# BT's response to Ofcom's consultation document

*"Non-domestic rates and the price for regulated Dark Fibre"*

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# Contents

# 1 Executive Summary

1.1 In this consultation, Ofcom characterises the changes to Dark Fibre Access (DFA) pricing, resulting from the Competition and Markets Authority (CMA) findings in the TalkTalk appeal, as being targeted and having relatively little wider impact. However, these adjustments to the active differential to reflect non-domestic rates (NDRs) differences are not a narrow technical matter. Irrespective of the magnitude of the adjustment, Ofcom's proposal raises important matters of principle about:

- the setting of discriminatory access prices in response to cost differences amongst users of access services; and
- the role of tax differences in incentives to take up dark fibre, which received no attention from Ofcom in its original Business Connectivity Market Review (BCMR) consultation, despite being highly relevant to the assessment of the costs and benefits of DFA.

1.2 Although NDR differentials arise due to tax policy determined by the government, Communications Providers (CPs) have a degree of control over the NDRs they pay within this system (at least in terms of the choices made about network size and configuration); therefore, although it remains open to the government to change the rules of NDRs, there is little by way of sharp distinction between cost differences across CPs arising from the NDR regime and other sources of cost differences across CPs. The level of NDRs which a customer pays are certainly outside of the control of Openreach as the supplier. For this and other reasons, BT considers that DFA prices should be the same for all customers and not be differentiated – rather the CMA's findings should be implemented through using a Component 2 in the active minus approach which is assessed across all operators and applied to the price paid by all operators.

1.3 If, however, Ofcom continues to take the approach it has proposed in this consultation, it should make clear that the CMA's findings and approach do not establish a general principle that access charges could be differentiated according to the costs of the access seeker. Ofcom should firmly state that this approach is unique to the particular circumstances of NDRs and does not create a precedent for access seekers to demand such differentiated pricing in other contexts. Otherwise, there will be a risk of leaving Openreach open to paying for other operators' inefficiencies and creating moral hazard by undermining access seekers' incentives for cost reduction. To the extent that there is a competition distortion arising from the different NDRs which are paid by downstream operators (as found by the CMA), Ofcom should not create a different distortion by introducing differential pricing for the same regulated product based on customer costs. This could have seriously deleterious impact on incentives especially if there is any danger of this approach leaking into other areas of regulation. BT therefore considers that the logical and preferable approach to implementing the CMA's findings would be continue to require the same DFA prices for all customers, based on average NDRs paid by all downstream customers.

1.4 Ofcom has not fully taken into account the possibility of CPs arbitraging amongst themselves through an active merchant market to lower the effective NDRs paid. For example, the substantial discount for dual fibres would be easy to arbitrage, as would lower NDRs for those CPs with greater existing network assets. Therefore, NDRs paid by other CPs are in practice likely to converge to the lower end of the scale of possible charges. Ofcom should take this possibility into account and revisit its assessment.

1.5 The CMA considered that there were significant differentials in NDRs even amongst those CPs paying according to the Direct Rental Comparison (DRC) method and that this would affect take-up incentives, with take-up of dark fibre being more likely for those CPs paying below average NDRs and less likely for those paying above the average. However, the CMA's logic is not reflected at all in Ofcom's assumptions about take-up in the BCMR nor in Ofcom's assessment of the impact of the proposed amendment on the costs and benefits of introducing a dark fibre remedy. If the CMA is correct, Ofcom cannot assume that take-up of dark fibre occurs exactly where it is efficient for a CP to do so, as NDRs are relevant to these decisions. Ofcom has not even mentioned this issue in the Consultation. The CMA's approach would suggest dramatically scaling back the claimed benefits of DFA. Accepting the relevance of NDR differentials to dark fibre take up, as identified by the CMA's approach, provides further emphasis to the fact that the choice between dark fibre and active services is a cost based one and there are significant cherry picking opportunities. As such take up of dark fibre cannot be assumed or asserted to be necessarily efficiency enhancing. For example, the approach proposed by Ofcom will create incentives for certain operators to purchase shorter dark fibre circuits, which is an incentive effect not considered by Ofcom.

1.6 Nor does Ofcom consider, in the Consultation, the impact of the proposed amendment to DFA pricing on its "neutrality" argument (that BT's cost recovery is not impacted by the introduction of dark fibre based on an active minus price). Ofcom's consideration of the costs and benefits of DFA in the Final Statement starts with the assumption that the use of 'active-minus' pricing is financially neutral for BT as the price of dark fibre reflects the incremental costs avoided relative to supplying a reference active service. This is the basis for Ofcom's argument that dark fibre enables possible benefits that Ofcom does not need to quantify as it sees the costs as largely insignificant. However, notwithstanding that this neutrality argument does not take proper account of the impact of DFA on active services at other bandwidths (especially higher bandwidths), even by Ofcom's logic if a lower price is now set for dark fibre, it cannot simply be assumed that the costs of DFA are negligible and that, in consequence, that there is no need to make an explicit comparison of the costs and benefits of DFA.

1.7 Ofcom's approach, of assuming that the overall average cost of dark fibre plus NDRs is unchanged (compared with the assessment in the Final Statement and so does not affect take-up of dark fibre) such that the assessment of risks and benefits is unchanged, is therefore fundamentally inconsistent with the CMA's logic and the underlying reasons why the CMA has found the DFA price needs adjusting in the first place. The CMA's approach re-emphasises arbitrage and cherry-picking as reasons for dark fibre take-up.

1.8 The need for adjustments to the DFA price as a result of the outcome from the CMA proceedings has created further uncertainties about the future price of DF over the longer term, even if the adjustment proposed for this charge control period is modest in magnitude. The Final Statement (and the present Consultation) demonstrate that Ofcom has a wide range of discretion in how it might calculate an adjustment for NDR differentials in future. If the modification to DFA pricing is confirmed as currently proposed, the introduction of dual pricing and the incentive effects resulting from the interaction between downstream operators' NDRs and investments in DFA create further reasons why the current active minus pricing approach is unsustainable in the longer term. However, a change to pricing approach would fundamentally impact on the assessment of the risks and benefits of introducing DFA beyond the current market review period.[1]

1.9 Ofcom has not tested whether the proposed approach will lead to individual prices below relevant cost floors: [✂]. (This is discussed further in Section 4 below.) As prices fall in this way it will become increasingly important to ensure that the active differential properly reflects avoided incremental costs associated with active services. The wide range of discretion identified above, as it is exercised in future market reviews, could create further risks to investment.

1.10 If Ofcom were to adopt the approach as proposed in the current consultation, we further believe that a number of adjustments are still warranted to the detail proposed and we discuss these in detail in Sections 4 and 6 below. In particular, BT considers that the average circuit length for DFA "tails" which should be used in calculating Component 2 of the active differential should be [✂]km. Explicit recognition should be made of the potential implications of this approach which may need to be reflected in future market reviews. For example, if significant volumes of circuits were to change which version of the DFA price they were paying any implications for costs under-recovery will need to be taken into account in subsequent market reviews. Another example would be any further reduction in Openreach's pricing flexibility which the proposed approach imposes should be recognised in setting future charge controls. In considering the proposed modification, Ofcom has also ignored the potential implementation issues which arise by introducing an additional price point for each DFA variant at this relatively late stage in the process. The costs and practical implications of this are set in Section 6 of this response along with proposals on how these could be appropriately and proportionately taken into account if Ofcom does not change its approach.

1.11 BT strongly agrees that the Leased Lines Charge Control (LLCC) requires a countervailing adjustment to ensure overall efficient cost recovery but has some concerns about the approach taken, as discussed in Section 5 below. We consider that the adjustment, as proposed, is fraught with a number of inconsistencies. As a result of this and other factors it therefore contains a real risk of under recovery of efficiently incurred costs [✂]. These concerns are detailed in Section 5.

[1] We note that this relates to a key area of disagreement between BT and Ofcom in the current appeal proceedings concerning the proportionality of introducing DFA in the first place. In particular, the impact of this is inextricably linked to the extent to which the DFA remedy is considered irreversible (which Ofcom accepts is the case for circuits already sold while BT considers this irreversibility relates to the introduction of the remedy overall).

# 2 Introduction and context of Consultation

2.1 The Consultation[2] is cast as a narrow and technical change resulting from the CMA Final Determination (the "Final Determination") in relation to TalkTalk appeal[3] of the BCMR. Ofcom describes the changes as "minor, targeted adjustments".[4] BT considers that the Consultation in fact raises a number of more fundamental issues concerning the appropriateness and future workability of the DFA price and the DFA remedy more widely. The adjustments themselves also have significant consequences in and of themselves as described below. As such, in this response we address the extent to which the changes to DFA pricing proposed in the Consultation are consistent with the logic of the Final Determination, the issues which arise in relation to the adjustments being proposed on their own terms, and the wider impact we consider these proposed changes have on the case for a DFA remedy in the first place.

