single basket across all LLU ancillary services. However, if Ofcom proceeds with separate MPF and SMPF ancillary services baskets, setting the same level of X across the two baskets would partially address the basket design issues identified.

Calculation of X

298. Openreach agrees that in principle it is sensible to use proxy products to calculate the X for the MPF and SMPF ancillary baskets. However, Ofcom has chosen to use a weighted average of MPF cease, SMPF cease and MPF provide. The largest components of the MPF Ancillary basket are the MPF SLP and the MPF WLTO products. Openreach considers that rather than use MPF Provide as a proxy, Ofcom should use the MPF Single Migration product as this is more closely related to the MPF WLTO product. This aligns with BT's preferred solution, as explained in response to question 4.10 above, of creating a single MPF and SMPF ancillary service basket which excludes MPF New Provide or Migrations from the combined basket.

299. Openreach agrees that in principle it is sensible to calculate X for the co-mingling ancillaries basket using pooled costs of room build, hostel rentals and tie cables products. However Openreach disagrees with the way in which Ofcom has modelled these costs for future years and believes the approach used under recovers co-mingling costs. Openreach covers issues regarding co-mingling charges separately in section 4.4.4 of this Response.

Question 4.12: Do you agree that sub-caps applied to the ancillary services baskets should be tighter than CPI-X+7.5%? Please give views on the appropriate level of sub-caps in the range 5% to 7.5%. Please provide reasons to support your views.

300. Ofcom proposes that, when using prior year weights, a sub-cap is a necessary tool to prevent 'gaming' the control e.g. to prevent Openreach increasing the price of products which are growing relative to other products. Openreach agree with the use of prior year weights, but disagrees that the sub-cap constraint is needed to prevent gaming. Openreach would argue that this needs to be set at more than CPI-X+7.5% if any sub-cap is implemented.

301. Our argument falls into three areas:

- there is no failure to correct and so no need for regulation;

- the proposed sub-cap is unduly restrictive as it goes against the principle of basket controls providing flexibility; and
- the proposed sub-cap is unduly restrictive as it requires each price to be reduced each year, regardless of the movement in costs.

No failure to correct

302. We would argue that Openreach has no ability to 'game' the basket controls for MPF ancillaries, SMPF ancillaries or co-mingling. As Ofcom is well aware, very few of the items in these baskets have volume forecasts. While there is limited data on items such as bulk migration, the inaccuracy of the forecast would not allow gaming, and neither would the fact that some of the more material items aren't forecast at all[101]. For the items in the co-mingling basket, to get the volumes to allow the prior year weights to be calculated requires a manual and time consuming data gathering exercise that is done once a year, purely to allow compliance to be demonstrated to Ofcom.

303. Furthermore, as Ofcom notes itself in paragraph 4.238 of the Consultation, price elasticity data is not readily available on these products to try and exploit the basket controls by increasing prices on inelastic products while reducing the price in elastic products.

304. The basket controls could also be used to set prices which benefit internal CPs and the sub-caps are intended to limit Openreach's ability to do this. The co-mingling basket contains items that are consumed by internal and external CPs. As TalkTalk notes, within this basket downstream BT only consumes tie cables directly from Openreach. Past behaviour evidences that Openreach has not used the flexibility of the basket control to favour internal CPs. In fact, tie cables (consumed by internal and external CPs) are priced above FAC, while hostel rentals and room build (consumed by external CPs) are priced below FAC.

305. Given that it has not shown any evidence of 'gaming' baskets in the past to favour internal CPs, Openreach does not feel there is a risk of such behaviour that Ofcom needs to regulate against. As such, the sub-caps are unnecessary and moreover the level at which they have been set is unduly restrictive.

Restricting basket flexibility

306. An advantage of a basket control is to allow flexibility to price efficiently within the basket. Setting a sub-cap restricts this flexibility and limits this benefit.

307. Ofcom's proposal is different from the current inertia clause in that the limit for increasing prices will stay the same – or even reduce in flexibility – while the limit on decreasing prices is removed. Flexibility to decrease prices by a greater amount is of limited benefit in a basket control unless there are also items that can have a relative increase, which these sub-caps would prevent. (see response to question 4.10)

Price decreases required on each and every product

308. Given the high level of X, and anticipated levels of CPI, even sub-caps at 7.5% could require all products in the baskets to decrease in price each year.

309. For the MPF and SMPF ancillary service baskets that have a proposed control of CPI-8.5% a +7.5% sub-cap will allow price rises if CPI is above 1%, but CPI would need to rise to 3.5% (well above the Government target) to allow price rises with sub-caps of 5%. For the Co-mingling

[101] Forecasts are received for bulk activity. However looking at the forecast received in November 2011 (which was the point in time pricing decisions need to be made for the FY 2012/13 financial year), the actual was 240% of the forecast across all CPs was and for SMPF the actual was 74% of the forecast. This would completely change the relative weightings within the basket and not allow pricing decisions to be made to try and 'game' the control.

basket, which has a proposed X of 10.75%, CPI would need to be above 3.25% to allow a price increase with a sub-cap of 7.5%, and as high as 5.75% with a sub-cap of 5%.

310. This means with a sub-cap of 5%, inflation would need to rise well above Government targets to allow a price to remain constant or increase. Such high levels of CPI are unlikely, and it is therefore likely that in each year, every product would need to decrease in price.

311. First, this creates significant administrative effort for Openreach and its customers. There are around 100 products across the three baskets to which these sub-caps would apply, and each price would need to be decreased to stay below the sub-caps. Not only would Openreach need to update its systems, so too would its customers. Given that many of these products do not have any volumes, this would seem a disproportionate administrative effort.

312. Secondly, and far more significantly, this does not allow for prices to increase if costs increase.

313. The baskets contain products whose costs are driven by a variety of different factors e.g. in the co-mingling basket security system maintenance and pay related installations sit alongside each other. The FAC of some products could increase while others decrease. If the costs of a subset of the products in the basket increase, Openreach should be allowed to increase prices of these products to reflect this.

314. The published RFS from both 2011/12 and 2012/13 show that the revenue from the comingling basket overall is below FAC, but this is not necessarily the case for each item within the basket e.g. tie cables are above FAC and hostel rentals below FAC as can be seen in table 7.4 below.

Table 7.4: Co-mingling service costs and revenues[102]

	2011/12 (as restated in the 2012/13 RFS)						2012/13					
	Volumes	Unit price	Unit FAC	Revenues	Cost	Variance	Volumes	Unit price	Unit FAC	Revenues	Cost	Variance
Tie Cables	325,953	86.89	47.08	28.3	15.3	13.0	348,940	67.18	44.05	23.4	15.4	8.1
Hostel Rentals	12,906	4,720.79	7,064.58	60.9	91.2	-30.2	14,338	4,670.22	7,756.23	67.0	111.2	-44.2
Room Build	1,520	12,793.57	13,712.45	19.4	20.8	-1.4	2,028	9,714.74	16,157.35	19.7	32.8	-13.1
Total				108.7	127.4	-18.7				110.1	159.3	-49.2

315. With both room build and hostel rentals below FAC, Openreach should be allowed to increase prices on these products in order to recover its forward looking efficiently incurred costs.

316. Openreach would much prefer its prices today to better reflect the underlying costs, but the current inertia clause of RPI-X+7.5% has prevented it from increasing prices in line with the increase in costs. For example, the 18% increase in the unit FAC for room build from 2011/12 to 2012/13 exceeds the increase of 9.3% allowed by the inertia clause and so couldn't be matched by an increase in price[103]. So, even in this situation where there is a positive controlling percentage and the sub-cap allows reasonable price increases, Openreach is prevented from increasing prices in line with costs.

317. It should be noted that this also raises the question of how such a large level of X could have been calculated for the co-mingling basket given that revenues have been significantly below FAC for the last two years. This is covered in more detail in 4.4.4.

Conclusion

318. Ofcom should limit the sub-caps on the baskets to 10%, as there is no failure to regulate, it would allow the efficient pricing of products, and it would permit price increases.

[102] Section 7.10.1 - Wholesale Local Access (WLA), Current Cost Financial Statements 2013 including Openreach Undertakings

[103] RPI of 5.4%, X of 3.6% and inertia cap of 7.5%.

Question 4.13: Do you agree that the sub-cap on MPF Stopped Line Provide should now be set at the same level as the sub cap for other services in the MPF ancillary basket? Please provide reasons to support your views.

319. Openreach agrees that the sub-cap on MPF Stopped Line Provide should not be any different to a sub-cap for the rest of the MPF ancillary basket. As Ofcom points out[104] previous pricing behaviour has not demonstrated any need for a specific constraint on this product.

Question 4.14: Do you consider that LLU Expedite charges should be based on Option 1 (maintain MPF Expedite and SMPF Expedite in the respective ancillary baskets) or Option 2 (remove MPF Expedite and SMPF Expedite services from the ancillary baskets and impose a safeguard cap on each Expedite service charge)? Please provide reasons to support your views. If you consider a different basis is more appropriate please set out what this approach would be and why.

320. In the current WLR and LLU charge controls, the difference in charges for Expedite across MPF and SMPF has increased. This increase is driven by the basket design rather than Openreach's pricing strategy. Openreach welcomes Ofcom's attempt to address this issue and, although Option 2 was not the solution it proposed, Openreach supports it on the basis that it achieves the same outcome.

321. If a safeguard cap is to be imposed, Openreach supports a cap of CPI-0% as this would allow Openreach some freedom to align prices for SMPF and MPF Expedite over time.

322. However, a CPI-0% sub-cap still provides limited flexibility to align prices that are so far apart. (From 1 September 2013 SMPF expedite will be £100.10 compared to £145 for a WLR or MPF Expedite.) As an illustration, if we assume CPI at the government target of 2% it could take untill April 2032 to align the SMPF price to the WLR and MPF price if the SMPF price was increased by CPI-0 each year.

323. Please also see the answer to question 4.10 above, where the impact of including Expedite products within the ancillary baskets is discussed.

