

The Ofcom logo consists of the word "Ofcom" in a bold, red, sans-serif font. Below the text is a horizontal bar with a color gradient from purple on the left to yellow in the middle, and red on the right.

making communications work
for everyone

Non-domestic rates and the price for regulated Dark Fibre

Consultation

Redacted [X] for publication

Consultation

Publication date:

11 April 2017

Closing Date for Responses:

22 May 2017

About this document

This document proposes an amendment to one of the regulatory conditions imposed on BT under the April 2016 Business Connectivity Market Review.

The need for an amendment arises from an appeal against the relevant condition by TalkTalk. The Competition and Markets Authority has found that Ofcom was wrong to use a measure of BT's non-domestic rates costs as part of the calculation for the price of dark fibre products. In this document we therefore consult on an alternative approach.

Contents

Section		Page
1	Introduction and summary	1
2	Proposed amendment to the active differential and guidance	4
Annex		Page
1	Proposal for modification of SMP Conditions	17
2	Revised guidance on the calculation of the active differential for SMP condition 10C.1	27
3	Responding to this consultation	28
4	Ofcom's consultation principles	30

Section 1

Introduction and summary

Background on the dark fibre remedy and the active differential

- 1.1 In the April 2016 Business Connectivity Market Review Statement¹ (“BCMR Statement”), Ofcom imposed a condition requiring BT to provide communications providers (“CPs”) with dark fibre products.
- 1.2 Ofcom decided that the price of dark fibre should be determined by subtracting an “active differential” from the price of the corresponding BT wholesale Ethernet 1Gbit/s leased line service.
- 1.3 Ofcom decided that the active differential should consist of the following three components.²
 - i. the long run incremental costs avoided by BT when providing dark fibre instead of the corresponding active service³ (“First Component”);
 - ii. if appropriate, a deduction of BT’s non-domestic rates (“NDRs”) associated with the corresponding active service⁴ (“Second Component”); and
 - iii. the long run incremental costs of any objectively justifiable differences between dark fibre and the corresponding active service (“Third Component”).
- 1.4 TalkTalk appealed Ofcom’s decision in relation to the Second Component.⁵ TalkTalk argued that Ofcom was wrong to decide that, in the absence of Ofcom’s preferred option where the Government would change the relevant rules, the Second Component should be based on an attribution of BT’s NDR cost.⁶ It contended that, in the absence of Ofcom’s preferred option, this component should be based on some other appropriate measure, such as a measure of access seekers’ (competitors) NDRs.
- 1.5 The issues raised in TalkTalk’s appeal were referred by the Competition Appeal Tribunal (“Tribunal”) to the Competition and Markets Authority (“CMA”) for determination as a specified price control matter under section 193(1) of the Communications Act 2003 (“CA03”) and Rule 16 of the Competition Appeal Tribunal Rules 2015 (SI 2015 No. 1648).

¹ See: <https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2015>.

² Ofcom’s decision as how to set the active differential is explained in A23.96 to A23.116 of the BCMR Statement.

³ This includes active (i.e. powered) equipment.

⁴ This deduction is made because under the relevant rules, it is the person lighting the fibre who pays the applicable NDRs.

⁵ See: <http://www.catribunal.org.uk/237-9284/1259-3-3-16--Talktalk-Telecom-Group-PLC-.html>.

⁶ Ofcom’s preferred option is for Government to change the relevant rules such that BT is responsible for the NDRs on the dark fibre services that it leases to other operators.

- 1.6 On 6 April 2017, the CMA determined that Ofcom was wrong to decide that the Second Component should be based on an attribution of BT's NDR costs (rather than on some other appropriate measure) (the "Determination").⁷
- 1.7 As a result of these findings Ofcom is required to amend its approach to setting the Second Component of the active differential. The CMA does not recommend that Ofcom should adopt a specific alternative approach and states that Ofcom should consider how the price may best be derived in a manner which takes into account the Determination. It therefore recognises that there are a number of alternative approaches that Ofcom might adopt.

Our consultation on proposed amendments

- 1.8 In light of the Determination, we propose to amend the calculation of the Second Component of the active differential to address the differences in CPs' exposure to NDRs, which the CMA found would affect the extent of the take-up of dark fibre. Our proposal targets the issue identified by the CMA by adjusting the Second Component to be more reflective of the higher NDRs paid by some CPs for dark fibre products.
- 1.9 We propose to adjust the calculation of the Second Component of the prices for dark fibre products to be paid by CPs whose NDRs are calculated using the Direct Rental Comparison method (which we understand to be most CPs, with the notable exceptions of BT, KCom and Virgin Media) (see Section 2 below). We propose to base this adjustment on the NDRs payable by a CP with an existing fibre network with a total contiguous length of 1,000km or more. Our proposal takes account of the different dark fibre services that BT will offer and their current charging structures:
- i) For the Dark Fibre Access ("DFA") and Dark Fibre Access – Local Access ("DFA LA") services we propose that a single fixed adjustment should be made to the annual rental charge for the access segment of each of these products, based on an appropriate estimate of the average route length of the access segment, which we estimate to be 1.9km in each case.
 - ii) The Main Link charge applies to DFA where the two ends are served by different exchanges, and is a function of the distance between the exchanges. It takes the form of an annual rental per metre. Therefore, we propose that an adjustment should be made to this charge on a per metre basis.
- 1.10 Given the volumes assumed in the Leased Line Charge Control ("LLCC"), we estimate that the total impact of these changes will be in the order of £5m, or around 1% of the total allowed costs in the LLCC in 2018/19. We are therefore proposing to adjust the LLCC (Ethernet basket) to compensate for this, reducing the value of X in the final year of the control from -13.50% to -12.75%.
- 1.11 We consider this approach to be the most proportionate way of amending the Second Component. It addresses the findings in the Determination in a simple and practicable way. We anticipate that BT will be able to implement this change in good time before the launch of dark fibre on 1 October 2017. We invite comments on the proposed changes.
- 1.12 In Ofcom's view, the minor, targeted adjustments it is proposing in this consultation do not materially affect the analysis of the costs and benefits of introducing the dark

⁷ The CMA's determination is available at: <http://www.catribunal.org.uk/237-9284/1259-3-3-16--Talktalk-Telecom-Group-PLC-.html>

fibre remedy. However, we invite comments on whether any changes or adjustments are required, whether as a result of implementing the proposal, or through other approaches to taking into account CPs' NDR costs.

- 1.13 We consider that the principal effect of the proposal will be to simulate the choices that CPs would have faced under Ofcom's preferred outcome, where the Government changes the rules on who pays the NDR costs. Under the proposed approach:
- a) Incentives for CPs to purchase dark fibre will be similar to those that Ofcom envisaged in the BCMR Statement. Where some CPs face high NDRs, they would also pay lower dark fibre prices. Accordingly, the impact of dark fibre in terms of innovation, differentiation, productive efficiency, and investment by rivals will be broadly similar to Ofcom's original expectations.
 - b) BT will continue to have an opportunity to recover its efficiently incurred costs through a (small) change to the LLCC, representing only around 1% of the total revenues for the relevant period.
 - c) The adjustments will address differences in NDR costs between CPs. It is recognised that the adjustments will not be perfectly calibrated to precisely offset each CP's NDR costs in each specific situation, but this would not be a practicable exercise.
- 1.14 The duties set out in relation to the consideration of remedies at Annex 2 of the BCMR Statement also apply in this context to the assessment of the appropriate amendment to make to the Second Component. In considering the appropriate regulatory option for the calculation of the NDR costs, we have had regard to the requirements of sections 45 to 47, 87 and 88 of the CA03. We have also considered our principal duty under the CA03 which requires us to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. We have explained at paragraphs 2.63 – 2.70 how our proposed modifications of SMP conditions 10C and 10A comply with the requirements contained in these provisions of the CA03.
- 1.15 We are consulting for a period of 6 weeks.