2.2 Ofcom's BCMR Final Statement[5] (the original decision) set the price for DFA access on an active minus basis. DFA products were to be priced to specific equivalent active reference products - specifically the relevant Ethernet Access Direct (EAD) 1GBit/s products – minus the "active differential". This differential is comprised of three components:

- Component 1: the long run incremental costs avoided by providing a dark fibre rather than active product;
- Component 2: the non-domestic rates saved (if tax arrangements remain such that these costs are saved) by providing dark rather than lit fibre; and
- Component 3: the long run incremental costs of additional costs objectively associated with providing DFA as opposed to an active product.

2.3 Components 1 and 2 represent subtractions from the EAD 1GBit/s price, whereas Component 3 is an addition to the price. TalkTalk's appeal related to Component 2 and the Consultation is solely concerned with changing Component 2 as a result of the Final Determination.

2.4 BT notes at the outset that the appeal processes are on-going. In the TalkTalk appeal, the Competition Appeal Tribunal (CAT) still needs to decide the matter in accordance with the Final Determination. BT's own appeal of the BCMR is still in front of the CAT. This procedural context of the points made in this response therefore needs to be taken into account and should in no way be taken as acceptance by BT that the DFA remedy is appropriate or proportionate, nor that BT accepts the market definition and analysis on which these remedies are based is correct. BT made clear at a number of points in its intervention[6] on the TalkTalk appeal that its arguments and evidence in that intervention were without prejudice to BT's own challenges in its Notice of Appeal to the overall DFA remedies imposed by Ofcom. This continues to be the case.

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[2] "Non-domestic rates and the price for regulated Dark Fibre": Ofcom consultation; published 11 April 2017 (the "Consultation"). (Available at https://www.ofcom.org.uk/consultations-and-statements/category-2/ndr-regulated-dark-fibre?utm_source=update&utm_medium=email&utm_campaign=ndrdarkfibre)

[3] CMA Final Determination in TalkTalk Telecom Group plc v Office of Communications (Case 1259/3/3/16) 6 April 2017.

[4] See paragraph 1.12 of the Consultation.

[5] "Business Connectivity Market Review: review of competition in the provision of leased lines" Ofcom Statement, published 28 April 2016. (Available at https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2015)

[6] See, for example, paragraph 2 and footnote 12 of BT's Statement of Intervention in TalkTalk's appeal, endnote 3 of BT's Speaking note at the hearing on 31 January 2017 and the transcript of that hearing p21/ln17-p22/ln4.

2.5 BT agrees in principle that adjustments within a charge control period should be as minimal as possible to retain the incentive properties of the charge control process. The scope of this consultation is explicitly very narrow. Naturally, it focuses on changes consequent on implementing the recommendations in the Final Determination. However, BT considers that the way in which Ofcom has limited its consideration does not lead to consistent application and that Ofcom has, without proper justification, ruled out changes to some elements of the regulations. This is discussed further below, in particular in Section 5 which considers the changes Ofcom is proposing to the LLCC. As Ofcom explicitly states in paragraph 2.44 of the Consultation Openreach's costs forecasts have not been updated to reflect more up to date information. The recent VOA revaluation has led to a significant change in relevant costs, which is therefore not being reflected in the changes to the LLCC; although this change will in due course automatically be reflected in the calculation of Component 2 of the active differential in this charge control period. Even with this change only coming into force in the final year of the charge control, this still means that there will be a number of months when the increase in BT's cumulo will reduce DFA prices but not be reflected in Ethernet prices.[7] Not only should this mis-match be taken into account in the Consultation, it will clearly also need to be taken into account in future BCMRs.

2.6 The narrow scope of the Consultation also leads to it not properly addressing the question of whether the proposed adjustment will continue to ensure appropriate cost recovery and the longer term impacts of this proposed pricing approach. The proposed adjustment brings into even starker relief the issue of how DFA pricing might work in the next charge control period and the sustainability of the active minus pricing approach (which in turn cast doubt on Ofcom's longer term assessment of the risks and benefits of introducing DFA). For example, the effective impact of the proposed modifications set out in the Consultation is that future compliance with any Ethernet basket will only be achievable [✂].

2.7 This reinforces the view that once DFA becomes established (and BT considers this will rapidly become irreversible), significant volumes will switch from active products during the next charge control period. BT explained in its response to the May 2015 consultation why active minus pricing was unlikely to be sustainable and the modifications proposed in this Consultation will simply exacerbate this.

2.8 Despite the narrow focus of the Consultation, the proposed changes to the DFA pricing approach still represent a substantive change to the original BCMR Final Statement published in April 2016. The following features of the proposals are materially different to the Final Statement and mean that these proposals should be considered a new decision:

- The introduction of different sets of prices for DFA access for CPs which pay non-domestic rates on a Direct Rental Comparison (DRC) basis and for those which pay on a Receipts and Expenditures (R&E) basis;
- There is a substantive change to the way in which charges for more than one optical fibre are derived meaning that they are no longer simple multiples of the single fibre charge (minus incremental cost savings of providing multiple fibres);
- The introduction of a separate dark fibre charge for main link services;

[7] See paragraph 5.8 of this response below.

- As explained above, the proposed changes have potential longer term consequences for the way DFA charges will work in subsequent charge control periods compared to the original decision; and
- The new VOA April 2017 revaluation (which, as indicated above, has significantly altered Openreach's costs) has specifically been introduced to determine Openreach's lost revenues (though, as discussed in more detail in Section 5, Ofcom has inconsistently ignored it for other aspects of the Consultation).

2.9 Even focusing on the current charge control period, while we accept that changes proposed "only" represent around 1% of the total allowed LLCC costs[8] it should be noted that the price changes proposed are of the same order of magnitude as the price changes posited under the SSNIP test (which Ofcom believes is sufficient to lead to material substitution between bandwidths). For example, the proposed £182 reduction in single fibre DFA product represents a 9% reduction in the DFA Final Reference offer price.

2.10 The rest of this response addresses the following issues.

- We first consider, in Section 3, the impacts of the proposed DFA pricing adjustment on the assessment of the risks and benefits of the DFA remedy, setting out why BT considers that Ofcom's assertion that there is no impact on this assessment is inconsistent with the approach taken in the Final Determination. Notwithstanding BT's own appeal and wider arguments in relation the proportionality of the DFA remedy, we consider that a proper assessment of the incremental impact of the proposed changes need to be considered properly to understand if it materially impacts the overall risks and benefits consideration.
- Section 4 considers the proposed Ofcom adjustment in light of the Final Determination notwithstanding the issues raised in Section 3, dealing with the mechanism of the proposed adjustment to prices itself and then addressing the conceptual and consequential impacts arising in relation to setting different prices for the same product. We also discuss what we consider to be a significant omission: namely that Ofcom has undertaken no analysis of whether individual DFA prices will be above the appropriate cost standard.
- BT strongly agrees that changing the DFA price requires a consequential adjustment to the LLCC. The following Section 5 provides BT's views on the proposal in the Consultation to change the final year X factor.
- If Ofcom confirms its proposals, in terms of the adjustment to DFA pricing, as set out in the Consultation, a number of practical implementation issues arise. In particular, the introduction of different DFA prices depending on how the customer incurs an NDR liability introduces significant complexity and implementation challenges. Further, the proposed amendments to the SMP Conditions requires some further changes to be fit for purpose and in order appropriately to reflect the policy described in the body of the Consultation. These issues are discussed in Section 6 below.

[8] Paragraph 1.10 of the Consultation.

# 3 Wider implications of the proposed approach

3.1 BT is concerned that certain views expressed in the CMA's Determination are at odds with the approach that Ofcom adopts to the assessment of the merits and demerits of introducing DFA. This demonstrates that Ofcom's analysis of the cost and benefits in the BCMR Statement was at best incomplete and most likely incorrect.

3.2 Ofcom sets out in the Consultation that the proposed adjustment to the pricing of DFA services is relatively modest. This adjustment would be further reduced if Ofcom had regard to the possibility of arbitrage between CPs to lower NDRs through an active merchant market. However, regardless of the magnitude of this adjustment, fundamental issues of principle are raised by both the possibility of such arbitrage and also the wider impact of NDR differentials on incentives to take up dark fibre identified by the CMA in the Final Determination.

3.3 In particular, Ofcom's assessment of the costs and benefits of introducing DFA in the Final Statement rest to a large degree on the assumption that the take-up of dark fibre will be efficient and, specifically, that any suppression of investment in infrastructure will be efficient.[9] Furthermore, Ofcom's views that dark fibre will create innovation benefits are dependent on the idea that take-up will be driven in the main by new applications for fibre.

3.4 Ofcom's case for dark fibre made in the Final Statement is strongly based on the argument that, if the differential between dark fibre and the price of the active reference services (i.e. EAD 1Gbit/s services) reflected the incremental costs avoided by providing dark fibre rather than an active service. On this basis, Ofcom considers that BT's profitability position should be left largely unchanged. The validity of this 'neutrality' argument is a matter of contention, as in BT's view the introduction of dark fibre constrains the pricing of other services (especially very high bandwidth services), which has an impact on BT's, and other infrastructure investors', returns from fibre investments. However, notwithstanding this criticism, even if Ofcom were correct that the introduction of DFA could be financially neutral for BT on the basis of an active-minus price as previously proposed, it self-evidently cannot be financially neutral at the lower price now proposed after the adjustment for the NDR differential; indeed, an adjustment is needed to the price control for this very reason.