Question 4.15: Do you consider that MPF/SMPF single/bulk jumper removal charges should be based on Option 1 (status quo) or Option 2 (separate charge controls for single/bulk jumper removals)? Please provide reasons to support your views. If you consider a different basis is more appropriate please set out what this approach would be and why.

324. Openreach agrees that MPF/SMPF single and bulk jumper removal costs should remain within the respective ancillary basket controls, as per Ofcom's recommended Option 1.

325. Given their related nature it makes sense for them to remain within the same basket to allow efficient relative pricing (a bulk jumper removal should be priced lower than a single jumper removal). If both the SMPF and MPF ancillary baskets have the same level of X, this allows the prices to continue to be consistent across both product areas.

326. If Option 2 were adopted and the items removed from the MPF and SMPF ancillary baskets, there would be little point retaining these basket controls, given the small number of remaining items within them with volumes/revenues against them.

327. Openreach notes that, within table 4.27 of the Consultation, the prices for MPF and SMPF Bulk Jumper Removal at 1 March 2014 are stated as "to be announced", whereas the current price should be assumed to be in effect at that time because Openreach has no plans to change these prices.

[104] Consultation, paragraph 4.258

Question 4.16: Do you agree that the existing obligation to align LLU Enhanced Care service charges with WLR Enhanced Care service charges should be retained? Please provide reasons to support your views.

328. Openreach agrees that the WLR and LLU enhanced care charges for the same module can be aligned, continuing the current regulatory approach.

329. In general Openreach prefers prices and costs to be aligned. As these products have similar costs, Openreach agrees they should have similar prices.

Question 4.17: Do you agree with our view that it is not necessary to impose a separate charge control on Special Fault Investigations? Please provide reasons to support your views.

330. Ofcom proposes a cost orientation obligation on Special Fault Investigation ("SFI") in its FAMR Consultation.

331. As Openreach notes in its answer to question 4.20 below, the decision to impose any constraint on its prices in an SMP market needs to be proportionate and justified under the legal framework. The finding of SMP alone is insufficient to justify the imposition of specific pricing constraints and these should be considered alongside the remedies already in place. To impose a separate charge control on SFI in addition to the cost orientation obligation already proposed in the FAMR Consultation would result in overlapping, overly complex and unnecessarily intrusive regulation. Moreover, Openreach considers that the benefits (if any) of imposing two forms of price control on this single item would not outweigh the issues caused by potentially conflicting controls.

332. Openreach does not agree with the proposal to impose a cost orientation obligation of SFI services. This is explained in more in the BT Group Response. That aside, for the reasons outlined above, Ofcom's proposal not to impose a charge control alongside the cost orientation remedy is proportionate, avoids unnecessary regulatory burdens and provides certainty and predictability for BT.

Question 4.18: Do you agree that the charges for special fault investigations should remain aligned between MPF and SMPF? Please provide reasons to support your views.

333. Openreach agrees that the SFI charges for the same module across MPF and SMPF can be aligned, continuing the current regulatory approach and reflecting the underlying costs of this service.

334. In general Openreach prefers prices and costs to be aligned. In the particular case of SFI, alignment of prices between MPF and SMPF is sensible as the underlying costs of the service will be the same for MPF as they are for SMPF:

- SFI2 is a single product that does not differentiate between MPF and SMPF i.e. the individual SFI modules offered (Base, Network, Frame, Internal wiring, Internal equipment, Coop and Frame direct) cover both products;

- as Ofcom notes at paragraph 4.315 of the Consultation, the cost of SFI work is largely based on direct and indirect labour engineering time; as the work conducted by Openreach engineers for each of the modules identified above is the same for MPF as it is for SMPF, the costs are also aligned.

335. The proposed approach to price regulation is covered in more detail within the BT Group Response.

Question 4.19: Do you agree that we should not align the SMPF and MPF services set out in Table 4.28? Please provide reasons to support your views.

336. Ofcom proposes not to align the SMPF and MPF ancillaries jumper removal prices. Openreach agrees that no regulation to align the price of similar SMPF and MPF services is needed.

337. Ofcom's own regulatory principles say Ofcom always seeks the least intrusive regulatory methods of achieving its objectives and will strive to ensure that interventions are evidence-based and proportionate.

338. Openreach has shown over the course of the current WLR and LLU charge controls a desire to align the prices of items that have similar costs, as Ofcom shows in table 4.28. This is a sensible commercial position, to support alignment of costs and price, and not to cause distortion in the market. The setting of the same level of X for the MPF ancillary basket and SMPF ancillary basket in general supports Openreach's continuation of this approach. As Openreach are already following this principle, there is no need for Ofcom to intervene.

Question 4.20: Do you agree that with basket controls coupled with sub-caps on individual services, a cost orientation obligation is unnecessary for the ancillary services? Please provide reasons to support your views.

339. Openreach agrees both in general and in this specific case, that where there is a basket control there is no need to also have a cost orientation obligation.

340. This issue was recently considered by Ofcom in the Business Connectivity Market Review ("BCMR"). As BT pointed out in its response to that consultation, the decision to impose any constraint on BT's prices in an SMP market needs to be proportionate and justified under the legal framework. The finding of SMP alone is clearly insufficient to justify the imposition of specific pricing constraints and these should be considered alongside remedies already assumed to be in place.

341. Until now, separate cost orientation remedies have been imposed in SMP markets in the UK by the "Basis of Charges" remedy. BT's view is that assessing compliance in this way means that the imposition of a separate cost orientation remedy alongside requirements to comply with basket controls and sub-caps results in overlapping, overly complex and unnecessarily intrusive regulation that merely creates uncertainty for all stakeholders. BT has also argued that such an approach has no clearly identified net benefits. As a point of principle, therefore, a simpler overall approach to pricing constraints that is more clearly focussed on addressing identified market problems is required.

342. A specific example of the issues of multiple controls and the uncertainty this brings can be seen with the co-mingling basket. Price reductions were announced to be effective from 1 April 2013 to comply with the requirements for the final year of the current WLR and LLU charge controls (2013/14). Amendments to prices were then needed to fully comply once prior year weights are finalised (which will come into effect on 1 September 2013). A further price change is then needed (coming into effect 1 November) when the historic cost orientation is known with the completion of the 2013/14 RFS in July 2014. This generally impacts products not impacted by any cost orientation issues as the basket will need some rebalancing to remain compliant. This leads to unstable prices during the course of the year. There have also been issues with conflicting controls over the co-mingling basket, where to comply with basis of charges obligations the basket control inertia clause must be broken. For example, reduction in Tie Cable prices.

343. Decisions to impose charge controls and the subsequent design of such controls (basket level CPI-X caps and sub-caps across prices within the basket) reflect: (i) concerns that any identified SMP should not be exploited by setting excessive charges; and (ii) that overall economic efficiency considerations require that the SMP operator should have an opportunity to recover efficient costs of provision, including a return of and return on capital investments. Concerns with

the way in which individual prices may be set will be captured in the design of the charge control remedy, in particular by:

- The decision on how to define the scope of services within baskets;
- Consideration of the possible need for 'day one' rebalancing of charges within the basket;
- The imposition of sub-caps limiting the extent to which both individual prices and average prices across sub-sets of services can be adjusted within any year.

344. These issues are rightly considered on their merits when setting the relevant controls, but once the design has been set, it needs to be made clear why there is any justification for an additional "cost orientation remedy" on individual prices.

Ofcom's approach reflects the correct interpretation of EU & UK law.

345. Ofcom's position is underpinned by EU and UK law. Within the EU CRF, the Access Directive covers the way in which Member States regulate access and interconnection of networks and facilities. Recital 20 of this Directive recognises that cost-oriented price controls (that is, not simply "cost orientation") are at the "much heavier" end of the spectrum of remedies:

"Price control may be necessary when market analysis in a particular market reveals inefficient competition. The regulatory intervention may be relatively light, such as an obligation that prices for carrier selection are reasonable as laid down in Directive 97l33lEC, or much heavier such as an obligation that prices are cost oriented to provide full justification for those prices where competition is not sufficiently strong to prevent excessive pricing. [...]"

346. Article 8 of the Access Directive goes on to say that:

"4. Obligations imposed in accordance with this Article shall be based on the nature of the problem identified, proportionate and justified in the light of the objectives laid down in Article 8 of Directive 2002/21lEC (Framework Directive)," [Emphasis added]

347. Under the UK Communications Act 2003, Ofcom must, in all cases, have regard to the following in performing their duties:

(a) The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and

(b) any other principles appearing to Ofcom to represent the best regulatory practice.

348. Section 6 of the Act provides that:

"(1) Ofcom must keep the carrying out of their functions under review with a view to securing that regulation by OFCOM does not involve-

(a) The imposition of burdens which are unnecessary; or

(b) The maintenance of burdens which have become unnecessary.

349. And Ofcom's own regulatory principles state that[105]:

When we regulate:

[105] Paragraph 6.2, Ofcom Annual Plan 2012/13, 29 March 2012

- Ofcom will operate with a bias against intervention, but with a willingness to intervene promptly and effectively where required.

How we regulate:

- Ofcom will always seek the least intrusive regulatory methods of achieving our objectives

- Ofcom will strive to ensure that interventions are evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome.

350. For the reasons set out above, Ofcom's proposals not to impose a cost orientation remedy alongside charge controls meet these regulatory principles of only imposing proportionate and necessary regulatory burdens, as well as providing maximum certainty and predictability.

7.3 Quality of service review and fault rate effects

Question 5.1: We would welcome the views of stakeholders on our proposed approach to estimating the cost of changes to service levels.

351. Openreach has provided a response to this question in its separate Service Response.

Question 5.2: We would welcome the views of stakeholders on our proposed approach to analysing fault rates. In particular do stakeholders believe that fault rates should differ between MPF, WLR and SMPF? Please provide reasons to support your views.

352. Openreach has provided a response to this question in its separate Service Response.

7.4 Charge control cost modelling

Question 6.1: Do you agree with our proposals for forecasting operating costs using CVEs based on BT's LRIC model? Please provide reasons to support your views. If you do not agree, please propose an alternative approach with supporting information.