Section 2

Proposed amendment to the active differential and guidance

Introduction

2.1 In this section we explain how we propose to amend the Second Component of the active differential to reflect a measure of NDRs that BT's competitors pay when they use dark fibre. We first describe the way in which the tax authorities assess the NDRs that CPs pay on their fibre networks. We then set out our proposed amendment to the Second Component, taking into account the different ways in which NDRs are calculated and applied. We then consider the effect of our proposed amendment on BT's cost recovery and propose an adjustment to the LLCC. Finally, we consider the implications of our proposal for the assessment of the benefits and risks of the dark fibre remedy in the BCMR Statement.

Background to NDRs and valuation methodologies used to assess NDRs for fibre networks

- 2.2 NDRs are a form of property tax. Ratepayers pay NDRs on their rateable assets, which include telecoms assets such as fibre and duct. In general, the liability is calculated by multiplying a rateable value ("RV") by a "rate in the pound"⁸. RVs are assessed by the relevant rating authority in each nation, for example the Valuation Office Agency ("VOA") in England and Wales. The RV is specific to each property or assessment. Rates in the pound are set centrally by each nation and are generally the same for all ratepayers in a nation. RVs are published in each nation's rating lists and are normally updated every five years.⁹
- 2.3 With respect to fibre assets the VOA has determined that "*as a general rule of thumb, the person who lights the fibre is considered to be in rateable occupation*".¹⁰ This means that, if BT sells an active leased line service then BT is liable for the NDRs, whereas if it sells a dark fibre service then the purchasing CP is liable for the NDRs once it lights that fibre.
- 2.4 The VOA publishes a manual explaining how it approaches the valuation of different types of assets. For fibre optic networks it explains that the valuation is made "*on a rental tone basis*".¹¹ In its decision, the CMA referred to this approach as the Direct Rental Comparison ("DRC") method and we use the same terminology in this consultation. The VOA's guidance applies to most fibre telecoms networks, but does

⁸ The main exception is the impact of transition schemes in England. For more information on these see paragraph A17.38 to A17.40 in Ofcom's Consultation of March 2017 on the Wholesale Local Access Charge Control.

⁹ We use the term rating lists to cover lists of RVs (in Northern Ireland the RV is called the net annual value or NAV). In England and Wales this list is called the Rating List. In Scotland, it is the Valuation Roll. For more information, see: SAA, The Valuation Roll, <https://www.saa.gov.uk/valroll.html> accessed 7 April 2017.

¹⁰ Paragraph 5.2 of Section 871 of the VOA's 2017 Rating Manual, <http://app.voa.gov.uk/corporate/Publications/Manuals/RatingManual/RatingManualVolume5/sect871/rat-man-vol5-s871.html>

¹¹ Paragraph 1 of the Section 871 of the VOA's 2017 Rating Manual.

not apply to operators whose RVs are assessed under the Receipts and Expenditure method, such as BT and KCom. It also does not apply to Cable TV networks, such as those operated by Virgin Media.¹² We understand that the rating authorities in Scotland and Northern Ireland adopt a very similar approach to the rating of fibre networks.

Direct Rental Comparison method

- 2.5 The effect of the DRC method is that CPs are required to pay NDRs for each fibre that they use (light). There are several factors that determine the amount of NDRs that a CP is required to pay for a given fibre. These factors include:
- the size of the CP's existing fibre network (total contiguous route length) to which they are attaching the fibre;
 - the length of the route of the fibre; and
 - the number of fibres the CP has lit on the route.

Receipts and Expenditure method

- 2.6 As noted above BT and KCom have their RVs assessed under the Receipts and Expenditure method ("R&E method"). Under the VOA's latest guidance cable networks, such as those operated by Virgin Media, are also assessed under the R&E Method.¹³ Under the R&E method all contiguous rateable assets are valued together.
- 2.7 For example, the assessment of BT's RV covers all of BT's rateable assets including its copper and duct assets as well as all of its fibre assets (including those fibres that are used to supply non-BCMR related services). Under the R&E method RVs are assessed by considering a set of forecast cash flows across all the rateable assets. Such an assessment is sometimes referred to as a "cumulo" assessment because all the assets are valued together. It is therefore not possible to estimate how much NDRs BT pays on its leased lines, or indeed on any of its individual services, and so in charge controls we use an attribution of BT's "cumulo" rates costs. We assume the same inability to estimate what is paid on leased lines applies to other CPs valued under the R&E method.
- 2.8 In the absence of any more appropriate method we therefore consider that an attribution of BT's rates costs is a reasonable estimate of the NDR costs that BT will incur when it lights new fibres. This is the approach we took when determining the value of the Second Component in the BCMR Statement.
- 2.9 We also consider that an attribution of BT's rates costs is a reasonable estimate of the NDR costs that other operators who are assessed under the R&E method will incur when they light new fibres.

¹² See paragraph 1 of Section 871 of the VOA's Rating Manual.

¹³ See paragraph 4, VOA Practice Note 2017: Revaluation 2017: Telecommunications Cable Networks,

<http://app.voa.gov.uk/corporate/Publications/Manuals/RatingManual/RatingManualVolume5/sect870/e-rat-man-vol5-s870-pn-2017.html>

Our Proposed Amendment

- 2.10 In light of the Determination, we propose to amend the calculation of the Second Component of the active differential to address differences in CPs' exposure to NDRs. We consider that the current approach to pricing Openreach's dark fibre adequately reflects NDR costs for CPs whose NDRs are assessed using the R&E method such as BT, KCom and Virgin. This is because we believe that our original approach provides a reasonable proxy for the NDRs payable by those CPs when they light new fibres.
- 2.11 We therefore propose to require Openreach to only amend the Second Component in calculating the prices for dark fibre for CPs whose NDRs are assessed using the DRC method.
- 2.12 As explained above, under the DRC method the exact NDRs that CPs pay each time they use (light) a fibre varies by reference to the size of the CP's network to which the fibre is attached, the length of the fibre and the number of fibres the CP is using in the same route.
- 2.13 We consider it important to ensure that the adjustments are simple and practicable. Therefore, we propose to make the same adjustment for all the qualifying CPs, regardless of the size of their existing network or location in the UK of these circuits.
- 2.14 Our adjustments need to consider not just the relevant RV but also what rate in the pound should apply.
- 2.15 With respect to the rate in the pound we propose that the amended Second Component should be calculated using the standard non-domestic rating multiplier in England. In 2017/18 that is 47.9p. We note above that rates in the pound vary across the nations. However, except for Northern Ireland, these all currently lie within a relatively narrow range (England 47.9p, Wales 49.9p and Scotland 49.2p).¹⁴ Moreover, we expect most of the demand for dark fibre to occur in England.¹⁵
- 2.16 With respect to the RV we consider that the adjustments should be based on the NDRs payable per km by a CP with a fibre network of 1,000km or more, as we believe that this represents an efficient (scale) operator. CPs with smaller networks will pay higher NDRs per km, and using a measure based on such higher NDRs would over-compensate the larger operators and risk promoting inefficiency and/or arbitrage. Further, we understand that several potential users of the dark fibre service already have networks of over 1,000km or are currently purchasing large volumes of active products from BT that could at some point in the future be converted to dark fibre.
- 2.17 We note that Openreach will make single-fibre and dual-fibre configurations of its dark fibre products available. We also note that the rating authorities charge different NDRs per km for each of these configurations. In particular the NDRs for two lit fibres on a route are significantly less than twice the NDRs for just one lit fibre on the same route (i.e. the NDR per fibre is less in a dual-fibre configuration). Therefore, we

¹⁴ For more information on these rates see paragraph A17.34 of the March 2017 Wholesale Local Access Charge Control Consultation. Available at: <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>

¹⁵ For example, 88% of BT's current RV is in England. See Table A17.3 in Annex 17 in the March 2017 WLA CC Consultation.

propose to use two NDR per km values in the adjustments: one for single-fibre configurations of dark fibre and the other for dual-fibre configurations. According to the VOA's 2017 fibre rent tables and using the 2017/18 rate in the pound for England, the current NDR payable by a CP with a network of 1,000km or more is £95.80 per km per annum for a single fibre, and £119.75 per km per annum for dual fibre.¹⁶

- 2.18 There are two main components to Openreach's annual rental charges for dark fibre services: access segments and Main Link.
- 2.19 The rental charge for the access segments does not vary with distance. Therefore, we propose that a single fixed adjustment should be made to the rental charges for access segments (whether DFA or DFA LA), based on an appropriate estimate of the average route length of the fibre in each case. We explain the proposed calculation of these averages below.
- 2.20 A Main Link charge only applies where the A and B ends of the DFA service are attached to different BT exchanges. The Main Link charge reflects the distance between those exchanges, and takes the form of an annual rental per metre. Therefore, we propose that an adjustment should be made for these services on a per metre basis, in line with the rental charge.