3.5 But this also undermines Ofcom's fundamental argument for DFA having net benefits. Ofcom has asserted in the BCMR Statement that DFA can be introduced with little cost, indeed sufficiently minor cost that the mere potential of benefits such as enhanced innovation are sufficient to conclude that DFA is desirable and that these potential benefits do not need to be quantified. However, if the price of dark fibre is lowered, even by Ofcom's own logic this argument cannot apply; there are material costs of introducing DFA that need to be weighed against potential benefits and it cannot simple be asserted that costs outweigh benefits. Put simply, the CMA has identified a distortion arising due to NDRs and said that this needs to be fixed; however, there is a material cost to fixing it which ultimately forms part of the cost of introduction DFA in the first place.

3.6 Ofcom has largely downplayed the role of arbitrage and cherry picking as motives for dark fibre take-up in its considerations. In particular, Ofcom considers in the Final Statement that

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[9] Final Statement, paragraph A20.9: "*Our approach is designed not to deter efficient investment. It requires BT to set the price of dark fibre by reference to its charge-controlled products operating at 1Gbit/s, and is therefore consistent with the design of the controls which we are imposing on BT's charges for regulated active services, which provides incentives for efficient investment for BT and for rival infrastructure operators.*" See also Final Statement, Vol I, paragraphs 1.39 and 7.77. Regarding take-up see Final Statement, Vol I, paragraphs 9.123-9.125

arbitrage is a key productive efficiency issue, noting that there are *"risks to productive efficiency (including inefficient entry), if investment signals at different levels of the value chain are distorted by the pricing of dark fibre (both in absolute terms, and relative to downstream active remedy pricing if they coexist)"* .[10] However, in the Final Statement's discussion of arbitrage and efficient entry, Ofcom does not mention NDRs at all.

3.7 In contrast, the Final Determination raises the possibility of tax differentials affecting not only the volume of take-up of dark fibre, but also the mix of service variants taken, and the CPs who take it. In this regard it is helpful to distinguish between (i) the differentials in NDRs paid under the Direct Rental Comparison method and those paid by, for example, BT and Virgin Media under the cumulo approach and (ii) differentials in NDRs amongst those CPs paying under the DRC method. The proposed adjustment of DFA pricing is intended to address the first issue. However, the Final Determination suggests that there could still be substantial differences in the amount of NDRs that two CPs paying under the DRC method would pay for an identical dark fibre depending on the context (i.e. the extent of the CPs' existing network and whether that fibre was taken a single fibre or in a pair). Indeed, the CMA goes as far as to modify Ofcom's analysis of take-up of dark fibre, supposing that those CPs facing higher than average NDRs might not take dark fibre.[11]

3.8 Whilst NDRs are not the sole determinant of take-up decisions, clearly the CMA considered that they were an important factor. However, this issue clearly was not considered by Ofcom in the Final Statement. Ofcom acknowledged the existence of NDR differentials between BT and other CPs paying by the DRC method, but did not take these in account in formulating take-up forecasts.[12] Ofcom did not consider the impact on dark fibre take-up of NDR differentials amongst CPs paying according to the DRC method.

3.9 For the avoidance of any doubt, BT is not proposing that there should be finer differentiation of DFA prices in order to "correct" for all these various differences in NDRs, as this would give adverse incentives to CPs and create great complexity and implementation costs. Nevertheless, the existence of substantial NDR differentials should have been considered by Ofcom when considering the efficiency of dark fibre take-up. In BT's view, it is simply unsustainable for Ofcom to have asserted that dark fibre take-up would be efficient without considering the various forms of arbitrage that might occur, with the Final Determination suggesting that NDR differentials would be a significant source of such arbitrage.

3.10 Take-up decisions for dark fibre will in a large part be driven by a comparison of the relative costs of dark fibre versus active services from Openreach. NDRs affect the costs of using dark fibre for a CP, but not the cost of taking an active service from Openreach. Therefore, it is self-evident that NDR differentials are likely to affect choices between dark fibre and active services. In particular, NDRs increase for longer dark fibre circuits, creating a distorting incentive to take dark fibre for shorter circuits and to continue using active services for longer links. Thus NDRs potentially affect the mix of demand for dark fibre, as well as the potential volume of take-up.

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[10] Final Statement, paragraph A19.2.
[11] CMA Final Determination, §4.183. Notably, the CMA refers that *"[i]n its Defence, Ofcom included further reasons why it did not consider that it was appropriate to follow an approach based on access-seekers' costs… there may be some take-up of DFA which reflects NDR differentials not OCPs being more efficient than BT*". (paragraph 4.175 b)
[12] Final Statement, paragraph A33.40

3.11 NDRs also affect decisions about self-provision of infrastructure by CPs versus buying either dark fibre or active services. Decisions at the margin between dark fibre versus own-infrastructure could also be affected by the NDRs that a CP expects to pay. The notion that all these decisions can be assumed to be tax-neutral and efficiently made is simply unsustainable.

3.12 Whilst BT expects there to be substantial take-up of dark fibre, the nature and mix of this take-up has potential to be affected by tax incentives, rather than being driven by CPs having cost efficiencies or making service innovations. Put simply, if there are sufficient distortions arising from NDRs for the CMA to have proposed the amendment it has, then Ofcom should have considered this issue <u>in detail</u> in the BCMR when assessing the costs and benefits of DFA, which it did not.

3.13 In the Consultation, Ofcom argues that there may be 'swings and roundabouts' at work when correcting its assessment of dark fibre take-up to take into account the differential between BT's NDRs and the average position of CPs paying by the DRC method. Apparently, Ofcom did not take into account the greater NDR costs of those CPs in formulating those forecasts. Given this, lowering the DFA price by the <u>average</u> amount of this NDR differential (between CPs paying by DRC and BT) will <u>on average</u> offset the NDRs costs that Ofcom previously omitted to consider. However, this does not mean that Ofcom can simply assume that its previous forecasts can stand. In particular, the mix of take-up of DFs will be affected and there are likely to be incentives to take-up DF in particular circumstances where NDRs are lower, leading to arbitrage and cherry picking.

3.14 These issues go to the heart of Ofcom's arguments for the introduction of DFA leading to a net benefit. In particular, Ofcom's 'neutrality' argument for DFA in the BCMR is that pricing DFA on the basis of an active differential that reflects the incremental costs avoided if Openreach supplies dark fibre rather than an active service will lead to efficient take-up decisions and leave BT no worse off in terms of its ability to recover its efficiently incurred costs. However, tax differentials can distort these decisions, reducing the benefit of introducing a DFA remedy. This would especially apply to the productive efficiency benefits but would also potentially apply to the claimed innovation (dynamic) efficiency benefits through such tax differentials leading to reduced volumes of dark fibre take-up as well as leading to arbitrage opportunities. Such arbitrage could lead to dark fibre simply being used for on-selling active products to other CPs. Ofcom has not assessed how the mix across dark fibre at different lengths and the LA variant might be affected and what the implications might be for BT.

3.15 We also note that the application of the adjustment to DFA pricing to account for NDRs substantially increases future risks for all infrastructure investors, not just BT. In particular, there is a wide range of discretion for Ofcom in how the NDR adjustment might be calculated, depending on how the average NDR across CPs in different situations is calculated for the purposes of making an adjustment to the dark fibre price and whether the possibility of tax arbitrage through an active merchant market is considered. Any investments made now need to anticipate the decisions that Ofcom will make about these issues in the next and subsequent price control reviews. The risk of lower DFA prices due to adjustments such as that proposed now by Ofcom inevitably depresses incentives to invest in infrastructure. Therefore, it is essential that Ofcom sets out now a clear and principled approach, making clear that the Final Determination does not open the floodgates to other claims for lower access prices to compensate for CPs having higher than average costs for whatever reason. Moreover, Ofcom should seek to minimise the adjustment it is now making to DFA pricing, for instance by taking account of the potential for CPs to minimise their NDR bills through arbitrage.

# 4 Ofcom's proposed revision to the approach to Dark Fibre Access pricing

4.1 This section addresses Ofcom's proposed adjustment on its own terms, assuming the broad scope of Consultation and the underlying assumptions are correct (importantly that the outcome of the original decision in relation to the risks and benefits of introducing DFA can be assumed to remain unchanged). For the reasons set out in Sections 2 and 3 above, BT disagrees that this is case. However, this section is purely focused on the proposed changes to Component 2 of the pricing approach setting aside the wider issues discussed above.