353. Ofcom uses CVEs and AVEs in its modelling: their purpose is to capture the yearly cost change due to cost component volumes changes (based on Ofcom's volume forecast). AVEs and CVEs are no more than the LRIC divided by FAC for each cost component (LRIC to FAC ratio(s)). The FAC numbers are derived from the ASPIRE financial system, as are the costs in the RFS, and the LRIC numbers are derived from BT's LRIC model which uses ASPIRE inputs. As such the AVEs and CVEs are estimated using a set of financial data consistent with that used in the RFS.

354. Generally, one would expect a LRIC to FAC ratio of less than one since the LRIC value is estimated by taking away FCC from the FAC for the cost component. Put another way, when there is an extra unit of output, that unit costs less on an incremental basis because FCC don't change with volumes. In the main, the CVEs and AVEs that Ofcom use here preserve this relationship. In the small number of instances where the CVEs are greater than 1, the costs are not material.

355. BT has reviewed the values used by Ofcom in its cost modelling and assessed whether the CVE and AVE values are sensible given the drivers of costs for each cost component. Broadly the CVRs appear sensible.

356. The comments above are specific to these Charge Controls and to circumstances where the overall volumes of lines are increasing slightly. In circumstances where volumes are falling, it is not as clear cut that an unadjusted CVE model would be appropriate. In the short term, if service volumes are declining, the network used to support the services generally remains the same.

357. Such a circumstance applies to PSTN linecards. Openreach expects most costs will remain fixed over the Control Period as they relate to a relatively fixed quantity of linecards and therefore the cost will not reduce much due to the forecast decrease in WLR line volumes. Forecast WLR lines reduce during the Control Period and Ofcom uses a CVE for PSTN linecards of 0.87. In Ofcom's modelling, this means that if, for sake of argument, WLR lines decline by 1 million lines and the linecards supporting those 1 million lines cost £10 million in the base year, then PSTN linecard costs in the final year of the controls, purely associated with the 1 million decline in lines, would be £1.3million. In fact, it would be more reasonable to assume that the linecard costs in the final year would be closer to £10 million as BT has no way of avoiding most of the cost. Therefore, BT proposes that Ofcom assume a CVE nearer to 0 for PSTN linecards in order that its cost modelling makes more sense.

Question 6.2: Do you agree with our proposals for forecasting capital costs? Please provide reasons to support your views. If you do not agree, please propose alternative approaches with supporting information.

358. Openreach's response to the question on forecasting capital costs is similar to that of forecasting operating costs. Openreach agrees with the use of AVEs, and with the caveats noted in the Consultation. The AVEs need to be robustly calibrated with the expected Capex, and that the AVEs are based upon long run assumptions of variability, which may not hold in the short term.

359. Openreach agrees with Frontier Economics and with Ofcom that "it would be inappropriate to rely solely on AVEs to forecast capital costs for the cost components utilised by services in the WLA and WFAEL markets."

360. Openreach welcomes that Ofcom is seeking to anchor the charges upon Openreach's own forecast and agrees with Ofcom's approach of calculating the forecast for copper and duct capital expenditure based upon Openreach's capital programmes for Copper and Duct spend.

361. For other capital cost items, Ofcom adopts the AVE approach justified on the basis that "we consider that non-copper and duct capital costs (for example, motor transport and computing) do not share the same longer term investment characteristics and can be effectively forecast using AVEs. We therefore consider that forecast volume change multiplied by the relevant AVE is an appropriate method for forecasting such capital costs to 2016/17."[106]

362. Taking Ofcom's approach of reviewing capital items where there are long term investment characteristics; BT has considered whether the Land and Buildings AVE of 0.73 is reasonable. The original AVE used in the charge control model was calculated based on a weighting of different equipment that requires housing e.g. Local Exchange, Main Exchange etc. However, the majority of the Land and Building costs falling within the scope of these Charge Controls relate to co-mingling in the form of Accommodation Plant, such as electrical lighting, power, ventilation and fire protection. In the 2012/13 LRIC model, BT generated a new CVR for Accommodation Plant. As majority of these costs relate to Accommodation Plant, Ofcom should consider adopting the methodology used then to generate the AVE; this would generate an AVE of 0.59. Ofcom needs to adopt this change in its modelling approach.

363. Secondly, the volumes for the room build component within co-mingling declines over the Control Period, which combined with a relatively high AVE implies that the majority of the room build costs can be reduced within a three year time period. This is unreasonable as it is highly unlikely that these costs can be reduced in a three year period. Therefore Openreach recommends AVE for Land and Buildings to be less than 0.59 for these Charge Controls.

364. Lastly, Openreach refers Ofcom to its comments at 4.4.4 of this response regarding the negative Capex forecast for room build (generated in part by this high AVE). A potential solution to this would be for Ofcom to change the AVE to a lower figure that generates a more reasonable Capex forecast that aligns with Openreach's plans.

[106] Consultation, paragraph 6.106

365. In summary, Openreach agrees with the use of AVE as an approach, with the caveat as noted in the consultation response and using Openreach's own capital forecast to calculate copper and duct capital costs. Ofcom should also disclose it's the approach used to forecast copper and duct capital costs to ensure non-ambiguity and should amend the AVE for Land and Buildings to 0.59.

Question 6.3: Do you agree with our proposed estimates of inflation for BT's pay, non-pay costs and asset price inflation? Do you consider that using a longer time series to analyse the correlation of input prices with general inflation indices would provide more robust estimates of input price inflation? Please provide reasons to support your views.

Pay Inflation

366. Ofcom argues in the Consultation that recent BT historical data shows pay costs consistently increasing at a rate below reported RPI and that this justifies a departure from its previous approach to set pay inflation at the rate of expected RPI for the forecast period.

367. Ofcom proposes to use 2.8% for the annual increase in nominal pay costs, which is 0.5% above forecast CPI and 0.5% below forecast RPI. In doing so, Ofcom notes that recent years have been "unusual" and that there is some uncertainty about the performance of the wider economy (and hence the resumption of long term trends) over the forecast period.[107]

368. In Figure 3.2 of the Consultation Ofcom compares CPI and RPI against the increase in average staff costs per employee for BT Group. Ofcom concludes that there is no strong correlation between either rate of inflation and the changes in BT Group's average staff costs. Ofcom also concludes that pay increases are lower than both CPI and RPI.

369. BT does not agree with Ofcom's conclusion that this is relevant to setting charges for Openreach products. The analysis that Ofcom has conducted is based on BT Group data which includes both UK and non-UK staff and is not directly representative of Openreach, UK-specific, pay costs. There is superior, more specific historical data available to Ofcom for the purpose of setting charges for Openreach products.

370. Table 7.5 below replicates Ofcom's analysis of Openreach pay costs rather than BT Group pay costs.

Table 7.5: Openreach Pay Costs[108]

Openreach Management Accounts	**2011/12**	**2010/11**	**2009/10**	**2008/09**	**2007/08**	**2006/07**
Staff Costs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Average Openreach FTE (from Annual Report)	31.2	30.9	31.4	33.1	33.8	32.1
Average wage & salary cost per FTE (£000s)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Increase YoY	4.1%	4.3%	-0.2%	3.7%	4.7%	-

371. The average annual increase over this same five period (2007/08 through to 2011/12) is 3.3%. This indicates a close correlation with RPI over the same five year period where the average is 3.4%.

[107] Consultation, paragraph 6.124

[108] Openreach cost data taken from its Management Accounts. FTE data taken from the BT Group published Annual Report and Form 20F.

372. The evidence above clearly shows that there is a close correlation between the increase in Openreach's pay costs and published RPI over an extended time period, with average pay cost inflation only 0.1% below the average RPI. Therefore forecast RPI minus 0.1% should be used by Ofcom as a minimum guide to future increases in pay costs for Openreach. Ofcom's forecast RPI over the life of the charge control is 3.2%, whereas Ofcom should use a minimum of 3.1% for pay cost inflation in its cost modelling as a result.

373. It is generally accepted that the historic trend has been for average real wage increases for the private sector to be higher than RPI according to data published by the ONS[109] (+1.4%). However, Ofcom has highlighted that since mid-2010, due to the unprecedented recent economic crisis real wage inflation is below RPI[110]. Ofcom use this as a reason for breaking the link between real wage inflation and RPI. BT does not agree with Ofcom's assessment and suggests that Ofcom should recognise that it is reasonable to assume that, as the economy picks up in the near future, there is likely to be strong pressure for a return to pay settlements more consistent with the historical trends. Indeed the Office for Budget Responsibility forecast a return to real wage growth by 2014, and for this trend to continue to at least 2017. Ofcom should therefore adjust its forecast pay inflation rate upwards.

374. Ofcom relies heavily, when setting its pay inflation rate, on BT's most recently announced pay deal for the financial year 2013/14. However, Ofcom has ignored the evidence that headline CWU pay settlements for BT have on average understated the trend of annual increases in total staff costs per employee by an average of 0.3%. This is shown in table 7.6 below:

Table 7.6: Annual increases in total staff costs per employee

Openreach Management Accounts	**2011/12**	**2010/11**	**2009/10**	**2008/09**	**2007/08**
Increase in staff costs year on year	4.1%	4.3%	-0.2%	3.7%	4.7%
Published CWU pay settlements	3.0%	3.0%	-	4.3%	4.7%
Difference	+1.1%	+1.3%	-0.2%	-0.6%	-0.0%

375. Therefore, should Ofcom continue to rely on the headline CWU rate, it should adjust its pay inflation forecast upwards by 0.3% per annum.

376. In conclusion Ofcom should set its pay inflation at a minimum of 3.1% reflecting the evidence outlined above.

Non-Pay Inflation

377. Ofcom has used a rate of 3% for non-pay operating cost inflation in its charge control model.

378. BT has analysed the types of costs that make up the non-pay total and any specific contractual or otherwise linkage to specific rates of inflation (see table 7.7 below).

379. Where BT is able to ascertain a direct inflation rate for contractual or otherwise reasons, it has applied those rates to those costs. For Accommodation costs under the Telereal contract, an annual inflation rate of 3% is applicable. BT has looked at historical rates of inflation for the Fuel & Lighting category from the Office for National Statistics to arrive at the rate to be applied to Electricity costs and Cumulo rates is subject to RPI.