DFA LA Single Fibre and DFA LA Fibre Pair

- 2.21 Openreach's DFA LA, which corresponds to BT's 1Gbit/s Ethernet Access Direct Local Access ("EAD LA") active service, is a fibre connection between an end user's premises and BT's local serving exchange. DFA LA can be supplied as either a single fibre or two fibres (fibre pair).
- 2.22 Although the length of the fibre for this service will vary, depending on the location of the end user's premises, the price for a 1Gbit/s EAD LA and for DFA LA services are fixed regardless of their length. Therefore, the adjustment to the DFA LA price needs to be constant, irrespective of the length of the fibre in order to ensure that the pricing structures remain aligned, consistent with our design of the dark fibre remedy.
- 2.23 Therefore, we propose to make a fixed adjustment to the DFA LA price and to base this on the average length of existing 1Gbit/s EAD LA services.
- 2.24 Information available to us from Openreach's inventory of active 1Gbit/s Ethernet Access Direct ("EAD") circuits provides the locations for both ends of BT's EAD LA services, as of May 2015.¹⁷¹⁸ This allows us to determine the straight-line distance between the ends of the services. However, the NDR payable is determined by the route length, not the straight-line distance. We therefore propose to calculate a proxy

¹⁶ The Rateable Value for a single fibre and dual fibre, when connected to a lit network of 1,000 km or more, is £200 per km and £250 per km respectively. This is taken from the 2017 Fibre Rent Scale published by the VOA (excluding London). See <http://manuals.voa.gov.uk/corporate/publications/Manuals/RateManual/RateManualVolume5/sect871/PN%202017%20Appendix%201%20Fibre%20Rent%20Tone.xls>

To arrive at the NDR, these Rateable Value are then multiplied by the rate in the pound for England, which is currently 47.9p.

¹⁷ BT's response to Question 7 of the 13th 2016 BCMR s135.

¹⁸ We have used information obtained for the purposes of the BCMR Statement. We do not consider that an updated data set would be likely to lead to a material change given that the underlying information concerns distances between exchanges and premises. We do not consider that updating the data set would be a proportionate use of Ofcom's resources.

of the route distance by multiplying the straight-line distance by a routing factor of 1.4. The 1.4 routing factor is commonly used in these situations and is also the factor which was used as a reference in the CMA's hearings that considered TalkTalk's appeal.

- 2.25 Based on this method, Figure 1 shows the cumulative distribution of the route lengths of 1Gbit/s EAD LA services.

Figure 1: cumulative distribution of 1Gbit/s EAD LA services (outside the Central London Area)

[X]

- 2.26 As can be seen from Figure 1, our analysis of BT's existing 1Gbit/s EAD LA circuits outside the Central London Area¹⁹, shows that over 90% of circuits have route lengths shorter than four kilometres. Across all circuits the median length is 1.9km, and the mean length is [X]km.²⁰
- 2.27 We propose to base the adjustment on the median length (1.9km) because we believe that the median is more representative than the mean in this case, as it avoids distortions which could be created by a small number of very long circuits.
- 2.28 Therefore, when determining the value of the Second Component for the DFA LA Single Fibre service we propose that BT should use the NDR per km per annum payable by a CP with a network of 1,000km or more, multiplied by 1.9.
- 2.29 As discussed above, the DFA LA Fibre Pair service has two fibres. When a fibre pair is used for DFA LA, both fibres will follow the same route. In this situation, we propose that when determining the value of the Second Component BT should use the NDR per km per annum for a fibre pair payable by a CP with a network of 1,000km or more, multiplied by 1.9.
- 2.30 Based on the VOA's 2017 fibre rent tables these adjustments are currently as follows: £182.02 (£95.80*1.9) for the DFA LA Single Fibre and £227.53 (£119.75*1.9) for the DFA LA Fibre Pair. We would require BT to calculate the NDRs that would apply each year when determining the value of the Second Component, where that would reflect any changes that might be made, such as any updates to the rate in the pound.

DFA Single Fibre and DFA Fibre Pair

- 2.31 Openreach's DFA service (which corresponds to Openreach's EAD active product) is a fibre connection between two points (A end and B end) specified by the customer. These points could be end user premises, co-location spaces within a BT exchange or one of each. Further, the two points do not need to be served from the same BT exchange, although where they are not, a Main Link will need to be purchased in addition. As for the DFA LA service, the DFA service can be supplied as either a single fibre or two fibres (fibre pair).
- 2.32 The approach we are proposing to the adjustment of the Second Component of the DFA service is the same as that proposed for the DFA LA services (see above), in that we propose to make a fixed adjustment to the annual rental of the access segment and to base this on the average length of the access segments of the

¹⁹ Our proposed geographic market in central London is set out in the BCMR Statement.

²⁰ Based on a database of EAD circuits provided by BT showing all active circuits at April 2015.

existing 1Gbit/s EAD services. We therefore need to determine the average route length of the local access segments of the existing 1Gbit/s EAD services.

- 2.33 Given the flexibility the customer has when specifying the locations of the A end and the B end of these services there are three possible configurations for these services.
- i. Both ends could be in a co-location space within a BT exchange, in which case there are no local access connections as such
 - ii. One end could be a customers' premise and another could be a BT exchange, in which case there would be one access segment
 - iii. Both ends could be a customers' premise, in which case there would be two access segments
- 2.34 Therefore, we need to determine two things, (i) on average how many access segments are there for each EAD service and (ii) what is the average route length for these access segments.
- 2.35 We have analysed the data for 1Gbit/s EAD services²¹ and the average (mean) number of access segments per EAD circuit is [3]. Given this, for simplicity we propose to assume that the average EAD has one access segment.
- 2.36 We have attempted to analyse the average route length of the access segments of the existing 1Gbit/s EAD services. We have done this by mapping the A ends and B ends to the respective local serving exchange and then treating each end as a separate local access connection. As per the EAD LA analysis we then determined the radial lengths for these segments and multiply them by the 1.4 routing factor. Across all 1Gbit/s EAD circuits this approach yields a median length of [3]km, and a mean length of [3]km.
- 2.37 We note that these averages are similar to, but not the same as, those for the EAD LA services. We do not believe that there should be a systemic difference between the lengths of 1Gbit/s EAD LA services and the lengths of access segments within the existing 1Gbit/s EAD services. We suspect that the small difference that we do see is a result of the different data manipulations. Therefore, for simplicity we propose to use the same average length for these services, as that used for the DFA LA services (i.e. 1.9km).
- 2.38 Given that there is, on average, one access segment per EAD service this means that the adjustments will be exactly the same for DFA services as they are for the DFA LA services. That is, based on the VOA's 2017 fibre rent tables the adjustments are currently as follows: £182.02 (£95.80*1.9) for the DFA Single Fibre and £227.53 (£119.75*1.9) for the DFA Fibre Pair.

Main Link

- 2.39 Main Link is a component of the annual rental charge which applies to DFA service in which the two ends are served from two different BT exchanges. Main Link is

²¹ For the reasons as set out at footnote 18 we do not consider that an updated data set would be likely to lead to a material change given that the underlying information concerns distances between exchanges and premises. We do not consider that updating the data set would be a proportionate use of Ofcom's resources.

charged on a per metre basis multiplied by the radial distance between the two exchanges.