4.2 In summary, this section covers:

- The first subsection provides our comments on the specific change which is being proposed to Component 2 for certain CPs addressing the issues of principal and calculation which arise in this proposed adjustment;
- The next sub-section addressed the issue of principle which arises from introducing different DFA prices which depend on the tax position of the purchasing CP: BT has serious concerns about this approach; and
- The final sub-section addresses BT's concerns that Ofcom has not undertaken any assessment of whether these proposals could lead to a relevant cost floor being breached for DFA services.

4.3 This section does not address in any detail the practicalities of the proposed approach which are considered fully in Section 6 below.

*Ofcom's approach to amending Component 2 of the DFA pricing mechanism*

4.4 The change to Component 2 proposed in the Consultation (for those CPs who pay NDRs on a DRC basis) for an EAD access tail involves the following key steps:

i. The appropriate Rateable Value (RV) per kilometre is derived from the VOA fibre rent tables, using the value for a CP with a fibre network of 1,000km or more;

ii. This RV is multiplied by the poundage rate for England (based on majority of likely DFA usage being in England and the similarity of poundage rates across most of the UK) to give a "typical" NDR payable per km;

iii. A "typical" circuit is assumed, based on the median length of current EAD LA circuits provided by Openreach, which are based on straight-line distances;

iv. This straight-line distance for a typical EAD LA circuit is multiplied by a factor of 1.4 to get an estimate of the route distance for a typical circuit (giving a value of 1.9km); and

v. The typical NDR payable per km is multiplied by the typical circuit length to give the amount for Component 2.

4.5 Based on the values in the VOA fibre rent tables, different RVs are calculated for a Single Fibre and Fibre Pair price (where the RV of a fibre pair over the same route is significantly less than two times the single fibre RV). The Consultation also considers whether there should be a difference between Component 2 for the DFA LA and standard products. Ofcom asserts that there is no systemic difference between the length of an access tail between these two products and, based on Openreach data provided during the BCMR calculates that the average number of access tails per standard EAD is [✂] and therefore assumes a value of one. On this basis, the Consultation proposes the same value for Component 2 is used for both the DFA standard and LA products.

4.6 A similar approach is also used for calculating the main link adjustment, but this is calculated on a per metre basis, avoiding the need to calculate a "typical" circuit length.

4.7 BT has a wider concerns about Ofcom's approach, which is heavily based on using average values and ignoring the impact of the distribution around these values which exists in practice. As discussed above in Section 3, the CMA identified NDR differentials both between those paying on the DRC method and the R&E method, as well as NDR differentials between those paying on the DRC method. The impact of this, especially of the latter effect, has not been properly taken into account in the Consultation.

4.8 There is also a more specific effect which arises from the approach proposed in the Consultation. The proposed level of Component 2 in the active differential (for CPs who pay NDRs based on the DRC method) can change year on year due to changes in the relevant tax rates, but is set with reference to the average route length at a point in time (proposed to be set for remainder of the current market review period). This average is derived from active circuit lengths as at April 2015, which is over two years prior to the introduction of DFA. While BT agrees with Ofcom that it would not be proportionate in the current circumstances to update this information at this stage, this does raise the issue of how and if the 1.9km factor will be adjusted in future (given that Ofcom is proposing to "hard code" it into the DFA pricing condition for the current period).

4.9 The introduction of DFA itself could lead to incentives to change circuit lengths and the proposed pricing approach itself could impact on the incentives to take different lengths of DFA access tails. The overall incentive effects of setting the 1.9km access tail length on which Component 2 of the active differential is set is not assessed in the Consultation. Ofcom has not discussed or assessed either the benefits of introducing a mechanism for this factor to be updated or indicated how Ofcom would expect to approach updating (or whether it would update) this factor in the next market review period. Having set the Component 2 on this basis it is therefore not clear to what extent this will (or can be expected to be) revisited in future charge control periods, even if the active minus approach to DFA pricing can be retained. There is considerable regulatory uncertainty about the DFA pricing approach in future market review periods and the approach taken in the Consultation would materially increase this uncertainty. BT therefore considers that Ofcom should make a clear statement at least about how it would plan to approach reviewing DFA pricing in future. In particular, the extent to which this approach to calculating Component 2 (including whether the 1.9 factor in the DFA pricing condition can be considered to be a long term approach) can be relied upon by Openreach and CPs purchasing DF as a basis for future DFA pricing.

4.10 Setting these broader issues aside, BT has two specific comments on the calculation Ofcom has undertaken when looked at on its own terms. BT accepts that the basic approach Ofcom has used is a feasible way of taking account of the findings in the Final Determination (aside from the issue of introducing different prices for different types of CP based on how NDR liabilities are incurred).

4.11 On the detail of the proposed implementation, BT does not see the justification for assuming that the EAD LA average access tail length should be the relevant benchmark. Ofcom's calculations, based on the relevant sample of circuits used, indicate that the EAD LA median access tail length is 1.9km while the EAD Standard median access tail length is [✂]km. While we accept that there is no a priori reason for considering that over the long term these should be materially (or statistically) different from each other, BT does not understand the justification for therefore assuming the EAD LA figure is the most appropriate to use. Our analysis of the sample which Ofcom has used (which we would expect to be reinforced by any wider assessment of the total number of different types of circuits) is that EAD Standard circuits represent the majority (i.e. in they are [✂] of the sample Ofcom has used). Therefore, using the EAD Standard access tail length would be more robust and appropriate and use of the EAD LA figure is arbitrary and unjustified. As such, BT considers that the 1.9km figure in the DFA pricing conditions should be adjusted to [✂]km. Based on the VOA's 2017 fibre rent tables the adjustments would therefore currently be as follows: £[✂] for the DFA Single Fibre and £[✂] for the DFA Fibre Pair.

4.12 Using any average circuit length approach in setting DFA pricing will introduce potential opportunities for arbitrage. The wider ramifications of this in terms of relative costs and benefits of the DFA remedy itself need to be properly considered and taken into account as discussed in Section 3 above.

4.13 BT also has concerns about the implications of the proposed pricing approach on EAD main link pricing. We understand the reasons why Ofcom is introducing an additional differential based on NDRs on main link pricing as well (a new feature of these proposals) and it is important that any approach does not exacerbate arbitrage opportunities to the extent possible. However, it needs to be recognised that the introduction of per metre NDR subtraction for main link prices will lead to a reduction in Openreach pricing flexibility. [✂] This is considered further in paragraph 4.31 below.

4.14 We expect that this will lead to a binding constraint relatively quickly and means Ethernet basket reductions will even more need to be focused on EAD 1G. [✂] However, this [✂] and will be a further factor which must be taken into account in the next BCMR. If the proposed pricing mechanism for DFA pricing is retained beyond 2018/19 this [✂]. This will also create a different form of arbitrage possibility between products which have different main link rate.

4.15 When taken together, these aspects of the proposed pricing approach, discussed in this sub-section, introduce further risks (for example to common cost recovery and flexibility to achieve efficient pricing structures) which have not been taken into account. As Ofcom is aware, BT considers that the introduction of DFA is essentially irreversible.[13] As such, these additional distortions will need to be taken into account in the next BCMR when considering the appropriate form of any future DFA pricing. This creates another aspect of the significant concerns BT has about the long term impact of introducing DFA and the medium to long term sustainability of the pricing mechanism, exacerbated by the changes proposed in the Consultation.

*Implications of the proposed differential pricing for DFA products*

4.16 It is a fundamental aspect of the approach proposed in the Consultation that Component 2 will be calculated in two different ways. Where the DFA purchasing CP pays its own NDRs on the DRC basis, the approach discussed above will be used. Where the DFA purchasing CP pays its own NDRS on the Receipts and Expenditure basis, Component 2 will be calculated on the basis originally proposed in the BCMR Final Statement (i.e. an allocation of the overall cumulo assessment of Openreach).

4.17 This proposed price discrimination raises a number of issues at a conceptual level and in terms of the precedent it sets for future charge controls. The practical issues concerning

[13] This is one aspect of BT's grounds of appeal against the imposition of a DFA remedy at all and is an important issue which will need to be considered in any future CAT proceedings in relation to BT's appeal.

implementation of such pricing, which are discussed in detail in Section 6 below, also demonstrate that such a differential pricing structure is flawed. Further, such an approach is inconsistent with the Equivalence of Inputs principle (which is also applied to DFA in the Final Statement). The justification for why Ofcom considers that this does not represent undue discrimination is set out in paragraph 2.67.2 of the Consultation. This boils down to saying that purchasing CPs will face the same overall cost of ownership of a dark fibre circuit as the different Openreach price will be off-set by a different NDR payment.

4.18 The Final Determination characterised TalkTalk's case against Ofcom, with which the CMA agreed, as considering Ofcom's original decision to be wrong because "there will be a distortion caused by the lower NDRs incurred by BT, this is distortion is very significant, could have been avoided by Ofcom and is inconsistent with Ofcom's regulatory objectives".[14] Nowhere in the Final Determination does the CMA suggest an approach which requires different prices to be charged to different groups of CPs based on the NDRs they pay. Their analysis was clearly on the basis that the alternative would involve Component 2 of the active differential being calculated on some basis related to all other CPs costs with that charge being levied on all Openreach customers.[15] As such, in introducing the additional change of differential charging when implementing the CMA's findings, Ofcom is required to ensure that this approach is consistent with their statutory duties and regulatory objectives in relation to the introduction of a DFA remedy. This is *a fortiori* the case given the reasons for the CMA finding being couched in terms of the original decision introducing a distortion and being counter to Ofcom's regulatory objectives. Ofcom's revised decision, as proposed in the Consultation, would compound rather than remedy the error the CMA has found if it introduced a different distortion.