[109] ONS data used to generate the average real earnings growth for the private sector relative to reported RPI for the period January 1990 through to July 2008

[110] Consultation, paragraph 6.124

380. Where there is no clear evidence for a specific inflation BT has used CPI on the assumption that these costs will increase at the average rate of the economy as a whole. This analysis is set out in table 7.7 below:

Table 7.7: [✂]

381. A weighted average of these cost categories shows that a forecast rate of non-pay inflation of 3.1% is more likely than the 3.0% quoted by Ofcom.

Asset Price Inflation

382. Ofcom uses an average rate of inflation to apply to both non-pay and pay costs. In recent WLR/LLU charge controls it has also used an average view of RPI in order to set the asset price inflation rate.

383. It is important to apply asset price inflation consistently so that holding gains and holding loss adjustments do not create distortions and prevent the recovery of efficiently incurred costs. In these Charge Controls, the RPI forecast is increasing and the average rate of RPI is lower than the final year forecast RPI. This generates a higher holding gain in the final year than would otherwise be the case if Ofcom adopted a consistent approach to asset price inflation.

384. Therefore, BT proposes that Ofcom maintain the approach from the current charge control and uses an average rate of RPI for the calculation of holding gains throughout the forecast period, which would reduce the final year asset price inflation from 3.45% to 3.2%.

Question 6.4: (a) Do you consider that the broadband line testing unit cost figures for MPF and SMPF in BT's 2011/12 RFS are reasonable? (b) What should Ofcom assume for broadband line testing costs for 2016/17? Please give reasons to support your views.

385. [✂]

386. [✂]

387. [✂]

388. [✂]

389. [✂]

390. [✂]

391. [✂]

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407. [✂

408. [✂]

409. [✂]

410. [✂]

411. [✂]

Question 6.5: Do you agree with our proposed approach to estimating the LRIC for relevant services in 2016/17? Please give reasons to support your views.

412. Where it has a reporting obligation to do so BT publishes the LRIC and FAC values for specified services in the RFS. Ofcom has used this information to calculate an average LRIC to FAC ratio for WLR rentals (55%) and MPF rentals (54%) which is then used to identify the FCC associated with the services.

413. The FAC numbers are derived from the ASPIRE financial system, as are the costs in the RFS, and the LRIC numbers are derived from BT's LRIC model which uses ASPIRE inputs. As such the FAC and LRIC costs are estimated using a set of financial data consistent with that used in the RFS. Therefore, in general, Openreach considers that the approach used by Ofcom to calculate LRICs for 2016/17 to be broadly reasonable.

414. However, in the published RFS for 2011/12 the MPF ratio is 59% and the WLR ratio is 53%. Ofcom adjusts the reported ratios as they consider there are distortions from the 'broadband line testing' and 'PSTN line test equipment' ratios in 2011/12. It justifies that this adjustment is appropriate with reference to historic LRIC/FAC ratios for the two services.

> *"From 2008/09-2010/11 the MPF LRIC/FAC ratio has been either equal to or 1% below that of WLR"*[111].

415. The effect is to treat costs that are reported as incremental to MPF as FCC thereby unfairly inflating the cost of WLR services by transferring MPF LRIC costs to WLR. This adjustment is likely to be highly distortionary. Ofcom doesn't evidence precisely what reported MPF LRIC costs are overstated in the RFS.

416. Openreach has no objection to all lines recovering the same share of FCC but Ofcom must make sure that the adjustment is valid and only includes FCC.

[111] Consultation, paragraph 6.154

7.5 Efficiency

Question A7.1: Do you agree with our proposed approach to modelling efficiency, both in general and in particular in applying a single efficiency target to both operating costs and capital expenditure? Please provide reasons to support your views.

417. BT does not agree with Ofcom's proposed approach to modelling efficiency either in general or in respect of its application of a single efficiency target to both operating costs and capital expenditure.

Ofcom's approach to modelling efficiency in general

418. Ofcom sets out its approach to modelling efficiency in general in Annex 7 to the Consultation, stating that:

- setting the efficiency rate is not about "giving BT incentives" but about "ensuring that future prices are set at an efficient forecast cost level"[112];
- Ofcom have considered a "range of indicators" to estimate the efficiency improvement that would bring Openreach's costs in line with those of an efficient operator"[113].
- the efficiency rate set should be independent of volume effects and input price changes, and should capture the effect of all means of delivering efficiency savings "including the savings that might be achieved by doing things less often (e.g. through reduced fault visits) or more quickly (e.g. through reduced task times) and for less money"[114].

419. BT discusses below that:

- The efficiency rate is full of uncertainty and Ofcom need to balance objectives;
- Ofcom should take account of actual PVEO data for 2012/13;
- Ofcom should adjust the actual PVEO data to make it consistent with Ofcom's modelling approach; and
- Ofcom should set separate Opex and Capex Efficiency Targets.

The efficiency rate is full of uncertainty and Ofcom need to balance objectives

420. In setting charge controls, and assessing efficiency, it is common for regulators to recognise that the potential for efficiency savings is full of uncertainty. That this is the case will be clear even from an analysis of BT's historical performance as described above regarding the PVEO analysis. The standard response by regulators to this uncertainty is three-fold:

- to use a variety of sources of information to build an overall picture
- to benchmark efficiency levels against prudent levels of best performance, such as choosing efficiency that is high performing as opposed to being "on the frontier" (i.e. the best performing firm)

[112] Consultation, paragraph A7.18

[113] Consultation, paragraph A7.20

[114] Consultation, paragraph A7.2

- to assess the extent to which it is reasonable to expect the regulated firm, over the price Control Period, to close the gap that separates it from the chosen efficiency benchmark.

421. For example, Ofgem recently assumed that it was reasonable to expect firms to close the gap to the upper quartile performing benchmark by 75%, partly in response to the fact that there would be statistical errors in any analysis[115]. The Office of the Rail Regulator explained its choice of the upper quartile level of performance, partly in response to uncertainty about data[116]. In the past, Ofwat has reduced its modelled level of inefficiency by 10% or 20% to reflect data uncertainty[117]. These have all been conscious choices, following analysis, not to inadvertently set cost levels which the supplier is unlikely to be able to meet.

422. There is a deliberate balance between the 'carrot' under a price control (making over-achievement possible) and the 'stick' (requiring efficiency improvements to recover costs). We find this is exactly the CC's position when in 2010, the last time BT's efficiency was subject to an appeal, and after having considered a number of sources of information, the CC stated:

> *'We have satisfied ourselves that the approach that we have adopted reflects a properly challenging target, recognizing the costs that may be incurred, and also that there may be scope for yet further savings.'*[118] *(Emphasis added)*

423. BT accepts this comment in its entirety – the target *should* be challenging, but the target should not be such that "yet further savings" cannot be identified and realised. That is, the target ought to be one which BT can reasonably be expected to exceed through very effective management and forensic attention to cost control.

424. Setting a target which is unobtainable over the timescale of the control also has serious detriments. By not permitting the recovery of efficiently-incurred costs, the funds available to future investment needed to maintain and improve the network will be squeezed. When a company's core services are earning less than the firm's cost of capital, the cost of accessing external funds is likely to rise. Competition is likely to be distorted, too, as suppliers attempting to compete against the regulated firm (and against firms using its services as inputs) will need to undercut charges which are built up from inputs which are already below cost.

425. These considerations are very well known and are discussed by Ofcom in terms of balancing allocative, dynamic and productive efficiency.[119] What they point to is the need for the regulator to make an evidence-based decision to *balance* different factors in setting what is (despite claims to the contrary by Ofcom in A7.18) the key incentive target for the forecast period.

426. In their deliberations following this consultation, BT urges Ofcom to give proper consideration to this balance and to align its approach with those it has used in the past. Ofcom should take into account the approach used by other UK regulators when setting price controls, to set a target it justifies as being "stretching but achievable", and which we consider is far lower than the current assumption of 5% each year.

Ofcom should take account of actual PVEO data for 2012/13

[115] Ofgem, RIIO-GD1: Final Proposals – Supporting document – Cost efficiency, December 2012, p. 7.

[116] Office of Rail Regulation, Determination of Network Rail's outputs & funding for 2009-14, October 2008, pp. 124–25.

[117] Ofwat (2009), 'Relative efficiency assessment 2008-09 - supporting information', December p.12, available at http://www.ofwat.gov.uk/publications/pricereviewletters/ltr_pr0939_appendix2.pdf

[118] The Carphone Warehouse Group plc v Office of Communications Case 1111/3/3/09, CAT Determination 31 August 2010. 2.231(d)

[119] For example, 3.13 to 3.18; and in consideration of the "RAV adjustment" in A5.10- A5.19; and in the "Economic principles for setting migration charges", from 4.101. Indeed, it is noteworthy that Ofcom discusses economic efficiency at length elsewhere in the consultation, emphasising the trade-offs involved, but does not address the issue when it comes to one of their main tasks i.e. the setting of the overall efficiency target itself.

427. In setting the efficiency target, Ofcom relies heavily on Openreach's own PVEO analysis of actual and forecast efficiencies. However, Ofcom's modelling approach uses CVEs which already incorporates some of these reported efficiency savings; if corrected Openreach's reported efficiency is much lower than Ofcom assumes.

428. The PVEO analysis is used as a management tool by Openreach to understand historic performance year-on-year or quarter-on-quarter, and to make comparisons between actual costs and budget or between forecast and budget. The analysis helps Openreach to evaluate and adapt its ongoing efficiency programmes as well as to make informed decisions about future efficiency programmes. It is not intended to reflect how the average cost of maintaining and supporting a WLR or LLU line has changed.

429. The way in which the PVEO analysis works is to break down changes in total costs into those assessed as being due to Price (P) changes, Efficiency (E) changes and Volume (V). The P, V and E estimates are constrained to sum to the known change in cash costs and are jointly determined. Efficiency is not a residual after P and V have been independently input into the PVEO, but is co-determined with V. Efficiency cannot therefore be used without an understanding of the corresponding V. What we term the "unadjusted E" is the E which is in BT's PVEO but which is based, for charge control purposes, on an inappropriate V. Attention must therefore be paid to the V[120].