2.40 We propose that an adjustment should be made to the DFA Main Link charge on a per metre basis, in line with the current structure of that charge. We are not proposing to make a routing factor adjustment as we believe that, given the network topology and the typical lengths of Main Links, the radial distance between the exchanges is a reasonably good approximation for the route length. Further, using the radial distance maintains alignment with the charging structure.

2.41 Main Link charges apply to all DFA products. In the case of a fibre pair both fibres follow the same route, whereas in a resilient dual fibre service, each fibre will follow a different route. Therefore:

- when determining the value of the Second Component for single fibre service we propose that BT should use the NDR per km per annum payable for a single fibre by a CP with a network of 1,000km to adjust the Main Link charge component;
- when determining the value of the Second Component for a Main Link dual fibre service we propose that BT should use the NDR per km per annum payable for a fibre pair payable by a CP with a network of 1,000km to adjust the Main Link charge component; and
- when determining the value of the Second Component for a Main Link resilient service we propose that BT should use the NDR per km per annum payable for a single fibre by a CP with a network of 1,000km to adjust the Main Link charge components.

2.42 Based on the VOA's 2017 fibre rent tables the adjustments to Main Link charges would be as follows:

- 9.58p/metre for a single fibre Main Link;
- 11.975p/metre for a dual fibre Main Link; and
- 9.58p/metre for a resilient Main Link (in addition to a single fibre Main Link).

Recovery of BT's efficiently incurred costs

2.43 We have considered if it is appropriate to adjust the LLCC to account for the risk which our proposed adjustment to the calculation of the Second Component of the active differential could pose to BT's ability to recover its efficiently incurred costs.

2.44 We propose a focussed and proportionate approach to the adjustment to the LLCC. This would adjust only for the change in the approach to NDRs included in the Second Component. We do not consider it appropriate to revisit any other assumptions in the LLCC, for example, we have not adjusted the forecasts of BT's costs in 2016/17 to reflect more up to date information. Consistent with this, we have used the DFA LA and DFA volumes assumed in the BCMR Statement.

- 2.45 We have only considered the 'external' volume forecasts (i.e. forecasts for non-BT CPs' use) of DFA and DFA LA from the LLCC,²² as the NDR adjustment would not apply to BT internal volumes.²³
- 2.46 We have multiplied these external volume forecasts in 2017/18 and 2018/19 by the difference in the active differential between (1) NDRs as calculated under Condition 10C before any amendment,²⁴ and (2) the deduction for NDR based on the methodology described above, which we update for inflation on the assumption that the rate in the pound increases.
- 2.47 As we did not include a specific forecast for dark fibre Main Links in the BCMR Statement, we have estimated this by calculating the percentage of 1 Gbit/s EAD circuits to which Main Link charges apply, and then applied this to the forecast number of DFA circuits. Similarly, we based the average length of the DFA Main Links on the average length of the 1Gbit/s EAD Main Links.
- 2.48 This results in an estimate of the total deductions from the dark fibre revenue of around £5m. This lower revenue could pose a risk to BT's opportunity to recover its efficiently incurred costs if not adjusted for.
- 2.49 Consistent with the approach we adopted in the 2016 BCMR when previously implementing an uplift to the LLCC to provide BT with an opportunity to recover its efficiently incurred costs, we consider it appropriate to recover this from both active and dark fibre services.²⁵ As such we have allocated a proportion of these costs to the Ethernet basket costs based upon the relative volumes of EAD 1Gbit/s and dark fibre rentals calculated in the Final Statement. This results in 87% of the £5m being added to the Ethernet basket.²⁶
- 2.50 We propose to reflect this in the LLCC through a relaxation of the X that applies to the Ethernet basket only in year 2018/19, the last year of the three-year charge control. We propose to only change the X that applies to 2018/19 because the dark fibre remedy will not be launched until October 2017. Thus, the impact of dark fibre will be limited before 2018/19. Moreover, the 2017/18 year has already begun.
- 2.51 We have calculated a value for the X for 2018/19 that ensures that the impact of our proposal is compensated for. We have not altered any other assumptions in the LLCC model. As with the original LLCC approach, we have rounded the X to the nearest 0.25%. To recover the additional £5m results in a change in X for 2018/19 from -13.50% to -12.75%.

²² The total dark fibre forecasts (made up of both internal and external volumes) are shown in Figure A33.1 of the BCMR Statement.

²³ We note that the external lines may overstate the number of dark fibre lines which are subject to the amended Second Component to some extent, as there may be some external dark fibre circuits that are taken up by CPs who have their NDR assessed on the DCR method (such as Virgin Media).

²⁴ Before any adjustment, the NDRs included in various dark fibre charges in 2018/19 will be BT's allocation for the corresponding active products in 2017/18. We have assumed that these are equal to their allocation in 2016/17 multiplied by 2.09, as we expect BT's NDR charge to increase, as detailed in our 2017 WLA Charge Control consultation, Annex 17, paragraphs A17.22 and A17.41. Available at: <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review> We have assumed that the 2016/17 NDR allocations are as presented to us by BT on 1 November 2016. This means that we have assumed that BT's 2018/19 allocation of NDR for the 1 Gbit/s EAD LA is £[><], for the 1 Gbit/s EAD is £[><], and for the main link is £[><] p/m.

²⁵ This is explained in the BCMR Statement in paragraphs A33.347-A33.351

²⁶ Annex 33, paragraph A33.355.

Implications for the benefits and risks of the dark fibre remedy

- 2.52 We have considered whether our proposal has any implications for the assessment of the benefits and risks of the dark fibre remedy in the BCMR Statement. In our view, the assessment is not materially affected.
- 2.53 Ofcom considered the treatment of NDRs in the BCMR Statement, in particular at Annex 23. We included in our assessment the potential for the Second Component to be based on a measure of the NDRs that purchasing CPs would pay. We concluded however that our preferred approach was for the Government to change the relevant rules so that BT would be responsible for paying NDRs on sales of dark fibre. We then concluded that, in the alternative where the relevant rules are not amended, a measure of BT's costs would be used in setting the Second Component. We therefore drafted Condition 10C and the associated guidance so that either option could be accommodated.
- 2.54 We believe that our proposal simulates the choices that CPs would have faced if the Government changed the relevant rules. Given this, we do not expect the incentives to use dark fibre to be materially affected by our proposal. We therefore believe that it is reasonable to assume that the take-up of dark fibre will be broadly consistent with that assumed in the BCMR Statement. Further, the magnitude of the total impact of our proposal is very small, both in absolute terms and as a percentage of the relevant market.

Benefits and risks of dark fibre in the BCMR Statement

- 2.55 Ofcom's assessment of the benefits and risks of dark fibre is summarised at Section 7 of the BCMR Statement.
- 2.56 Ofcom considered that a dark fibre remedy would deliver benefits that exceeded the risks in both the short term and the long run. Dark fibre will promote more effective competition by exposing the active layer of the value chain to competition, encouraging innovation, service differentiation and promoting productive efficiency. Dark fibre could also lead to the reduction of regulation in future, by rolling back active remedies in leased line markets. This is in line with Ofcom's general approach of promoting competition across as much of the value chain as is efficient, effective, sustainable, and consistent with the interests of consumers.
- 2.57 Ofcom recognised that there were some risks associated with dark fibre (see paragraphs 7.68 to 7.78 of the BCMR Statement). In particular, we highlighted risks concerning: the potential to undermine BT's investments by undermining BT's cost recovery, promotion of inefficient entry, and deterring of alternative investments. We also identified a risk that dark fibre might limit BT's flexibility in setting prices for active products which could result in less efficient pricing structures. Ofcom was also mindful that introducing dark fibre at a relatively low price point (for example setting prices to reflect BT's average costs of supplying dark fibre) could be disruptive in light of the existing active pricing structures that the industry currently relies upon.
- 2.58 Ofcom's approach was, therefore, to introduce dark fibre carefully, setting the dark fibre price to reflect the 1Gbit/s active service as the first step in a managed transition towards greater reliance on passive access remedies. While this approach would result in relatively low take-up of dark fibre in the short run, it would allow time for the market to adjust and Ofcom expected that decisions at future reviews would support greater reliance on the remedy, potentially to the extent of removing regulation for active products entirely.