4.19 BT believes there is a real risk that setting different prices for different groups of CPs could introduce such a distortion. As discussed in Section 3 above, the Final Determination suggests that there is a wide distribution of potential NDR liabilities between different circuits and between different CPs paying the DRC method. This means that there will, in fact, be very few circuits where the proposed reduction in dark fibre price will be cancelled out by an increased NDR liability. In practice, most circuits will either incur a greater or lesser liability. Operators will react to the incentives they face in relation to the actual circuits they purchase or plan to purchase. Even if Ofcom is right that higher NDR liabilities will <u>on average across all operators</u> be cancelled out by lower dark fibre prices, this will not be the case for any individual CP or circuit. The argument in the Consultation that there is no undue discrimination is therefore simply incorrect.

4.20 Discrimination is usually considered to be a situation where two operators in the same circumstances are treated differently, which is not the same as putting every operator in exactly the same cost position. Even if all circuits can be considered "on average", then Ofcom's argument would only show non-discrimination if operators had no way of influencing their tax liability by their actions or investment choices. In fact, operators face a range of choices in making investment and provisioning decisions about how to supply customers. This

[14] See paragraphs 4.185 and 4.186 of the Final Determination.

[15] For example "We agree with TalkTalk that there have been other instances in setting margins when …… OCPs and BT had different costs where Ofcom had used OCPs costs": paragraph 4.178 and the CMA accepted that TalkTalk's proposed alternative "for example … the use of an average of NDRs borne by OCPs" (paragraph 4.202) "demonstrated that an alternative approach would be available which would be consistent with Ofcom's objective" (paragraphs 4.207 and 4.226).

will involve different trade-offs with different options having different balances of cost types – including tax liabilities. To hold a group of operators neutral on one specific cost input (i.e. NDR liabilities) therefore creates discrimination in favour of those investment and provisioning choices which maximise tax liabilities compared to other costs. This distorts incentives in a way which introduces a different competitive distortion rather than solving competitive distortions as required under the Final Determination.

4.21 For these reasons, the modifications proposed in the Consultation purport to fix the distortion identified by the CMA, but in so doing introduce significant adverse alternative distortions through this introduction of a dual pricing system for DFA services. This approach will introduce additional potential arbitrage opportunities (reducing allocative efficiency), harm to productive efficiency incentives as discussed above and likely create uncertainty (harming dynamic efficiency). These distortions are likely to be at least as harmful as the distortion it is purporting to fix.

4.22 What is more, as already indicated above, the introducing of such a pricing system introduces significant additional practical implementation problems and costs for BT. These could not reasonably have been anticipated by Openreach before the publication of the Consultation. These are discussed further in Section 6. Even if satisfactory solutions to these problems can be introduced and the timing issues appropriately accommodated (for example by being clear by when Openreach will be required to implement any dual pricing approach and in ensuring that he additional efficiently incurred costs are appropriately recovered there remain concerns. This additional complexity will not be cost-less and is also likely to impact negatively on Openreach’s customers (as discussed further in Section 6). As such, these practical problems provide a further reason not to introduce any such dual pricing system.

4.23 Further, the approach taken in the Consultation also sets an extremely worrying precedent whereby prices can be differentiated by reference to different costs of the purchaser in taking a service rather than supplier costs of providing service to different customer groups. This is antithetical to appropriate incentive based regulation. Such an approach blunts the incentive on downstream purchasers to maximise productive efficiency, by insulating them from the effects of inefficiency through adjustments to upstream regulated prices. It is not clear, nor properly explained at all in the Consultation, on what basis Ofcom is distinguishing the specific circumstances relating to NDR costs from other forms of cost. As such, BT is not clear to what other forms of downstream cost such an argument could or could not be used. This creates potentially very significant regulatory risk and uncertainty for BT as well as regulation creating perverse incentives for purchasing CPs.

4.24 For all these reasons BT considers it would be wrong to require DFA prices to be set at different levels on the basis of how customers incur an NDR liability. However, if Ofcom persists in the proposed modifications in the form set out in the Consultation (and in that case BT reserves its position on the appropriateness of such modifications) then it is crucial that Ofcom sets out the specific circumstances which make such price differentials between CPs paying NDRs on different bases an appropriate form of discrimination of the upstream price. Ofcom needs to be clear that the CMA’s findings should not be interpreted as setting a more general principle. Otherwise Openreach will be at risk of funding its customers’ inefficiency and introducing a significant different distortion. This arises through creating a significant moral hazard issue whereby downstream CPs will be disincentivised from reducing (at least certain categories of) costs, knowing that this will simply be off-set by regulated Openreach input prices. If Ofcom persists in requiring different prices for CPs paying NDRs on a DRC basis compared to a R&E basis then it needs to clearly state why NDR costs are different to other costs and on what criteria they are considered to be different. For example, it is not clear why the same logic does not apply to electronic equipment costs (i.e. Component 1 of the active differential), whereby downstream operators are also insulated from any cost disadvantages such as scale disadvantages they may face on purchasing boxes to light the dark fibre. Clearly, the precedent has potentially massive ramifications far beyond the business connectivity market unless appropriately specified and limited.

4.25 BT considers that a preferable approach would be to remove this aspect of the proposed adjustment to dark fibre pricing. In this case, all purchasing CPs would pay the same price for dark fibre. In line with the Final Determination this price would need to be set on the basis of the NDRs actually paid by downstream purchasers given the specific competitive impact of this specific item as determined by the CMA. As such, assuming Ofcom continues to use the approach of averaging across all downstream purchasers of dark fibre, then this average would need to take account of average NDRs paid by those assessed on an R&E basis as well as on the DRC basis. The logic of the Final Determination suggests this would lead to a smaller Component 2 reduction than proposed in the Consultation, albeit across all dark fibre circuits rather than a specific subset. Clearly this would also have an impact on the LLCC adjustment required and the forecasts of future volumes.

4.26 Such an approach would be consistent with the Final Determination and appears to be what the CMA was clearly envisaging in that Final Determination. The main objection the CMA found with the approach in the Final Statement was that size of Component 2 in the DFA pricing approach was not sufficiently large to achieve Ofcom's objectives. Taking account of the NDR differential by setting a larger Component 2 – set with reference to all Openreach's customers' NDR liabilities, would therefore address the CMA's concern. Simply because this would further undermine Ofcom's assertion that the Final Determination and the adjustments being made by this Consultation have no impact on the risks and benefits comparisons of introducing DFA, cannot be a justification for adopting what otherwise would be a flawed approach. Paragraphs 4.197, 4.200, and 4.219 of the Final Determination all point towards a view of a single price – at a lower overall level due to a larger Component 2 (assessed in a different way). Ofcom's alternative approach, as explained above, results in competitive, economic and practical difficulties which are unnecessary. Any approach will lead to some distortions in incentives, but we consider that the CMA's objections can reasonably be overcome in a way which introduces the least adverse distortions to investment and competition incentives through all customers paying the same price for DFA services.

4.27 Such an approach is also more logical given that there is a potential for operators to change the basis on which they pay NDRs within a charge control period. While the basis on which this tax liability is calculated for any individual operator is ultimately a matter for the relevant Government authorities, any individual CP can seek to argue it would appropriate to pay on a different basis and will have some influence over this decision. It is a possibility that whether a CP is assessed on the DRC or R&E basis could change during any particular market review period which would then mean that assumptions made at the time of setting the charge control would be wrong. Depending on the size of the CP involved this could have a significant impact which could create distortions in and of itself. Further, this would have implications for the countervailing adjustment to the LLCC to ensure efficient cost recovery which would need to be taken into account. This provides another reason why we consider having a single set of DFA prices would be strongly preferable as it would remove this potential additional risk of under recovery through the LLCC.

4.28 If, on the contrary, Ofcom decides to retain its current proposed approach then BT considers that not only must Ofcom set out the specific criteria on which these treatment is based, but also needs to take into account the implementation issues and costs involved. These are discussed in more detail in Section 6 below.

*Assessing whether the proposed revision to DFA pricing breaches FAC cost floor*

4.29 BT is concerned that the adjustment to the active differential will raise a serious possibility that when it becomes feasible to determine the costs of DFA, the price in the marketplace will actually fall below relevant cost floors. Indeed, given the high LRIC:FAC ratios used in the calibration of the active differential, it is possible that it will be below LRIC as and when the allocation methodologies have been determined. BT made it absolutely clear before the CMA that BT was very concerned that BT might not even recover its incremental costs, let alone its efficiently incurred costs (including common costs) if a NDR based on CPs DRC NDR costs was used.[16] Ofcom's failure to carry out a proper evaluation of whether Ofcom's revised pricing permits BT to recover, for example, its FAC or LRIC costs causes BT very significant concerns.