430. Openreach have identified two key issues regarding the use of unadjusted E from the PVEO analysis described above.

- Firstly, as per section 4.4.1 above, Ofcom's new modelling approach does not account for all volume effects in the PVEO analysis which include for example, increased fault rate, pole testing activities and increased visit ratios. As an illustrative example consider fault rates.
    - The implicit fault rate in Ofcom's cost model is static and therefore any increase in fault rate is not accounted for in the Ofcom CVE model. The V in Openreach's efficiency analysis includes cost changes relating to an increased copper fault rate. The E is therefore higher than it would otherwise be. Because Ofcom make no allowance for the increased fault rate in the CVE modelling, the E needs to be reduced in order to be consistent with the new modelling approach. The consistent E value would net out the V impact of cost increases due to fault rate increase.
- In 2009 the Ofcom charge control in for WLR/LLU services explicitly included an assumption for efficiency on fault rates, i.e. a reduction over time and in the OFFR determination[121] Ofcom concluded that efficiencies representing an annual reduction of 2% in the fault rates were assumed in its cost modelling.
- In 2011 the Competition Commission stated[122] that 0.5% of the efficiency rate was a result of the assumption that fault rates would reduce and in the 2012 WLR/LLU final determination Ofcom said "Efficiency is defined such that it includes all types of efficiency savings, including reductions in task times, fault rates and real unit cost improvements."[123]
- Secondly, Ofcom's model is based on actual costs in the base year, therefore the E should be based on the change in Openreach actual costs. The Openreach PVEO analysis recognises the impact of cost avoidance actions / programmes. The approach is to recognise the cost of faults *anticipated,* without such actions being included in the V assessment whilst their benefits (in terms of faults assessed to have been avoided)

[120] For clarity of argument, Openreach has not referenced Other (O) although this is also estimated and has a very small impact on the Volume (V) calculations.

[121] Consultation, paragraph A9.124

[122] Final determination, paragraph 2.226

[123] Final determination, Annex 3, paragraph A3.8

are included in E assessment. What this means is that the E Ofcom uses is not based on the change in actual costs (which is relevant to the modelling) but includes cost increases that we assess we have avoided.

Ofcom should use an alternative calculation of the PVEO consistent with the modelling approach

431. There is a further issue regarding the direct use of BT's PVEO analysis and its use in a charge control model.

432. Each of Ofcom and Openreach's approaches looks for an understanding of the movement in costs, and its constituent parts, but they do this in fundamentally different ways. Openreach's PVEO analysis is designed to measure the performance of Openreach managers against cost saving targets set by senior management, and includes views from those responsible for cost savings projects as well as the outcome of an interrogation of these views. That such a process is followed is deliberate, as the PVEO is designed to enable such examinations and internal interactions. For example, costs judged to have been avoided (costs which never occurred but would have occurred without a programme) are included as Efficiencies even though there are no Year on Year outturn unit cost savings as a result.

433. In contrast, in Ofcom's charge control efficiency is imposed after taking account of the effect of assumed volumes [V] and input prices [P], as well as other known factors or cost movements unrelated to efficiency improvements, such as the impact of economies of scale (which does not feature in the Openreach PVEO).

434. We therefore asked Oxera to calculate Efficiency based on Ofcom's assumptions for P and V, and including scale economies effects, as if Ofcom carried out a specific regulatory PVEO analysis. This would not include costs avoided and use of Ofcom's assumed volumes changes. Oxera show this would have a very significant impact on Efficiency, as shown in table 3.1 of their Report.[124]

435. Under the implied Ofcom approach to PVEO, Oxera calculate that operating cost (Opex) efficiency was 2.0% in 2011/12, and around 4.0% in 2012/13 and 3.8% in 2013/14, and hence about 3.3% each year on average.

436. The estimates for capital cost (Capex) efficiency are very volatile under the implied Ofcom approach, being 1.1% in 2011/12, 0.5% in 2012/13 and 11.3% in 2013/14.[125] Such instability calls into question the use of the approach for Capex, and Oxera suggest at the very least that a longer-term analysis may be required to smooth out the variability. Oxera note that Ofgem assesses Capex efficiency over a 7-year horizon to account for this volatility.

Ofcom should set separate Opex and Capex Efficiency Targets

437. Ofcom's approach to this charge control is to set prices to achieve its view of efficiently incurred costs that have been allocated on a cost causal basis.

438. Ofcom is setting a single average efficiency rate, across Operating Costs and Capital Expenditure. It is clear from the evidence provided to Ofcom, by BT, that Openreach has achieved a lower rate of efficiency on operating costs, i.e. below the average across total cash costs, whilst it has achieved a higher rate of efficiency on capital expenditure, i.e. greater than the average across total cash costs. This is shown in detail in table 7.12 below.

439. On an accounting cost basis, the average efficiency generated by BT would be below the average cash cost efficiency for two reasons.

[124] Assessment of Ofcom's analysis to set the efficiency target, Oxera, 24 September 2013.

[125] The high 2013/14 result appears to be driven by a significantly large forecast reduction in gross CAPEX of around 12.5%.

- Operating Costs, which represent around three quarters of the total cash costs for Openreach, has a lower efficiency rate than the average.

- The higher efficiency being generated on capital expenditure would be amortised over the lives of the assets.

440. The approach taken by Ofcom penalises BT and prevents it from recovering its efficiently incurred cost. This is because Ofcom is using an average efficiency rate based on cash costs but is applying that to the accounting cost in its model.

441. The example below in table 7.12 illustrates the difference in the application of an average 5% cash cost efficiency and a disaggregated accounting cost efficiency using Operating Cost and Capital Expenditure efficiencies of 4% and 9% respectively.

Table 7.12: The difference in application of using cash flow basis and an accounting cost basis

Example	Cost Parameters	Cash Flow Basis Efficiency	Accounting Cost Basis Efficiency
Operating Cost	£400.0m	5.0%	4.0%
Capital Expenditure	£100.0m	5.0%	9.0%
Total Cash Cost	£500.0m	5.0%	5.0%
Asset life (years)	10		
WACC	10.0%		
Calculation of efficiency	**In year cost**	**Cash Flow Basis**	**Accounting Cost Basis**
Operating Cost	£400.0m	£380.0m	£384.0m
Capital Expenditure	£10.0m	£9.5m	£9.1m
WACC	£10.0m	£9.5m	£9.1m
Accounting Cost	**£420.0m**	**£399.0m**	**£402.2m**
Efficiency applied:		**-5.00%**	**-4.24%**

442. As can be seen from table 7.12, by taking the approach that Ofcom is proposing, it is in effect applying a larger efficiency to the accounting costs, which Ofcom use to set prices, than is supported by the evidence provided to it by BT.

443. It should be straightforward for Ofcom to assess separate Opex and Capex efficiency targets as BT has provided Ofcom with a breakdown of efficiency between Opex and Capex. We propose that once Ofcom has adjusted their analysis to take account of the points made above, that it uses the separate targets as a guide to its final assessment of the most appropriate Opex and Capex efficiency targets.

444. The impact of applying differential rates of efficiency consistent with the average cash cost efficiency of 5% in Ofcom's Base Case is to materially reduce the Xs of products within the scope of this charge control. This has a material impact BT's revenue and its ability to fully recover its efficiently incurred costs over the life of this charge control.

445. Applying an average efficiency rate rather than applying a separate Opex and Capex efficiency rates, has a very significant on Ofcom's base case Xs which leads to under recovery of c. £85m over the life of the control.

446. Ofcom assert disaggregating efficiency rates and applying them in its model would add unnecessary complexity.[126] This is clearly an ill-considered position as we have demonstrated there will be a material understatement in efficiently incurred costs and that the benefit of correcting this clearly outweighs any additional complexity. This is particularly as Ofcom's model includes the necessary functionality to apply the separate rates.

Ofcom's approach and incentive regulation

447. Ofcom claims that (emphasis added),

[126] Consultation paragraph A7.17

'Setting the efficiency rate is therefore not about giving BT incentives but about ensuring that future prices are set at an efficient forecast cost level.[127]*'*

448. This is a radical new claim, which is unsupported by Ofcom and about which BT wholly disagrees. Indeed, elsewhere in the consultation Ofcom state that (emphasis added);

'Price cap regulation (rather than "rate of return" regulation) provides an incentive to make efficiency gains over and above those forecast as part of the control. If BT is able to deliver the required services at a lower cost than has been forecast, it can keep the profits resulting from these savings. In this way, price cap regulation provides incentives to 'outperform' the control and improve efficiency over time. Customers also benefit in the longer term, as these additional efficiency gains can be shared through lower prices when the charge control is reset.'[128]

449. This has been Ofcom's position for many years. For example, in 2009 it said that

'we want to provide incentives for Openreach to reduce its costs via efficiency gains.' [129]

450. In 2011, in explaining its preference for glide paths, Ofcom said that

'This [glide path] approach also has greater incentives for efficiency improvement as it allows the firm to retain the benefits of cost reductions made under a previous charge control for longer.' [130]

[Under] an RPI-X charge control Openreach is encouraged to increase its productive efficiency. This is achieved by allowing Openreach to keep any super-normal profits that it earns within a defined period by reducing its costs over and above the savings envisaged when the charge control was set. The benefits of any cost savings would potentially accrue to the regulated company in the short run and this would give Openreach incentives to make those efficiency savings. In the longer run, these cost savings could be passed to consumers through reductions in prices, either as a result of competition or through subsequent charge controls. This form of price regulation is also preferable to a rate of return type of control.[131]

451. Ofcom's position appears to be that price cap regulation *is* about incentives but that the setting of the efficiency rate is not. Given that efficiency is one of the key factors that is largely within BT's control (as opposed, for example, to the WACC) the idea that this integral part of the approach can be carved out and positioned differently is clearly misguided. Indeed, if the objective Ofcom set itself was to set prices at their efficient level, then it could do this very year and dispense with there-year price controls altogether.