Impact of our proposed amendment

- 2.59 Our proposal for implementing the CMA's decision seeks to offset the higher NDRs paid by some CPs with a lower dark fibre price to reflect the NDR difference. In principle, this should mean that CPs' incentives to use dark fibre or a 1Gbit/s active product should be largely unaffected by NDRs. Under our proposals, those CPs that face higher NDRs will obtain a reduction in the dark fibre price, but they will also have to pay those higher NDRs. Overall these two effects will offset each other, leaving CPs with broadly unchanged incentives to use dark fibre in place of active products compared to those identified in the BCMR Statement.
- 2.60 In practice, it is not possible to target the NDR adjustment such that in all instances CPs' NDR costs are precisely offset. This means that in some cases the NDR differential will be higher than that necessary to offset the actual NDR payment a specific CP would face on any given circuit, and in some cases it will be lower. However, we think that our proposals will target the adjustments appropriately. Firstly, we are proposing to only apply the adjustments to the price paid by those CPs who pay NDRs using the DRC method. Secondly, while the NDRs depend on distance, the value of our proposed adjustments to access segment annual rental charges is small compared with those charges and the distribution of access segment lengths is relatively narrow.²⁷ As such there will be limited impact on CPs' decisions on whether to take dark fibre or not. We therefore believe that it is reasonable to assume that the take-up of dark fibre will be broadly consistent with that assumed in the BCMR Statement.
- 2.61 Given that CPs' incentives to use dark fibre under these proposals will be broadly similar to our original expectations in the BCMR Statement, we consider that the scope for innovation, productive efficiencies and also the impact on investment in competing infrastructure will also be broadly similar to that originally expected. Accordingly, there is no reason to expect material change in the balance of benefits and risks from this source.²⁸ Therefore we do not consider that implementing the proposed amendment would lead to a need for a re-appraisal of the dark fibre remedy overall.
- 2.62 Nor do we do not consider that we need to change other aspects of our remedies as a result of our proposed amendments. In particular:
- 2.62.1 As there is no material impact on the case for dark fibre nor the market conditions assessed in the BCMR Statement, we do not consider that the amendment alters Ofcom's analysis as to the need for geographical variations in the application of the remedy.
- 2.62.2 Given that we do not consider there is any material impact on the case for dark fibre, we also do not consider there is any knock-on effect on the consideration of the case for duct access. The pricing risks associated with

²⁷ We note that for Main Links the proposed adjustment is a larger proportion of the price and that there is more variation in their lengths. However, these services are charged for on a per metre basis and the way both the NDRs and our adjustments are determined are also on a per metre basis. Thus, limiting any distortions.

²⁸ As explained at paragraph 2.49, we propose to adjust the LLCC upwards slightly in order to ensure that BT can recover its costs. These price increases will be paid for by users of active leased lines. We note that the CMA considered that the net effect on the LLCC of using TalkTalk's approach to NDRs was not a reason in itself why that approach ought not to be adopted and that the scale of the effect was small (see paragraph 4.198 of the Determination).

the introduction of dark fibre, discussed in Annex 21 of the BCMR Statement would remain.

Proposed revisions to conditions and guidance

- 2.63 We consider that the proposed modifications to the SMP conditions, as explained in this consultation and set out below, comply with the requirements of sections 47 and 88 of the CA03.
- 2.64 With regard to the tests under section 88 of the CA03, and taking into account Ofcom's wider assessment of the costs and benefits of the dark fibre remedy, we consider that the proposed modifications to SMP conditions 10C:
- 2.64.1 are appropriate for promoting sustainable competition because they will ensure that differences in NDR exposure will have a limited impact on CPs' decisions as to whether to take dark fibre or not;
 - 2.64.2 are appropriate for promoting efficiency – we consider that our proposal to base the adjustment on the NDRs payable per km by a CP with a fibre network of 1,000km or more will promote efficiency as our assumption is designed to reflect the position of an efficient scale operator;
 - 2.64.3 confer the greatest possible benefits on the end-users of public communications services - our proposed modification has been designed so that the dark fibre remedy can be implemented as planned on 1 October 2017 with the benefits of the dark fibre remedy being available for the end-users from that date.
- 2.65 We also consider that the consequential modification of SMP condition 10A meets the section 88 tests. Whilst we recognise that the modified condition will lead to a small increase in overall price levels in the last year of the charge control relative to the level which would have occurred without this adjustment, it will continue to ensure that BT cannot price excessively and aim to bring BT's charges for the active products in line with BT's cost of provision by the end of the charge control period.
- 2.66 In considering the proposed modifications to SMP conditions 10C and 10A, we have also taken into account the need to ensure that BT has the incentives to invest and innovate where it is efficient to do so. In particular, we have sought to ensure that BT continues to have the opportunity to recover its efficiently incurred costs.
- 2.67 We are satisfied that the proposed modifications to SMP conditions 10C and 10A meet the required tests under section 47 of the CA03:
- 2.67.1 objective justification – we consider that the proposed modifications are objectively justifiable because they seek to address differences in exposure to NDRs whilst at the same time ensuring that BT continues to have the opportunity to recover its efficiently incurred costs;
 - 2.67.2 undue discrimination – we recognise that the proposed modification if implemented will mean that the basis of calculating the Second Component will differ for CPs whose NDRs are assessed using the R&E method and those whose NDRs are assessed using the DRC method. However, as set out above, we consider that the current approach to pricing dark fibre adequately reflects the different NDR costs for CPs whose NDRs are assessed using the R&E method. The aim of our proposals is to offset the

higher NDRs paid by those CPs whose NDRs are assessed on the DRC method with a lower dark fibre price to reflect the NDR difference. Our proposals are not therefore unduly discriminatory as those CPs that face higher NDRs will obtain a reduction in the dark fibre price, but they will also have to pay those higher NDRs;

- 2.67.3 proportionality – we consider that each proposed modification does not impose requirements that go beyond what is required to achieve the aim of appropriately addressing distortions arising due to NDRs, and ensuring that BT continues to have the opportunity to recover its efficiently incurred costs; as explained above, we have taken a simple and practicable approach to designing the proposed adjustment;
- 2.67.4 transparency – we consider that each proposed modification is transparent in relation to what it is intended to achieve; the aims and effect of each proposed modification are set out in this consultation. We are also publishing the text of the proposed modifications and have assessed their likely impact.
- 2.68 In making the proposals referred to in this document, we have also considered and acted in accordance with its general duties set out in section 3 of the CA03, Article 8 of the Framework Directive,²⁹ and the six Community requirements in section 4 of the CA03.
- 2.69 In particular, we consider that our proposals serve to further the interests of citizens in relation to communications matters and to further the interests of consumers by promoting competition.
- 2.70 As we expect the Tribunal will make an order directing Ofcom to modify the relevant SMP conditions to take into account the findings in the Determination, we have not included as part of this consultation an assessment of whether there has been a material change in the relevant market pursuant to section 86 of the CA03. In any event, Ofcom is not aware of any material change to the assessment of the relevant markets on which the relevant conditions are based.

Proposed revisions to Condition 10

- 2.71 We propose that Condition 10A and Condition 10C, set out at Annex 35 of the BCMR Statement will be replaced with the conditions set out at Annex 1 to this document. These changes will take effect on the date of the final statement.

Proposed revisions to accompanying guidance on the calculation of the active differential for Condition 10C

- 2.72 We propose that the guidance set out at Annex 24 of the BCMR Statement will be replaced with the guidance set out at Annex 2 to this document. These changes will take effect on the date of the final statement.

²⁹ Directive of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (2002/21/EC).