4.30 It is notable that the Consultation makes no assessment of whether individual DFA prices will fall below relevant cost floors, especially as a result of the proposed adjustments to DFA pricing. BT considers that this is an important omission. What the Consultation implies is that as the overall adjustment is meant simply to reflect the incremental cost of active electronics, the reduction in DFA price (off-set by a relative increase in active prices) will ensure that common cost recovery continues to be achieved. However, this "global" analysis ignores whether individual DFA prices will be forced below a, for example FAC or DLRIC, floor and the economic efficiency implications that would have.

4.31 [✂]

4.32 The on-going presumption to date is that the issue of a cost floor (for example, based on LRIC or FAC) for DFA is not relevant. The Ofcom 2015 Consultation Annex 26 in particular, offered a qualitative assessment of alternative pricing approaches comparing the following: (a) cost based; (b) active basket; and (c) single active reference product.

4.33 It appears to be implicit in Ofcom's thinking that the active minus formula will produce a price for DFA which is above the implicit cost for DFA itself as and when such a value can be computed from the RFS. This is in tune with the notion that Ofcom was being cautious in its pricing of DFA. Further, the Guidance in the Final Statement for the pricing of DFA (Condition 10.1C) explicitly included the notion of avoidability in costs from the removal of the electronic boxes with the implicit assumption being that the resulting price for DFA will inevitably be above a cost floor. In light of the changes proposed in this Consultation, BT is concerned that the way in which the active differential is being calculated will not in fact lead to this outcome. There are a number of detailed reasons that suggest that the active differential (as currently calculated) will not be long run sustainable.

4.34 Further, Ofcom will be aware that Openreach has a very different projection of volume demand for DFA arising from CPs switching out the current base at all bandwidths and that this will not be ameliorated by the pricing of Openreach in the current control period. The impact on common costs will become more acute into the next charge control period and the impact of a wider active differential from higher NDRs can only augment this fact. On the basis of projections prior to the latest proposal, Openreach had forecast that in the broad

[16] See the second bullet of paragraph 3 of BT's Core Submissions for the CMA of 12 December 2016.

region of up to [✂] of its LLCC revenues would come from DFA within six months of the next control period. This would be on [✂] as CPs continue to migrate out of active services and which will be reinforced by the current proposal on NDRs by Ofcom.

4.35 In summary, whatever view is taken of the trajectory of volumes for DFA, it appears to BT that the current pricing of DFA is unsustainable and that there is a material risk that the price of at least some DFA prices will be below a plausible future relevant cost floor; deducting approximately another at least £[✂] per circuit (the difference between the current allocation based on BT's NDRs and Ofcom's proposal) will mean this risk is substantially enhanced. The situation in relation to DFA main link pricing is one clear example here (see discussion above at paragraphs 4.13 and 4.14) of a set of prices where this concern will manifest either in this, or very early in the next, charge control period.

# 5 The adjustment to the Leased Lines Charge Control and impact on BT

5.1 It was a central part of Ofcom's own case in the original decision that one of the risks associated with the introduction of the DFA remedy was that it would adversely affect Openreach's opportunity to recover its efficiently-incurred costs.[17] In the Final Statement, Ofcom consequently set out its view that the pricing mechanism imposed was carefully designed to mitigate this risk. The Final Determination (and indeed TalkTalk's Notice of Appeal) clearly envisaged that it was important to ensure continued efficient cost recovery.[18] Moreover, the Final Determination made it clear that TalkTalk's appeal succeeded only on the basis that the risk of Openreach under recovering its efficiently incurred costs would be avoided.[19] In short any risk to BT that it would not recover its efficiently incurred costs should not be permitted.

5.2 The rest of this section sets out comments in relation to two broad aspects about the LLCC adjustments proposed. The first of these aspects relates to a number of inconsistencies between the factors which Ofcom is proposing to update and those where the Final Statement is being left unchanged. Elements which Ofcom has ignored are the increase in BT's NDR liabilities due to ratings revaluations, the appropriate treatment of internal revenues compared to external, the assumed no change in volumes is in tension with other findings, and there are certain timing inconsistencies. The second set of concerns relates to increased risks that the adjustment will not allow Openreach to recover its efficiently incurred costs (and in particular common costs). This is due to different views of relative active and dark fibre volumes, an assumption that those volumes will not change as a result of these proposed adjustments, and a circularity in Ofcom's approach of assuming 13% of the loss of revenues from lower DFA prices can be recovered from higher DFA prices.

5.3 The Consultation, especially in paragraphs 2.43 to 2.51, sets out how the proposed adjustment to DFA pricing requires changes to the LLCC to ensure that this efficient cost recovery is not undermined. BT strongly agrees that the introduction of dark fibre creates a risk to efficient cost recovery and that any change to the DFA pricing mechanism requires a consequent adjustment to the LLCC to mitigate this risk. BT therefore welcomes the acknowledgement in the Consultation that there is a need to adjust the Ethernet price cap to take account of the fall in revenues resulting from the reduction in DFA pricing.

5.4 On the basis of the assumptions set out in the Consultation, Ofcom considers that both the reduction in DFA revenues and final charge control year increase in EAD revenues are "around" £5m.[20] However, there are a number of issues with the way these figures have been calculated and rounded which leads, in BT's view, to this adjustment creating under recovery overall. Further, BT has concerns around the underlying assumptions used. Correcting for all these effects suggests that, even on the basis of the proposed change in DFA pricing, the LLCC adjustment should be materially larger. The remainder of this section sets out the reasons for this conclusion.

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[17] See paragraph 7.69 of the Final Statement.

[18] See, for example, paragraph 4.162 of the Final Determination.

[19] See for example paragraphs 4.169, 4.170, 4.182 and 4.197 of the Final Determination.

[20] On a principled basis, BT also considers that the EAD 1Git/s sub basket should also be adjusted in the final year of the charge control given the change in the overall Ethernet charge control basket. See paragraph 5.20 below. However, on the basis of price changes already implemented and announced we expect that this will not have a material impact in practice.

*Inconsistencies in the way different variables have been updated*

5.5 The Consultation states that the proposed adjustment, to reflect the findings in the Final Determination, is "focussed and proportionate".[21] What this appears to mean in practice, is that Ofcom has changed only a limited number of variables in the LLCC but has failed to change other factors to reflect the more up to date position, for example the overall volumes of active and dark fibre services assumed have not changed and the forecasts of Openreach's costs have not been updated to reflect more recent information.

5.6 This approach leads to a number of inconsistencies in Ofcom's analysis and it is clearly wrong for Ofcom to pick and choose which new data it wishes to use and then ignore other updated information which will have a material impact on Openreach's actual recovery of its efficiently incurred costs. BT will give some examples.

5.7 First, in calculating the reduction in DFA revenues Ofcom calculates the difference between revenues using the Final Statement methodology and the proposed revised methodology. In calculating the revenues in the revised methodology Ofcom uses current estimates of BT's NDR liabilities (which significantly increased as a result of the most recent revaluation exercise undertaken by the Valuation Office Agency).[22] On the other side of the equation, the forecast of NDR costs, which forms the basis of what BT is allowed to recover under the LLCC, has remained unchanged, meaning that it only allows BT to recover the NDRs which would have applied if the revaluation had not taken place (as is made clear in paragraph 2.44 of the Consultation).

5.8 Second, linked to this point, Ofcom has excluded all BT's internal revenues when assessing by how much BT's revenue recovery will drop for DFA.[23] However, the significant increase in BT's NDR liabilities as a result of the revaluation by the Valuation Office Agency will flow through, under the existing DFA pricing mechanism, to a lower DFA price for those CPs paying NDR on an R&E basis. As such, Openreach's revenue from internal sales will drop. Although BT accepts that, because of the linkage of the price in the SMP condition to BT's cumulo costs "in each prior relevant year", there will be a time lag in this loss of revenue, it is still very likely that there will be a significant shortfall of revenue in the final months of the control because of the NDR revaluation.

5.9 If Ofcom, therefore, applies the more up to date information from the revaluation for some purposes, Ofcom cannot ignore it for other purposes. Otherwise, there is a real risk that the very feature which the CMA indicated should not happen (i.e. any risk of BT failing to recover its efficiently incurred costs) may occur because an incorrect assessment has been done.

5.10 Third, the Consultation assumes no change in the volumes of active and dark fibre services compared to the original decision. The impact and allowed change to the LLCC is therefore calculated on the basis of unchanged volume assumptions (as set out, for example, in paragraph 1.10 of the Consultation). However, this assumption is in tension with:

- The revised assumptions Ofcom has adopted in relation to main link volumes and the updated DFA revenues which would have applied if the existing Condition 10C continues to apply (see point above concerning changes to BT's NDR liabilities);

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[21] For example, paragraph 2.44 of the Consultation.
[22] See paragraph 2.46 and footnote 24 of the Consultation.
[23] See paragraph 2.45 of the Consultation.