452. The problem that Ofcom are seeking to avoid by the claim in A7.18 is that they have not addressed how the basis of the chosen forecast can itself be expected to affect incentives over time. In this consultation Ofcom has, in effect, relied exclusively on its reading of BT's past performance and the savings which BT has challenged itself to deliver in the future (at least for three next two to three years). Ofcom has not recognised that this, in itself, sets up very poor incentives for the long run because any record of historic achievement will be held as evidence justifying *further* price cuts; and the very existence of any plans to reduce costs will be used in the same way.

453. A regulated company facing such a form of regulation then has a reduced incentive to reduce costs – it is, in effect, being penalised for aggressive cost cutting and for also setting itself stretching targets.

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[127] Consultation paragraph A7.18

[128] Consultation, paragraph 3.4

[129] Charge controls for Wholesale Line Rental and related services, Ofcom Consultation, 3 July 2009.

[130] Charge control review for LLU and WLR services, Ofcom Consultation, 31 March 2011, 3.94

[131] Consultation, paragraph 9.47

454. This is why regulators should make extensive use of evidence which is *exogenous* (i.e. independent and objective) to the regulated supplier, but at no point has Ofcom done this. There is no evidence offered by Ofcom as to the level of efficiency which BT/Openreach has achieved and therefore what it is reasonable to expect it to improve over the period to 2016/17.

455. This very point about the importance of exogeneity is even acknowledged by Ofcom in a different context in the consultation where it is stated that:

> *'An indexation approach which uses a third party index, making the revaluation of the asset base exogenous [and] ensures that the incentives on BT to increase efficiency due to the charge control mechanism are effective.'*[132]

456. In this latter statement there is a consistency with the Competition Commission's (CC) consideration of efficiency in 2010[133]. The CC concluded that there was a role for different sources of evidence, as none could be considered decisive on their own,[134] and implied that Ofcom ought to give particular weight to independent and objective evidence. The CC stated that:

> 'In our view, the KPMG report was the most objective, independent source of evidence available to Ofcom; the historical indicators provided the most direct evidence of what Openreach had recently achieved; whilst Openreach's 2009/10 budget was important because it corroborated the historical indicators and KPMG efficiency review and established what Openreach had planned in the first year of the price control. This *contrasted with Ofcom's reliance on the Openreach budget for 2009/10 in preference to the other measures.'*[135]

457. We note that in December 2012 the Office of Rail Regulation stated quite plainly that

> *Undertaking benchmarking and assessing efficiency is recognised as a core task for economic regulators. Benchmarking is typically used by regulators as a means of mimicking the competitive environment and through assessing the efficient level of historical and planned expenditure of regulated companies on an ongoing basis and, in particular, as part of a price control review.*[136]

458. Ofcom has, quite simply, omitted one of its core tasks under a price control. To give one example of the problem this causes, if BT had caught up with the efficiency frontier in a past control, then applying forwards rate consistent with past achievements would mean that it would lead to the catch-up achievement being imposed again when there was no "catching up" left to be achieved.[137] But, having omitted to take a view of BT's efficiency, and where it was relative to the frontier, Ofcom has no way of knowing whether it has made this error or not.

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[132] Consultation, paragraph A5.85

[133] The Carphone Warehouse Group plc v Office of Communications *Case 1111/3/3/09, CAT Determination 31 August 20101.*

[134] In paragraph 2.231(a) the CC recognised that, "each of the sources of information we have seen about the savings that Openreach might make has strengths and weaknesses. Consequently we have assessed the evidence in the round, identifying where more or less reliance can be placed on each source of information, recognizing the limitations of each source of evidence, and looking for corroboration among those sources."

[135] The Carphone Warehouse Group plc v Office of Communications *Case 1111/3/3/09, CAT Determination 31 August 20101.* 2.224

[136] Project Splice: Workstream 3: Benchmarking and efficiency, Office of Rail Regulation. http://www.caa.co.uk/docs/2552/2012JRGWorkstream3Benchmarking.pdf.pdf

[137] Efficiency is said to be catch-up when a company makes improvements which bring it into line with its efficient peers; and frontier shift efficiency when it is efficiency made by an already efficient firm. An efficient firm can therefore only make the "frontier shift" rate of improvement, whilst an inefficient firm can make additional catch-up improvement.

Question A7.2: Do you agree with our proposed net efficiency range of between 4% and 6% and base figure of 5%? Do you agree with the levels proposed? Please provide reasoning to support your views.

459. There are a number of flaws to Ofcom's position which are set out above in response to Question A7.1. These flaws mean that Openreach does not agree with Ofcom's proposed net efficiency range of between 4% and 6% and base figure of 5%. Openreach has further specific comments on the references used by Ofcom which are detailed below.

BT disagrees with Ofcom's assessment of historical efficiency

460. Ofcom assume that historical efficiency achievement is indicative of future achievement.

Ofcom should replace forecast efficiency with actuals

461. Ofcom evidence their assumptions using historical data provided by BT over the five year period to 2011/12. BT is now providing Ofcom with actual data for the year 2012/13 and this should be included in Ofcom's calculation of the historical average.

462. Taking account of the latest draft actual BT data for 2012/13, the average cash cost efficiency, including NGA, over the last six years is [✂] (adjusted for one-off items).

463. When Ofcom replace the forecast data with actuals, the range around these years will be [✂].

Ofcom should allow for one-off adjustments

464. The range before one-off adjustments[138] for the six year period shows efficiency of [✂], with a rounded average of [✂].

465. However, BT would strongly argue that there is a clear rationale for unrepeatable one off items to be excluded from Ofcom's efficiency and in particular the £84m reduction in Cumulo charges in Openreach's Management Accounts in 2010/11, should be excluded from the efficiency value in that year. This reduction which was due to BT moving from the 2005 to the 2010 ratings list, is by its nature a one-off that should not be taken into consideration when Ofcom are assessing historical levels of efficiency. This one-off reduction was explicitly excluded from Ofcom's analysis of historical efficiency in the last WLR/LLU charge control and this issue was not appealed by any stakeholder. We therefore see no reason for Ofcom to change its decision in this new charge control.

466. If Ofcom allow the one-off Cumulo adjustment to the efficiency in 2010/11 but exclude all others, the average of historical efficiencies is [✂] with a range of [✂].

Ofcom's analysis of historical efficiency from the RFS is flawed

467. Openreach asked Oxera to consider the RFS data over the past three years in WLA and WFAEL markets (2009/10 to 2011/12) to assess the extent to which this could be used as an additional reference point supporting the 4% to 6% adopted by Ofcom. Oxera's analysis is set out in Section 4 of their Report where they make the following observations.

- Ofcom's finding of 6% per annum historic efficiency for WLA and WFAEL can be replicated with Oxera's assumptions including input price inflation of 2.9%, the use of rental volumes to estimate volume effects, and adjustment for changes in Cumulo Rates methodology. For Openreach as a whole, efficiency is estimated at 4%.

- However, the pace of efficiency improvements based on the RFS data is slowing, with the relatively high average of 6% largely explained by efficiencies achieved in 2009/10

[138] Consultation, paragraph A7.25

and 2010/11. This is the case both for Openreach as a whole and for the WLA/WFAEL services.

468. Further, Oxera explain that, as a significant proportion of the Openreach cost base is made up of common costs "consumed" by many products spread across a variety of markets, considering WLA/WFAEL services only may be unreliable for use in a top-down basis. This is because the unit cost changes will reflect a combination of "true" year-on-year efficiencies and cost reductions that have resulted from shifts in common costs across products markets as a result of changes in the product mix or in cost allocation methodologies.

469. Oxera note, too, that Ofcom has identified the same concern in other contexts. In particular, Ofcom said that obtaining a reliable estimate of efficiency for Ethernet[139] products would not be possible due to changes in the relationship between cost components and the underlying services over the relevant time period.

470. Oxera therefore suggest that estimates of efficiency obtained from an analysis of cost trends at the level of Openreach would be more reliable than granular assessments of efficiency at a market level. These estimates are more stable, lending them greater credibility, and are less likely not to be influenced by changes in cost allocation methodologies. Oxera therefore assessed efficiency at the Openreach level (i) using total rentals as a proxy for all Openreach volumes and (ii) using Ofcom's approach to volumes in the charge control model. As shown in Oxera's table 4.2 on page 10 of their Report, this analysis indicates average efficiency between 2009/10 and 2011/12 of 4% and 5.2% depending on which scenario of volumes is used[140], and again a downwards trend, whilst the 2012/13 RFS results indicate efficiency gains of under 4%.

471. The RFS data does not therefore support the range of 4%-6% even historically, and the downwards trend further suggests that historical rates are unlikely to be achieved in future.

Ofcom need to use BT's updated forecast efficiency

472. Openreach is in the process of updating its forecast for 2013/14, 2014/15 and 2015/16 as part of its bi-annual re-forecasting process. When the data becomes available, BT will provide this to Ofcom for use in its assessment of the level of efficiency to apply in the next charge control for copper products.

473. In any event, BT disagrees with Ofcom's interpretation of the forecast efficiency data already provided to it under formal information gathering powers earlier this process.

474. Ofcom state that its interpretation of data showing the Openreach forecast efficiency for the period 2012/13 through to 2015/16 supports a range of 4% to 6% with a mid-case of 5%.

475. Notwithstanding that BT has provided Ofcom with actual 2012/13 data to replace the forecast efficiency it used to form its opinion in the consultation document.

476. The data that BT provided showed forecast efficiency to reduce over the next three to four years as Openreach becomes more efficient and delivering efficiency becomes more difficult. The targets provided to Ofcom show that Openreach expect efficiency of [✂] in 2014/15 and [✂] in 2015/16 so it is Openreach's contention that this range should start at 3.5%, rounded not 4%.

477. The reduction in efficiency in 2014/15 and 2015/16 reflects BT's view that delivering efficiencies at the level seen in recent years will be become more difficult to achieve going forward.