Impact assessment

- 2.73 The analysis presented in this document constitutes an impact assessment as defined in section 7 of the CA03.
- 2.74 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that generally we have to carry out impact assessments where our proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in Ofcom's activities. However, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions. For further information about our approach to impact assessments, see the guidelines, Better policy-making: Ofcom's approach to impact assessment, which are on our website:
http://stakeholders.ofcom.org.uk/binaries/consultations/ia_guidelines/summary/condoc.pdf

Equality impact assessment

- 2.75 Ofcom is separately required by statute to assess the potential impact of all our functions, policies, projects and practices on race, disability and gender equality. Equality Impact Assessments (EIAs) also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 2.76 It is not apparent to us that the proposals set out in this consultation are likely to have any particular impact on race, disability and gender equality. Specifically, we do not envisage the impact of any outcome to be to the detriment of any group of society. Nor do we envisage any need to carry out separate EIAs in relation to race or gender equality or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our regulatory intervention will not have a differential impact in relation to people of different gender or ethnicity, on consumers in Northern Ireland or on disabled consumers compared to consumers in general. Similarly, we do not consider that our proposals will have a particular impact on consumers in different parts of the UK or between consumers on low incomes.

Consultation questions

- 2.77 We invite views on any aspect of the assessment contained in this document. In particular, we invite responses to the following question:

1) *Do you agree with our proposal for the adjustment of the price of dark fibre to take into account the NDRs paid by CPs and our assessment of its impact on the costs and benefits of dark fibre? If not, please set out your reasoning, including supporting evidence, and explain: (i) how Ofcom should approach making the adjustment to the price of dark fibre in a manner which takes into account the Determination, and (ii) how that alternative approach would impact on the costs and benefits of dark fibre.*

Annex 1

Proposal for modification of SMP Conditions

NOTIFICATION UNDER SECTION 48(2) OF THE COMMUNICATIONS ACT 2003

Background

1. On 28 April 2016, the Office of Communications (“**Ofcom**”) concluded, in a statement entitled ‘*Business Connectivity Market Review – Review of competition in the provision of leased lines*’ (“**2016 BCMR Statement**”), its review of the business connectivity markets.
2. At Annex 35 to the 2016 BCMR Statement, Ofcom published a notification (“**2016 BCMR Notification**”) identifying markets, making market power determinations and setting SMP conditions in relation to, among others, the following markets:
 - a. wholesale market for contemporary interface symmetric broadband origination in the Rest of the United Kingdom excluding the Hull Area; and
 - b. wholesale market for contemporary interface symmetric broadband origination in the London Periphery.
3. SMP conditions contained in the 2016 BCMR Notification included the following obligations on BT, as a provider with Significant Market Power in the markets referred to in paragraph 2 above:
 - a. the obligations to provide Dark Fibre Access contained in SMP condition 2.1(c) and to price Dark Fibre Access in accordance with the basis of charges obligation contained in SMP condition 10C; and
 - b. the obligation to provide network access (including the Ethernet Services) contained in SMP condition 1 and 2.1(a) and a charge control on the Ethernet Services falling within the Ethernet Services Basket specified in SMP condition 10A.
4. On 28 June 2016, TalkTalk Telecom Group Plc (“**TalkTalk**”) brought an appeal against the 2016 BCMR Statement to the Competition Appeal Tribunal (“**Tribunal**”) under section 193 of the Communications Act 2003 (“**Act**”). TalkTalk’s appeal concerned only one aspect of the design of Dark Fibre Access; in the event that Ofcom’s recommendation to the Government (described in paragraph A23.111 of the 2016 BCMR Statement) was not adopted, that the non-domestic rate (“**NDR**”) costs to be deducted in deriving the price for Dark Fibre Access should not be based on an attribution of BT’s rates costs to the fibre (but rather some other appropriate measure should be used).
5. On 17 November 2016, the Tribunal referred the matter arising out of TalkTalk’s appeal to the Competition Markets Authority (“**CMA**”) for determination as a specified price

control matter under section 193(1) of the Act and Rule 16 of the Competition Appeal Tribunal Rules 2015.

6. On 6 April 2017, the CMA notified the Tribunal and the parties of its final determination of the specified price control matter in TalkTalk's appeal. The CMA determined that Ofcom had been wrong to decide that the NDR costs to be deducted in deriving the price for Dark Fibre Access should be based on an attribution of BT's rates costs to the fibre (rather than some other appropriate measure).

Proposals for modifications

7. In this Notification, Ofcom is now proposing to modify SMP conditions 10C and 10A.10 on BT, as set out in the Schedules to this Notification.
8. In accordance with section 48(2) of the Act, and in relation to the markets referred to in paragraph 2 above in each of which Ofcom determined BT to be a person having a Significant Market Power, Ofcom proposes to make the following modifications:
 - a. SMP condition 10C set out at Annex 35 to the 2016 BCMR Statement is proposed to be modified as set out in Schedule 1 to this Notification; and
 - b. SMP condition 10A.10 set out at Annex 35 to the 2016 BCMR Statement is proposed to be modified as set out in Schedule 2 to this Notification.
9. The proposed modifications to SMP conditions 10C and 10A.10 are shown as deletions and insertions against the SMP conditions as included in the 2016 BCMR Notification.
10. The effect of, and Ofcom's reasons for making, the proposals to modify the SMP conditions set out in Schedules 1 and 2 to this Notification are contained in the consultation accompanying this Notification.

Ofcom's duties and legal tests

11. In making the proposals set out in this Notification, Ofcom has considered and acted in accordance with its general duties set out in section 3 and the six Community requirements set out in section 4 of the Act. Moreover, in making the proposals set out in this Notification, Ofcom has considered the exercise of its general duties and the modification of the charge control condition in the light of the tests under sections 45 to 47, 87 and 88 of the Act.

Representations

12. Representations may be made to Ofcom about the proposals set out in this Notification and the accompanying explanatory consultation by no later than 22 May 2017.
13. Copies of this Notification and the accompanying consultation have been sent to the Secretary of State in accordance with section 49C(1)(a) of the Act.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the 2016 BCMR Notification set out in Annex 35 to the 2016 BCMR Statement and otherwise any word or expression shall have the same meaning as it has in the Act.

15. For the purposes of interpreting this Notification:

- a. Headings and titles shall be disregarded; and
- b. The Interpretation Act 1978 (c. 30) shall apply as if this Notification were an Act of Parliament.

16. Schedules 1 and 2 to this Notification shall form part of this Notification.

A handwritten signature in blue ink, consisting of a stylized initial 'D' followed by the name 'Clarkson'.

David Clarkson, Ofcom

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

11 April 2017

Schedule 1

The proposed modifications of SMP condition 10C

10C.1 The Dominant Provider must secure, and must be able to demonstrate to the satisfaction of Ofcom, that at all times during the Relevant Year each and every charge offered or payable for Dark Fibre Access is reasonably derived from the charge for the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service (or such other services as Ofcom may direct from time to time), adjusted to:

- (i) subtract the long run incremental costs that are avoided by the Dominant Provider when providing that Dark Fibre Access instead of the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service, such costs to be averaged over the Prior Relevant Financial Year;
- (ii) if appropriate make a subtraction in respect of non-domestic (business) rates in accordance with the requirements set out in Condition 10C.1A ~~subtract the average of the Cumulo costs attributed to the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service in each Prior Relevant Financial Year;~~ and
- (iii) reflect the long run incremental costs of any objectively justifiable differences (except any differences in circuit length) between that Dark Fibre Access and the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service, such costs to be averaged over the Prior Relevant Financial Year.