- The CMA finding that "Ofcom's NDR approach would significantly reduce the take-up of DFA, compared with a scenario in which there was no NDR distortion";[24] and
- The implicit (and illogical) conclusion that a change in the relative price of EAD and dark fibre products (the former price increasing and the latter price decreasing) leads to no change at all in the overall volumes of each product: this appears to be based on the contention that the overall cost of ownership does not change from an implicit assumption made in the original decision <u>on average</u> – as discussed in Section 3 above this approach is highly problematic when considered against the probable variability that exists around these averages.

5.11 Fourth, Ofcom has adjusted the X factor only for the final year of the charge control period (2018/19) which is inconsistent with the approach taken in the original decision where cost recovery was spread across the whole charge control period.[25] It is also inconsistent with the approach Ofcom has taken in the Consultation whereby the revenue shortfall created by the proposed adjustment is added to Ethernet basket costs (which implies across the whole charge control period).[26] On any view, contrary to what Ofcom implies, BT's prices for DFA will not only suffer a price reduction in 2018/19 but will suffer a shortfall from October 2017 (i.e. half a year) and the cost recovery of this price reduction must be properly spread across the period that the price reduction actually occurs (i.e. October 2017 to end March 2019).

5.12 These inconsistencies create biases which mean that Openreach is at risk of not recovering its efficiently incurred costs. Further they create uncertainties about how the various impacts will be taken into account in future charge control periods. All this undermines confidence in the proposed adjustments.

*The proposed final year LLCC adjustment does not allow for efficient cost recovery*

5.13 In addition to the above inconsistencies, there are two further reasons why the proposed increase in the final year X factor does not lead to a situation where Openreach can recover its efficiently incurred costs.

5.14 First, the Consultation refers to both the decrease in DFA revenues and the increase in active revenues being around £5million. The balancing of revenues between DFA and EAD that Ofcom asserts here will only work to the extent that Ofcom has forecast perfectly. However, BT estimates [✂] that the difference between the negative impact on Openreach revenues from the proposed pricing adjustment compared to the increase in Ethernet revenues will be non-trivial (around £[✂] for this final charge control year). [✂] On Ofcom's own case, the underlying costs cannot change at all (as volumes remain the same pre and post the change in DFA pricing) and hence this represents around a £[✂] shortfall in Openreach's cost recovery in the final year of the charge control period.[27]

5.15 The Consultation implies that Ofcom considers that the negative and positive impacts, calculated using the LLCC model, cancel each other out exactly. A number of factors could be contributing to this difference in views. As is clear from current appeal proceedings, BT takes

[24] See paragraph 4.150 of the Final Determination.
[25] See paragraph 5.262-263 of Volume 2 of the Final Statement.
[26] See paragraphs 2.48 and 2.49 of the Consultation. We also note that these paragraphs appear to elide the concepts of a revenue shortfall resulting from the proposed adjustment to DFA pricing and efficiently-incurred cost recovery.
[27] However, given that Openreach has only limited information as to which CPs pay NDRs on a DRC basis, we have only been able to estimate these figures by assuming that effectively all external CPs would benefit from the DRC driven price of DFA proposed in this consultation.

a different view to Ofcom on the volumes of DFA forecast to be purchased in 2018/19 ([✂]). The Consultation also states that only 87% of the revenue shortfall is recovered from active products (paragraph 2.49) which could also be a reason for this shortfall. BT does not consider that this is logical (discussed below).

5.16 Second, it needs to be recognised that fixed and common costs are recovered from margin not revenue. Ofcom is saying that revenue reduction from DF is cancelled out from revenue increase in the active products. This appears to be on the basis that Ofcom is assuming that volumes do not change and hence there are no change in costs, in which case equivalent change in revenues would lead equivalent changes in margin and hence fixed and common cost recovery. It is not appropriate simply to assume that volumes - and relative volumes of active and dark fibre products – remain unchanged. As discussed in Section 3 above, there is the potential for the pattern of demand for dark fibre to change and different incentives to arise. If volume forecasts were to change then Ofcom's approach of countervailing revenue impacts would only be appropriate if the margin on both EAD services and DF services is the same. We do not consider this to be the case.

5.17 The proposed adjustment also does not allow for any changes in the way in which NDRs are paid by individual CPs during the charge control period. If a purchasing CP with significant volumes were to change the basis on which it paid NDRs (i.e. switching between the R&E and DRC methods of assessment) then the relevant DFA price they would pay under the proposed modified charge control conditions would automatically change at that time and hence the impact on DFA revenues would occur within charge control period. The adjustment to the LLCC has naturally been calculated on the basis of current forecast volumes and therefore countervailing increases in Ethernet revenues would not occur. This is a factor which is outside of Openreach's control. BT strongly believes that Ofcom should either introduce an adjustment mechanism to deal with this eventuality within the charge control conditions (such that the change in Ethernet revenues matches the relevant change in DFA revenues) or, at the very least, commit to taking any such factors into account in the subsequent market review and LLCC calculations.

5.18 Even under Ofcom's own assumptions and approach, the proposed adjustment means that each dark fibre sold to a DRC CP will entail a risk to common cost recovery without corresponding relative increases in Ethernet prices. Openreach will only be able to recoup this shortfall from active circuits to the extent Ofcom's forecasts of volumes are correct – especially the extent to which dark fibre circuits cannibalise active circuits and the extent to which existing active circuits can be aggregated onto a single dark fibre. If cannibalisation is greater than Ofcom has assumed then Openreach will be at risk of under recovering costs (and given the increasing differential between dark fibre and active circuits created by the proposed pricing adjustments this is a real risk).

5.19 There is also a final point about Ofcom's approach to adjusting the LLCC which raises concerns. In the Final Statement Ofcom assumed that some fixed and common costs would be recovered from dark fibre circuits (in proportion to the number of dark fibre circuits forecast compared to active circuits). This is described paragraph 2.49 of the Consultation (referring to Annex 33 of the Final Statement). The Consultation proposes that the consistent approach is therefore to take the overall reduction in revenues from reducing the dark fibre price and allocate this between active and dark fibre products in the same proportion of

87:13.[28] This creates an error as it is confusing the overall recovery of costs with the recovery of a specific change in revenue received from one of the two sets of products. Essentially this is saying that 13% of the £5million reduction (on Ofcom's own figures) in dark fibre revenues must be recovered from that same £5million reduction. However, the adjustment (i.e. the DFA price reduction which leads to this revenue reduction) is not ameliorated in any way to take account of or allow for this 13% of £5million to be recovered from dark fibre sales. As such, Ofcom's approach of only recovering 87% of the £5million from active products means it is unreasonably not allowing the 13% to be recovered at all.

5.20 A separate point also arises in relation to the Ethernet 1GBit/s sub-basket which Ofcom does not address in the Consultation (simply leaving this at the same level for the final year of the charge control). As is clearly set out in paragraphs 5.275-5.279 of Volume II of the Final Statement, the level of this sub-basket was originally set within a range between a CPI-0% and the same as the overall Ethernet basket. Paragraph 5.278 then concludes that "we consider approximately half of the value of X to be a reasonable basis for the purposes of setting the sub-basket constraint". Consistent with this approach, we therefore consider that the sub-basket constraint should be changed, on the basis of Ofcom's approach of adjusting only the final year (which is discussed above) to CPI-6.25% for the final year of this charge control period.

[28] See final sentence of paragraph 2.49 of the Consultation.

# 6 Implementation

6.1 For the reasons set out in previous sections, BT considers that there are some very real issues of principle with the proposed adjustment to dark fibre pricing in the Consultation, in particular the proposal to introduce two different sets of dark fibre price. Further, as discussed in Section 4, BT considers that the actual level of the adjustment, even if dual pricing were an acceptable approach, needs amendment. This section of the response ignores these concerns and focuses on the practical implementation of Ofcom's own proposal in the Consultation. These points would need to be adjusted to the extent that Ofcom changed the proposal in light of the comments set out above, especially in Section 4. We also review the proposed changes to the SMP Conditions on the same basis (i.e. assuming no changes to the proposals in the Consultation) which BT considers need some revisions appropriately to implement the proposals set out in the Consultation.

*Practical Implementation of differential Dark Fibre Access prices*

6.2 Openreach systems and processes are set up and designed to ensure that all customers face the same terms and conditions, including price, for the same product. The implementation to date of dark fibre has been no exception (indeed this is required by the Final Statement and Condition 4 of the BCMR). As BT made clear during the original BCMR process, the introduction of a DFA product was a significant implementation challenge and would take some time with the systems development being deployed over 5 releases. In setting the date by which DFA had to be introduced Ofcom accepted this was indeed the case. At this late stage of systems development and after the Final Reference Offer has been issued, the introduction of what is effectively a new set of dark fibre products is therefore problematic. Requiring different prices to be charged for the same product is essentially introducing a new product set again. In fact the Lead to Cash (L2C)[29] aspects of the DFA development have been completed and deployed onto our EMP strategic systems. This software is currently in the process of being tested.