[139] Business Connectivity Market Review, March 28th paragraph A12.99

[140] Oxera Annex X, Section 4.1, Scenario 1 and Scenario 2

Ofcom's analysis makes limited reference to external benchmarking

478. Ofcom's analysis makes limited reference to external benchmarking, essentially referring to BT's recent analyst briefing for its 2013 year end results and to "limited" data Ofcom gathered from Virgin Media and KCom regarding efficiency savings made on their own network.

479. Regarding BT's analyst briefing, the quartile comparisons that Ofcom describes as "External Benchmarks" are not based on comparisons of "total factor productivity" (the type of efficiency sought by Ofcom) but crucially gave weight to financial measures of performance, such as Opex cost relative to exchange line revenue earnings. They therefore provide no basis for Ofcom's task.

480. Separately, Ofcom's cross reference to other telecoms operators is wholly inadequate for assessing the reasonableness of the efficiency ranges proposed by Ofcom. BT commissioned Deloitte to update their comparative efficiency study of major EU operators in order to evaluate how efficient BT is compared to its European peer-group and to quantify the trend rate at which efficiency is improving[141].

481. Deloitte's key findings are that, for network operations, BT is the most efficient operator within the sample (implying that there is no catch-up) and that the rate of shift in the cost frontier through time is approximately in line with inflation. Deloitte's study is therefore broadly consistent with a trend rate of efficiency improvement for BT of between 2.5% and 3.5% per annum.

Comments by BT's senior management regarding cost savings

482. Ofcom quotes comments by both BT's Group Finance Director[142] and Openreach's CEO[143] to substantiate the reasonableness of its assumption of 5% efficiency gains over the period to 2016/17. Notwithstanding the methodological points made above, the comments do not provide such substantiation.

483. To be clear, both BT's Group Finance Director and Openreach's CEO see cost transformation as a process which is ongoing and on which material progress can be made. BT is making every effort to control costs as effectively as possible, and its progress has been widely recognised in its success to date.

484. Regarding the recent presentation to analysts by BT's Group Finance Director on BT's year end results, the main points made were that:

- BT has numerous programmes in place aimed at transforming its costs base and huge progress has been achieved between 2008/9 and 2012/13 (all of which would be captured by the RFS that Ofcom is using as its starting point for its cost forecast).
- BT needs to reduce costs by c. £1bn out of £15bn (just under 7%) to be in the top quartile in every cost type of European Telcos; and that savings need not stop here as the sector itself has room for further gains.
- Cost reduction programmes would continue to deliver benefits "in the next two to three years" (up to 2015/16) but no overall estimate of the total "opportunity" was given, except that the £1bn was identified as being clearly within scope, and could even be exceeded.

[141] BT Wholesale's response to Review of Wholesale Broadband Access Markets, Annex 4: Analysis of the Efficiency of BT's Regulated Operations. A report by Deloitte, 25 September 2013 and answer to Q7.13 of BT's response to the WBA Charge Control.

[142] Consultation, paragraph A7.33

[143] Consultation, paragraph A7.41

485. The comments do not support an interpretation that the rate of reductions would be 5% p.a. in real terms until 2016/17.[144]

486. Ofcom also refers to Normura's paper of February 2013 which focuses on Openreach. Normura state "one of the CEO's core performance benchmarks is delivering efficiency gains, and Ms Garfield was adamant that Openreach would become more efficient". The paper states that "Openreach is considerably behind the Retail division on its cost transformation journey". [145]

487. Ms Garfield's statement shows Openreach's commitment to generating year on year savings and our aim to be more efficient next year. As we mention above, that BT is making strenuous efforts to control costs is well understood. The focus of the discussion Nomura report also appears to be fibre as all three examples given[146] refer to cost savings in fibre delivery.

Comments by industry analysts

488. Ofcom state that:

> *"analysts are positive about BT's ability to continue to reduce costs but believe that this may well be increasingly difficult to achieve."* [147]

and that

> *"In summary, analysts suggest that BT, and Openreach in particular, has the potential to continue to cut costs but that it may get increasingly difficult to achieve the reductions. This view is consistent with BT's public statements."*[148]

489. Ofcom acknowledges that there is wide recognition that cost savings are getting "increasingly difficult", it therefore seems perverse for Ofcom to conclude it is reasonable to increase the rate of efficiency from the current control.

490. The consistency Ofcom notes, arises because the analysts reports largely derive from BT's public statements, so this is not a new separate source of corroboration (i.e. exogenous data) regarding Ofcom's assumption.[149] What the analysts do believe is that even though cost reduction "may get increasingly difficult", BT's track record and commitment means that it is likely that BT can deliver on its public announcements.

491. In fact, the most recent consensus forecasts for Openreach are that cost savings (in nominal terms) are likely to be relatively modest, with most of the Group efficiencies being realised by Retail and Global Services. The consensus view is that Openreach will hold costs approximately flat in nominal terms over the period to 2016/17, with a small nominal decrease in the first two years being offset by small rises in the last two years and the overall reduction being under 1%.[150]

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[144] If one considers there are £15billion of costs p.a. then using Ofcom's assumption of 5% would result in an estimate of c. £2.8bn savings (rather than £1bn).

[145] Consultation, paragraph A7.41

[146] These being (i) long-distance work travel and makes the workforce more mobile in response to the varying BDUK requirements, (ii) that Openreach has cultivated two equipment suppliers for fibre, helping to secure cheaper rates. Most operators choose a sole provider to limit complexity and (iii) constant innovations to facilitate more efficient fibre rollout, including more contained work areas so that pavements are not obstructed as much and council approvals can be kept to a minimum.

[147] Consultation, paragraph A7.38

[148] Consultation, paragraph A7.42

[149] For example, UBS commented on 26 July 2013 that there is "two more years" of cost cutting, worth "£1bn+", exactly in line with the presentation to analysts that Ofcom refer to in A7.33.

[150] BT, Pre Q2 2013-14 Consensus, July 25, 2013 available at http://www.btplc.com/Sharesandperformance/Quarterlyresults/Quarterlyresults.htm

492. In terms of "real" efficiency, this implies aggregate cost savings in line with inflation (c. 2.3% measured against CPI; or c. 3% against RPI). Of course, true economic efficiency requires an adjustment for volume changes which the analysts do not attempt.

7.6 Volume Forecasting

Question A8.1: Do you agree with our proposed approach to forecasting volumes as set out in Annex 8 and Annex 9? Please provide reasons to support your views.

493. Ofcom's volume forecast is that the total of all Openreach lines will grow by 0.67m from 24.36m lines in 2011/12 to 25.03m lines in 2016/17. This total comprises a reduction of 0.18million in business lines[151] which is more than offset by Ofcom's view of residential lines which are forecast to grow by 0.84million.

494. Our view is that the forecast of an increase of 850,000 new residential lines is much overstated for two reasons. First, Ofcom's assumptions regarding household growth in the UK are too high and, secondly, Ofcom does not recognise the likely growth in the level of mobile only households over the forecast period.

495. As we set out in Annex 1, the growth from the increase in households is likely to be 470,000 lower than assumed by Ofcom. The main reason for this is that dwellings growth (including conversions and uplifted to take account of vacant properties coming back into use) is much lower than projected household growth over the period. The difference between the dwellings forecast and the household projections is explained by the fact that the latter is based on population trends, which are inherently uncertain and unconstrained by the future supply of residential properties.

496. Looking over the forecast period, it is clear that a housing constraint is likely to bite – there are not enough new homes[152] to accommodate (in a self-contained unit of accommodation behind a closed door) all the projected new households. To believe Ofcom's forecast, for every year of the forecast period, household growth in the UK have to exceed the highest year's growth in housing ever achieved in the last 20 years (with one small exception)[153]. In short, where there is no new home, there is unlikely to be the demand for a new fixed line to the home, whatever the level of projected household growth based on population trends.

497. Secondly, Ofcom assumes that that the proportion of mobile only homes will remain constant at 15% of the total number of households. The recent UK data[154] does not take account of the launch of 4G services in the UK over the forecast period. We are not suggesting that 4G is in all respects comparable to fixed copper services – 4G will offer the advantage of mobility but may be more prone to congestion, and pricing may be a relative consideration. However, for an increasing number of households, 4G reduces the need for a fixed service to such an extent that the household will decide to go mobile only even though it requires broadband connectivity.[155] This may not be a "mass market" substitution, to use the term in the Consultation, but still a significant effect at the margin.

498. In fact, in countries where 4G has been launched[156], the evidence is of a material increase in the growth of mobile only homes. Market research which we have commissioned further supports this trend in the UK, as it suggests that certain customers do see 4G as a substitute for a fixed

[151] That is, lines supplied to businesses.

[152] Including conversions, homes from change of use and making an allowance for long term empty homes being brought into the used housing stick.

[153] Department for Communities and Local Government, *Live tables on dwelling stock (including vacants)*, 21 May 2013, available at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants

[154] Ofcom technology tracker wave 2 2013 - MAIN SET, 13th May to 27th July 2013, available at: http://stakeholders.ofcom.org.uk/binaries/research/statistics/2013Sept/Ofcom_Technologyw2-2013.pdf

[155] That is, the incremental benefit of a fixed service on top of a 4G service may be les that the incremental cost

[156] Analysys Mason, Western European telecoms market: trends and forecasts 2013–2018

line. This is particularly the case for households which consist of a single person or are rented properties. An increase of mobile only households by 3% to reach 18% by 2016/17 is clearly warranted.

499. We discuss these issues in more detail in Annex A of this response.

7.7 Detailed cost modelling assumptions

Question A13.1: Do you agree with our proposed approach to calculating SMPF unit costs? Please provide reasons to support your views.

500. Ofcom propose the following options to calculating the SMPF unit costs:

- using external costs and external volumes only as a proxy for the unit cost applicable to both internal and external SMPF services;
- increasing the costs in the Cost Model to reflect the expected costs of both internal and external volumes; or
- uplifting the volumes to include both internal and external volumes in 2012/13 (i.e. the first year after the base year), whereby the costs will increase due to the uplift in volumes (as forecast by the product of total volumes multiplied by the relevant AVEs and CVEs).