10C.1A In relation to the subtraction for non-domestic (business) rates referred to in Condition 10C.1(ii), the Dominant Provider must comply with the following requirements:

- (i) where Dark Fibre Access is provided to a Third Party whose non-domestic (business) rates are assessed on the basis of the Direct Rental Comparison Method, the Dominant Provider must make one of the following subtractions as applicable:
 - a. where a service is provided corresponding to a 1Gbit/s EAD Service or 1Gbit/s EAD LA Service, an amount calculated by multiplying the non-domestic (business) rates payable per kilometre per annum for one optical fibre as set out in the VOA Table by: (i) the Rate in the Pound, and (ii) a factor of 1.9;
 - b. where a service is provided corresponding to a Single Fibre Main Link Service, an amount per metre calculated by multiplying the amount of the non-domestic (business) rates payable per kilometre per annum for one optical fibre as set out in the VOA Table by the Rate in the Pound, and dividing the resultant amount by 1,000;
 - c. where a service is provided corresponding to a Resilience Main Link Service, an amount per metre calculated by multiplying the amount of the non-domestic (business) rates payable per kilometre per annum for one optical fibre as set

out in the VOA Table by the Rate in the Pound, and dividing the resultant amount by 1,000;

- (ii) where Dark Fibre Access is provided to a Third Party whose non-domestic (business) rates are not assessed on the basis of the Direct Rental Comparison Method, the Dominant Provider must subtract the average of the Cumulo costs attributed to the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service in each Prior Relevant Financial Year;

10C.2 Where Dark Fibre Access is a service providing network access to more than one optical fibre, in addition to complying with the requirements set out in Condition **10C.1 (i) to (iii)** and **10C.1A**, the Dominant Provider must secure, and must be able to demonstrate to the satisfaction of Ofcom, that the charge does not exceed an amount calculated by:

- (i) multiplying the charge for equivalent network access to one optical fibre (calculated in accordance with Condition **10C.1**) by the number of optical fibres; and
- (ii) adjusting that amount (calculated in accordance with Condition **10C.2(i)**) to:
 - a. reflect any incremental cost savings of providing network access to more than one optical fibres at the same time; and
 - b. where Dark Fibre Access is provided to a Third Party whose non-domestic (business) rates are assessed on the basis of the Direct Rental Comparison Method, subtract the difference between (i) an amount calculated by multiplying the non-domestic (business) rates payable per kilometre per annum for the relevant number of fibres as set out in the VOA Table by the Rate in the Pound and a factor of 1.9 and (ii) the amount calculated under Condition **10C.1A(i)(a)**.

This Condition applies to determining the charge for all Dark Fibre Access when more than one optical fibre is provided with the exception of determining the charge for Dark Fibre Access reasonably derived from the charge for the corresponding Main Link Service, in which case ~~only~~ Condition **10C.1** applies irrespective of the number of optical fibres provided; except that where Dark Fibre Access is provided to a Third Party whose non-domestic (business) rates are assessed on the basis of the Direct Rental Comparison Method, the subtraction under **10C.1A(i)(b)** shall instead be calculated by multiplying the amount of the non-domestic (business) rates payable per kilometre per annum for the relevant number of fibres in the circuit being purchased, as set out in the VOA Table by the Rate in the Pound, and dividing the resultant amount by 1,000.

10C.3 The Dominant Provider must secure, and must be able to demonstrate to the satisfaction of Ofcom, that each and every charge offered or payable for associated facilities which are reasonably necessary for the use of Dark Fibre Access is not greater than the amount that the Dominant Provider charges for the corresponding associated facilities reasonably necessary for the use of the 1Gbit/s EAD Service or 1Gbit/s EAD LA Service, adjusted to:

- (i) subtract any long run incremental costs that are avoided by the Dominant Provider when providing that associated facility instead of the corresponding associated facility for the use of 1Gbit/s EAD Service or 1Gbit/s EAD LA Service, such costs to be averaged over the Prior Relevant Financial Year;

- (ii) reflect the long run incremental costs of any objectively justifiable differences (except any differences in circuit length) between that associated facility reasonably necessary for the use of Dark Fibre Access and the corresponding associated facility reasonably necessary for the use of 1Gbit/s EAD Service or 1Gbit/s EAD LA Service, such costs to be averaged over the Prior Relevant Financial Year.

Associated facilities include the Accommodation Services, the Interconnection Services, the ECC Services, the Time Related Charges and the Cablelink Services.

10C.4 For the purposes of complying with Conditions **10C.1 to 10C.3** including 10C.1A(ii), the long run incremental costs and the average of the Cumulo costs that are avoided by the Dominant Provider when providing that Dark Fibre Access instead of the appropriate corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service shall be calculated by reference to the Regulatory Financial Statements, the Accounting Methodology Documents and the latest available Additional Financial Information, such calculation to be performed by the Dominant Provider as soon as reasonably practicable after the date for the provision of that Additional Financial Information under Condition **11.8** and any subsequent revision of that Additional Financial Information.

10C.4A For the purposes of complying with Condition **10C.1A(i)** and **10C.2**, in the event that there is a revision in either the VOA Table and/or the Rate in the Pound, the Dominant Provider shall update each and every calculation required under these Conditions as soon as reasonably practicable after publication of the relevant revision.

10C.5 The obligations set out in this Condition **10C** are subject to any applicable notification requirements under Condition **6.4**.

General provisions and interpretation

10C.6 Where:

- (i) the Dominant Provider makes a material change (other than to a charge) to any Dark Fibre Access which is subject to this Condition **10C**;
- (ii) the Dominant Provider makes a material change (other than to a charge) to any 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service which is subject to this Condition **10C**; or
- (iii) the Dominant Provider makes a change to the date on which its Financial Year ends;

Condition **10C** shall have effect subject to such reasonable adjustment to take account of the change as Ofcom may direct to be appropriate in the circumstances.

For the purposes of this Condition **10C.6**, a material change to any Dark Fibre Access or to any 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service (each of which is subject to this Condition **10C**) includes (but is not limited to) the introduction of a new product or service (as applicable) wholly or substantially in substitution for that existing product or service (as applicable) which is subject to this Condition **10C** or a change to the billing practice for any product or service which is subject to this Condition **10C**.

10C.7 The Dominant Provider must record, maintain and supply to Ofcom in an electronic format (including in any such presentational form or arrangement (including as to the level of disaggregation) as Ofcom may direct from time to time), no later than three months after the end of each Relevant Year, the data necessary for Ofcom to monitor compliance of the Dominant Provider with Conditions **10C.1 to 10C.3** in respect of Dark Fibre Access. This data must include for each and every Dark Fibre Access:

- (i) the published charge for that Dark Fibre Access and the published charge for the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service;
- (ii) unit average Cumulo costs attributed to the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service;
- (iii) unit long run incremental costs that have been avoided by the Dominant Provider when providing that Dark Fibre Access instead of the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service;
- (iv) unit long run incremental costs of any objectively justifiable differences between that Dark Fibre Access and the corresponding 1Gbit/s EAD Service or 1Gbit/s EAD LA Service or Main Link Service;
- (v) unit incremental cost savings of providing network access to more than one optical fibre at the same time;
- (vi) all relevant data and methodology used by the Dominant Provider for deriving the charge for that Dark Fibre Access; and
- (vii) such data as Ofcom may direct from time to time.

10C.8 Ofcom may direct that Conditions **10C.1 to 10C.7** shall not apply to the extent specified in any such direction.

10C.9 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition **10C**.

10C.10 In this Condition **10C**:

“1Gbit/s EAD Service” means each and every service with bandwidth of 1Gbit/s described as “Ethernet Access Direct” falling within the Ethernet Services Basket;

“1Gbit/s EAD LA Service” means each and every service with bandwidth of 1Gbit/s described as “Ethernet Access Direct Local Access” falling within the Ethernet Services Basket;

“Accommodation Services” means each and every service which is subject to Condition 10E and which is reasonably necessary for the use of Dark Fibre Access;

“Accounting Methodology Documents” has the same meaning as in Condition **11**;

“Cablelink Service” means each and every service which is reasonably necessary for the use of Dark Fibre Access and is described as “Cablelink” in the Ethernet Interconnection Sub-basket;

“Cumulo costs” means the non-domestic (business) rates that BT pays on its Cumulo Rateable Assets within the United Kingdom;

“Cumulo Rateable Assets” means the assets that make up BT’s Cumulo non domestic rating assessments in the United Kingdom as defined for England in The Central Rating List (England) Regulations 2005 (SI 2005/551), as amended by The Central Rating List (Amendment) (England) Regulations 2006 (SI 2006/495) and The Central Rating List (Amendment) (England) Regulations 2008 (SI 2008/429), and the analogous legislation that define these assets in Wales, Scotland and Northern Ireland;

“Direct Rental Comparison Method” means a method of assessing rateable values for non-domestic (business) rates on individual sections of route within telecommunication fibre networks with reference to a scale that varies with the total route length of the network and the number of lit fibres on the route;³⁰

“ECC Services” means each and every service which is subject to Condition 10F and which is reasonably necessary for the use of Dark Fibre Access;

“Financial Year” has the same meaning as in Condition 11;

“First Relevant Year” means a period beginning on 1 May 2016 and ending on 31 March 2017;

“Main Link Service” means each and every service described as “Main Link” falling within the Ethernet Services Basket;

“Prior Relevant Financial Year” means the Financial Year to which the latest available Additional Financial Information relates; “Regulatory Financial Statement” has the same meaning as in Condition 11;

“Rate in the Pound” means the non-domestic rating multiplier in pence for the Financial Year divided by 100 as notified by the Department for Communities and Local Government to Chief Finance Officers of English Billing Authorities.³¹;

“Relevant Year” means each of the following three periods:

- (i) the First Relevant Year;
- (ii) the Second Relevant Year; and
- (iii) the Third Relevant Year;

“Resilience Main Link Service” means each and every service described as “Resilience Main Link” falling within the Ethernet Services Basket;

“Second Relevant Year” means a period beginning on 1 April 2017 and ending on 31 March 2018;

“Single Fibre Main Link Service” means each and every service described as “Main Link” consisting of one optical fibre and falling within the Ethernet Services Basket;

³⁰ The VOA currently publishes such a scale within Annex 1 of “Section 871: Practice note: 2017: Telecommunications fibre optic networks” which is available at: <http://app.voa.gov.uk/corporate/publications/Manuals/RatingManual/RatingManualVolume5/sect871/PN%202017%20Appendix%201%20Fibre%20Rent%20Tone.xls>

³¹ For 2017/18 this notification is available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/598276/BRIL_3-2017_Multiplier.pdf. For the avoidance of doubt the relevant multiplier is not the small business non-domestic rating multiplier

“**Third Relevant Year**” means a period beginning on 1 April 2018 and ending on 31 March 2019; ~~and~~

“**Time Related Charges**” means each and every service which is subject to Condition 10G and which is reasonably necessary for the use of Dark Fibre Access; ~~and~~

“**VOA Table**” means the content of the row within the spreadsheet entitled “Fibre Rent Scale (Excluding London MAN)” which relates to “Total Network Route Km” over 1,000.³²

³² The current version of the Fibre Rent Scale (Excluding London MAN) is available at <http://app.voa.gov.uk/corporate/publications/Manuals/RatingManual/RatingManualVolume5/sect871/PN%202017%20Appendix%201%20Fibre%20Rent%20Tone.xls>

Schedule 2

The proposed modifications of SMP condition 10A

10A.10 In respect of each Basket and subject to the provisions set out in Conditions **10A.11** to **10A.13**, the Controlling Percentage in relation to any Relevant Year shall be calculated by employing the following formula:

$$CP_t = CPI_t + X$$

Where:

CP_t is the Controlling Percentage for the Relevant Year, t ,

CPI_t is CPI for the Relevant Year, t ,

X is equal to: (i) minus 13.50 percentage points for the Ethernet Services Basket in the First Relevant Year and the Second Relevant Year and the Ethernet Interconnection Sub-basket in each Relevant Year

(ii) minus 12.75 percentage points for the Ethernet Services Basket in the Third Relevant Year

~~(ii)~~(iii) minus 6.75 percentage points for the Ethernet 1Gbit/s EAD and EAD LA Sub-basket, and for the Ethernet Main Link Sub-basket.

Annex 2

Revised guidance on the calculation of the active differential for SMP condition 10C.1

It is proposed that the following text replaces the current text of paragraph A24.21 of Annex 24 to the BCMR Statement, under the heading “Second adjustment - Non-domestic business rates”.

“We consider that if access-seeking CPs, whose Rateable Value for the purposes of determining NDRs is assessed using the Direct Rental Comparison method, are liable for business rates when using dark fibre, then the active differential should reflect the NDRs calculated with the Direct Rental Comparison methodology. This means:

- For the EAD 1Gbit/s and EAD LA 1Gbit/s services, the Rateable Value should be calculated by multiplying the rate as set out in the VOA’s 2017 Fibre Rent Scale (excluding London MAN) for a 1,000km contiguous network size (with the number of fibres depending on whether it is a single fibre or fibre pair) by a length of 1.9 km.³³ The NDRs should be calculated by multiplying this Rateable Value by the non-domestic rating multiplier in pence for England, for the relevant Financial Year, divided by 100.³⁴
- For the Ethernet Main Link Service services the Rateable Value should be calculated by multiplying the rate as set out in the VOA’s 2017 Fibre Rent Scale (Excluding London MAN) for a 1,000km contiguous network size (with the number of fibres depending on whether it is a single fibre or fibre pair) by the length of the main link.³⁵ The length of the main link used for calculating the Direct Rental Comparison should be the radial distance. The NDRs should be calculated by multiplying this Rateable Value by the non-domestic rating multiplier in pence for England, for the relevant Financial Year, divided by 100.

We consider that if access-seeking CPs, whose Rateable Value for the purposes of determining NDRs is assessed using a method other than the Direct Rental Comparison method, are liable for business rates when using dark fibre, an appropriate attribution of BT’s non-domestic rates bill should be reflected in the active differential of the corresponding EAD 1Gbit/s, EAD LA 1Gbit/s or Ethernet Main Link Service. This should be based on the average attribution of BT’s cumulo rating costs to the corresponding active Service (SMP condition 10C.1(ii) and 10C.1A), based on an average across internal and external services.”

³³ The VOA currently publishes such a scale within Annex 1 of “Section 871: Practice note: 2017: Telecommunications fibre optic networks” which is available at: <http://app.voa.gov.uk/corporate/publications/Manuals/RatingManual/RatingManualVolume5/sect871/PN%202017%20Appendix%201%20Fibre%20Rent%20Tone.xls>

³⁴ The non-domestic rating multiplier is notified by the Department for Communities and Local Government to Chief Finance Officers of English Billing Authorities. For 2017/18 this notification is available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/598276/BRIL_3-2017_Multiplier.pdf. For the avoidance of doubt the relevant multiplier is not the small business non-domestic rating multiplier

³⁵ As a resilient main link fibre follows a different route it should be treated as a separate circuit for the purposes of this calculation (rather than an additional fibre in a multiple-fibre circuit).

Annex 3

Responding to this consultation

How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document, **by 5pm on 22 May 2017**.
- A1.2 We strongly prefer to receive responses via the online form at <https://www.ofcom.org.uk/consultations-and-statements/category-2/ndr-regulated-dark-fibre>. We also provide a cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>) for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work. You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to catherine.warhurst@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>).
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation.
- Catherine Warhurst
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact Catherine Warhurst on 020 7981 3382, or email catherine.warhurst@ofcom.org.uk
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed in the body document. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Catherine Warhurst on 020 7981 3382, or by email to catherine.warhurst@ofcom.org.uk

Confidentiality

- A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited

resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, www.ofcom.org.uk, as soon as we receive them.

- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <https://www.ofcom.org.uk/about-ofcom/website/terms-of-use>.

Next steps

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

Ofcom's consultation processes

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 4.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.

If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Email: corporationsecretary@ofcom.org.uk

Annex 4

Ofcom's consultation principles

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

Before the consultation

- A1.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

- A1.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A1.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.
- A1.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A1.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A1.6 If we are not able to follow any of these seven principles, we will explain why.

After the consultation

- A1.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

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

Nothing	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

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

DECLARATION

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

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

Name

Signed (if hard copy)