501. BT agrees with Ofcom's preferred approach i.e. option (a), that unit costs for external SMPF and internal SMPF will be the same. Using the unit costs from external SMPF which are published in the RFS and applying these unit costs to all SMPF is reasonable.

502. BT also agrees with Ofcom that approach a) is a simpler approach than approach b) and that it will provide a better reflection of overall unit costs than approach c).

Question A13.2: Do you agree with our proposed approach to BT's pension deficit repair payments? Please provide reasons to support your views.

503. BT notes Ofcom's discussion of the copper assets being underestimated due to capitalised labour relating to ongoing pension costs.

504. BT disagrees that the issue here is similar to that discussed in the Pensions Review in relation to recovery of the pension deficit. Rather the issue here relates to ongoing service costs, and the impact they have on capitalised labour costs, which in turn feeds into annual capital expenditure figures. The pension deficit is only relevant in these circumstances to the extent that the deficit (and specifically, the deficit repair programme) is a reasonable proxy for the amount by which ongoing service costs were underestimated.

505. This misunderstanding of the proposal is typified by Ofcom's following statement:

> *"As we value post-97 copper and duct on a CCA basis, assets are valued at their replacement cost151. This approach means that it would be inappropriate to adjust the estimated replacement cost, as suggested by BT.*
>
> *FN 151: We currently use indexed capital expenditure as a proxy for this. We do this, because of the complexities involved in calculating a bottom-up replacement cost for CCA valuation. As a result, we consider that our valuation method captures the cost of replacing the copper and duct assets, which includes the efficient costs of capitalised labour, including the pension costs associated with that labour."*

506. Ofcom states that its valuation method captures the cost of replacing copper and duct assets by using indexed capital expenditure. However, the very essence of BT's argument is that historical

Capex, the amounts that are being indexed, have been underestimated, and therefore do not fully reflect the true cost of replacing the network. Rather, the indexed capital expenditure includes a measure of the assumed labour costs at the time of building the assets, but with the benefit of hindsight we now know that these labour costs were undercalled. Assessing the quantum of the underestimate requires reference to the pension deficit repair programme, but does not constitute a partial recovery.

507. Ofcom must re-consider the information provided by BT and adjust the capital values to allow for the material under-estimation of capital values.

Question A13.3: Do you agree with our proposed approach to adjusting BT's linecard costs? Please provide reasons to support your views.

508. BT agrees that the PSTN linecard costs should be inflated to a steady state basis. Prices based on costs for mature products will sometimes be too low because some of the assets that support them are fully depreciated. If there is no adjustment for this, then mature products prices will decrease and customers will be discouraged from moving to new services.

509. Ofcom states that there are three options to estimate the steady state[157]:

- uplift the net replacement cost 'NRC' for the PSTN linecard component to ensure that the unit cost of linecards in its base year is equal to £11;
- adjust the ratio between the NRC and the GRC to one which replicated the NRC/GRC ratio over a period which it deemed to be steady state in the March 2012 Statement[158] (e.g. 2004-2009); or
- adjust the NRC/GRC ratio to one which it considers replicates a steady state. For example, in previous charge controls such as the 2012 ISDN30 Statement[159] Ofcom considered that an appropriate uplift for ISDN30 linecards was 50%. We may also consider an adjustment to the asset life of linecards as done in previous charge controls.

510. Ofcom should continue with the third option of a 50% ratio of NRC to GRC and with a revision to asset life. This option would better reflect the value of an ongoing asset in the mid-point of its life-cycle, and is consistent with what was used for the ISDN30 charge control and previous charge controls.

511. In addition to using a 50% NRC / GRC ratio, Ofcom should use a more appropriate asset life. Ofcom's modelling calculates the asset lives by dividing the GRC by the depreciation in the base year, currently 2011/12. This calculation ignores the steady state adjustment which will increase the depreciation in the base year. Ofcom has calculated an average life for PSTN linecards of [✂]. This long asset life is because many of the assets are fully depreciated. The current NRC to GRC ratio is [✂]. The proposed NRC to GRC ratio is 50%. Accordingly, we propose that Ofcom changes the calculation of asset lives to allow for a higher base year depreciation in the ratio of [✂]. This would result in a more reasonable asset life of 14 years. This aligns with the 13 years which is used in BT's accounts.

512. Openreach supports a steady state adjustment as it more closely reflects forward looking costs in a competitive market. When making this adjustment we would propose that Ofcom use a 50% GRC to NRC ratio and a 14 year asset life.

[157] Consultation, paragraph A13.64

[158] Ofcom Statement Charge control review for LLU and WLR services 7 March 2012

[159] Ofcom Statement Wholesale ISDN30 price control 12 April 2012

Question A13.4: Do you agree with our proposed approach to calculating dropwire costs for the purposes of forecasting to 2016/17? Please provide reasons to support your views.

513. In Ofcom's 2006 WLR Statement, Ofcom excluded the costs for drop wires installed up to December 2005 from the asset base, on Ofcom's understanding that this cost would have been recovered by the previous Retail charge controls. This adjustment has continued to be made in successive charge controls.

514. These drop wire costs are capitalised over 10 years. In the final control year, 2016/17, there will be no capital costs in the RFS that relate to drop wires installed prior to 2006.

515. Therefore, BT agrees with Ofcom's proposal "to make no adjustment for pre-2006 dropwire assets in the Cost Model" as:

- There are no assets which require adjusting in the 2016/17 cost stack and that the BT RFS costs, with no adjustment for dropwire, are appropriate for forecasting dropwire costs to 2016/17.
- The previously applied 'dropwire adjustment' is now time expired.

Question A13.5: Do you agree with our proposed approach to allocating repair costs to services in the Cost Model? Please provide reasons to support your views.

516. Openreach agrees that if there are significant differences in fault rate between MPF, WLR and SMPF services, then this should be reflected in Ofcom's modelling. Openreach also agrees that where Care Levels drive significant differences in costs that this should be reflected in Ofcom's modelling.

517. Ofcom proposes to maintain the same relative fault rates of MPF, WLR and SMPF services, used in the current control in Ofcom's base case. Ofcom are analysing the relative fault rates based on the most up to date information available and plan to consult in autumn regarding the appropriate fault rate to be used in the setting of WLR and LLU prices in that separate service consultation. Openreach will respond to this consultation and in the meanwhile it seems reasonable that Ofcom maintain the same relative fault rates for modelling purposes. Openreach expects Ofcom to update its modelling consistent with the findings of the service consultation.

518. While Openreach agrees that there should be a differential, it disagrees about the correct level of this differential. Again, this will be dealt with in the service consultation and Openreach will respond to that consultation. Openreach considers that the premium Ofcom allows (5.4%) to account for the difference between CL 1 and CL 2 is significantly understated. Openreach has responded in more detail on this issue in the Service Response, setting out the significant operational challenges posed by the increasing proportion of jobs requiring to be fixed in the day following the receipt of the customer fault report.

519. As the volumes of products with faster repair times increase during the control period, this will inevitably drive Openreach's total repair costs upwards. Ofcom does not increase total 2016/17 costs in its model to reflect the expected change in care level mix as, in particular, MPF volumes grow. Ofcom must reflect the costs of MPF growth in its cost modelling by increasing total repair costs in 2016/17 as the base year is not representative of the total costs to be expected in 2016/17. It is therefore crucial, to avoid a significant understatement of costs, that Ofcom adjust their modelled costs to increase overall total repair costs in 2016/17.

520. Please see Openreach's Service Response for more details.

Question A13.6: Do you agree with our proposed approach of excluding any pair gain adjustment for the purposes of forecasting D-side and E-side copper capital costs to 2016/17? Please provide reasons to support your views.

521. DACS is a system that allows a single pair of copper lines between an exchange and a pole or roadside cabinet to be used to connect two customers to the exchange; this is called "pair gain".

522. DACS cannot be used with broadband, i.e. only voice services can be provided over DACS, which means that pair gain can only be applied to WLR. Unlike normal provision where if two customers were connected to the network there would be two copper pairs from the exchange to the customer premises, in the cases where DACS is employed, there are two short pairs from the cabinet or pole to the customer premises and one pair between the cabinet and exchange. In effect, two WLR connections are made using less that two full pairs worth of copper (as in the case of normal WLR or MPF). Ofcom included an adjustment for Pair Gain in its modelling for the current charge controls.

523. Ofcom propose to remove this adjustment as they do not think it will be material by the end of the control. Therefore, their rationale here is the same as that for removing the Line Length adjustment, namely it is not material, which Openreach supports. Indeed, the impact of the two adjustments is of a similar size. Therefore given the adjustments tend to balance each other out and Ofcom proposes to be even handed in removing both adjustments, Openreach has no objection to the removal of the pair gain adjustment once Ofcom act in a consistent manner and also remove the Line Length adjustment. Should Ofcom decide not to remove the Line length adjustment then BT would propose that it also includes the Pair Gain adjustment for consistency's sake.

524. The pair gain adjustment has been included in the 2012/13 RFS and was only omitted from the 2011/12 RFS as an oversight. It was included in prior years and as such, the adjustment will be automatically included in the underlying cost data which will be provided to Ofcom to allow the update of the model to 2012/13 base year costs. The default starting position for forecasting 2016/17 costs should be the published 2012/13 RFS.

7.8 Treatment of cumulo rates within the charge control

Question A14.1: Do you agree with our proposed approach to the treatment of BT's cumulo costs in the calculation of regulated charges for WLR and MPF? If not please explain why and tell us how you would propose to treat these costs and outline the calculations that would be involved.

525. BT agrees with Ofcom's approach to the treatment of cumulo rates costs. After carrying out some valid sense-checks, Ofcom has included 2011/12 cumulo rates costs as per the RFS, which are then forecast forward as part of the relevant component costs. We believe is a reasonable approach towards BT's cumulo costs.

7.9 Cost of capital

Question A15.1: Do you agree with our proposed approach to estimating the cost of capital of BT Group, Openreach and Rest of BT? Please provide reasons to support your views.

526. Please refer to the BT Group Response.