6.3 The proposed pricing change introduces an alternative additional price point for each and every item in the DFA price list. This requires major changes to the Openreach systems across the L2C process. Openreach has contractual obligations to ensure that prices are correct throughout this L2C process and ensuring these prices are correct is also important for a good customer experience. Purchasing CPs need confidence that prices quoted are correct to ensure that their buying decisions are made on good information and not distorted so this also impacts on downstream investment and provisioning decisions.

6.4 Openreach has identified the elements which will therefore require systems development to accommodate the proposed change and implement the proposals in the Consultation. These are set out in the following table, along with the reason that the proposals in the Consultation require a change and the impact that the proposed changes will have in relation to that particular system. Openreach current estimates are that these developments will entail costs of [✂], just in terms of additional systems costs.

[29] That is, the process covering the whole purchase process from ordering through delivering the circuit to billing.

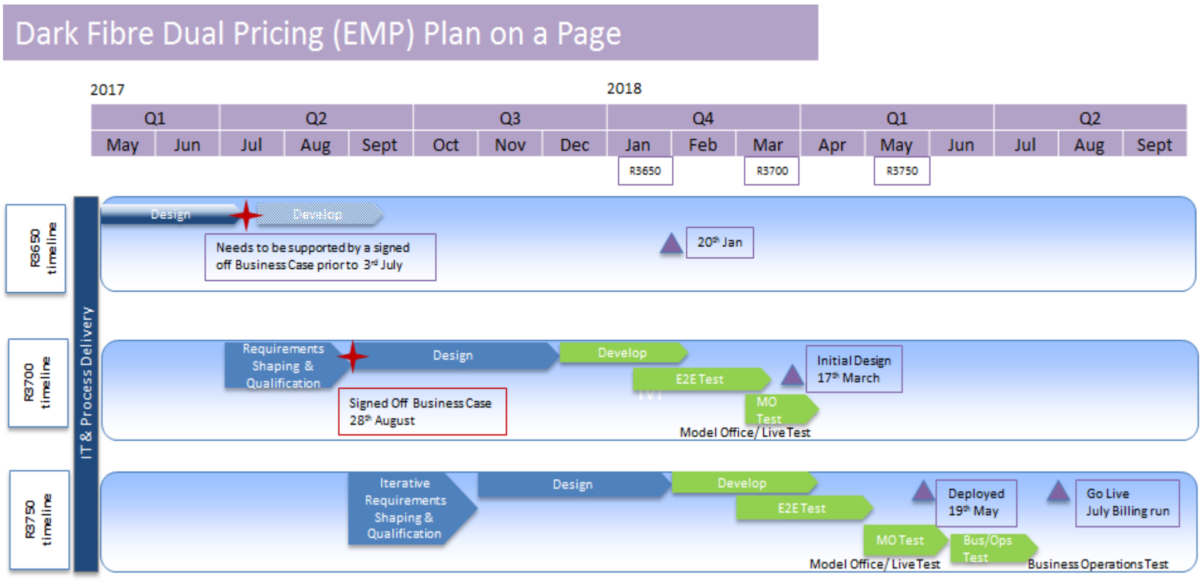
| System | Rationale | Impact |
|---|---|---|
| Openreach Price List | Prices must be correct and publicly available. | Changes can be made using existing tools. |
| Quick Quote | System that shows circuit prices including main link charges. Must be correct to allow customer to understand the full cost of a circuit ahead of placing their order. Some CPs directly link their quoting systems for end customers to this tool. | Include CP name in drop down and then look up tables so the correct price is returned for the CP. This is all new functionality. |
| OR- Siebel | This is the strategic ordering system. The price needs to be correct as this drives the billing for connection and rental charges, and need to be correct for the contractually committed quote at KCI2. | Need to look up CP and Flexzone in a new table and then apply the correct rates from the two pricing matrices for pre-priced charges. This is all new functionality. |
| Atlantis | Billing system for recurring charges. CPs must be billed correctly. | Need to look up CP in a new pricing table and then apply the correct rates from the two pricing matrices. This is all new functionality.<br>There are some associated systems that interact with Atlantis (e.g. to update prices, make manual billing adjustments) which will also need to be amended.<br>Manage impacts on DFA inflight services. |
| Flow | Provides CP updates in terms of KCI and final order completion. | Handling order validation, order decomposition, KCI, monitoring & tracking, handling exceptions and order closure. |
| BUT | A workflow application executing business process such as Novations, | OneSiebel - change customer records.<br>Billing & Payments platform to change billing account data. |
| SLAM | Produces SLA reports for Openreach product line/service centre to validate compensation claims submitted by CPs on order placement & repair lead times. | Manage SLA/SLG payments with correctly calculated adjustments, taking relevant CP pricing into consideration. |

| System | Rationale | Impact |
| --- | --- | --- |
| ORBIT | Openreach Business Information Toolset: provides BT's everyday business information, such as orders booked and closed, repairs reported and completed etc. | Enable MIS reporting considering CP and Flex Zone dataset as well. |
| ESB | Supports all the Openreach orders and faults as well as dialogue service transactions. All the Openreach messages and requests pass through ESB. | Updates to Internal data transformation between OR-Siebel and FLOW to allow transactions to include CP and Flex Zone information passing between systems. |
| CVF- GeSS | Customer Verification Facility part of the Openreach EMP live architecture. Facility offered to customers to validate their solutions to ensure they can continue to trade with Openreach. GESS - Emulation engine, to emulate the behaviour of the components. | Emulate components considering CP downstream to OR-Siebel to enable new functionality to be tested by CPs. |

6.5 These changes will not be possible to complete by 1 October, when the existing SMP conditions require Openreach to provide these services. Openreach will commence work on these system developments once the requirement is confirmed in a final statement following the Consultation. We will then need to incorporate these changes in the next available system release. The earliest viable system release that could be targeted to commence the development of an automated solution for dual pricing would be R3700. Due to the size and complexity of the development, Openreach CIO teams have advised that it would require two development cycles to complete (R3700 and R3750.) To be considered a firm candidate for development in R3700 we would need to have firm scope for the development in STORM user stories and associated acceptance criteria reviewed, approved and signed off by Openreach CIO through our C2M governance process. We would also need to ensure that full funding was approved by OIB by 28th August 2017. All development would be delivered at the end of the R3750 release cycle which is targeted for 19th May 2018. We would then enter a model office testing phase to conduct full testing of the development to confirm it worked as expected. Following a successful testing phase, we would sign off the solution and commit to "go live," targeting the DFA customer billing runs of July 2018.

6.6 Figure 1 below provides the relevant release timelines.

**Figure 1: Systems Release Timelines**




6.7 We have scoped the alternative option of targeting an earlier release (R3650) to commence this development but consider this to be unrealistic. Funding approval and firm user stories would need to be signed off and in place by 3rd July 2017. This simply would not be feasible considering the likely timing of the final statement. In addition, R3650 already has a firm list of candidate developments. To accommodate the automated the dual pricing development, it would mean that other Ethernet developments (most likely be CP asks for EMP system improvements for the EAD product portfolio) would need to be deferred. Any item that is deferred would be viewed negatively by CPs. As such the overall costs of introducing the dual pricing system for DFA services needs to also include these opportunity costs for Openreach's customers (something which Ofcom ultimately would need to judge based on information from Openreach and from Openreach's customers). These opportunity costs would be in addition to the [✂] systems development costs mentioned above.

6.8 Deployment of the solution in R3700 and R3750 may still impact CP asks scheduled in these releases but Openreach consider these releases to be the most workable and lowest impact.

6.9 This raises the issue of what happens between 1 October 2017 from the launch of DFA and July 2018 when the automated system solution will be available. Openreach would request that the requirement to have two prices for each product is not required until July 2018. As Ofcom believe the volumes in this time period will be limited, there should be minimal impact in terms of distorting competition. The alternative would be for Openreach to use a manual work around for this period, which will also incur a cost in and of itself. Given that volumes of DF are expected to be low in the first few months, costs are not too significant (estimated to be [✂]) which also need to be included in the overall incremental development costs.

6.10 However far more significant is the impact on the customer. All quotes will need to be issued at the higher potential price, with a retrospective billing adjustment to the correct price. This leaves CPs with uncertainty on what price they will ultimately pay (few of their sales agents will be aware on what basis they pay NDRs) and this could impact their ability to quote to end customers and win business. Manual billing also increases the risk of errors in billing, the billing disputes this leads to create cost for Openreach for staff to resolve but more significant is the cash flow impact on Ofcom when CPs withhold bill payments as a result of a dispute on a small portion of the bill.

6.11 The exact level of such manual work arounds are dependent on the volume of new DFA services provided and therefore will increase the longer such a work around is required in order to accommodate the expected ramp up in DFA volumes. [✂].

6.12 The Final Statement made clear that DFA prices should reflect the long run incremental costs of any objectively justifiable differences between dark fibre and the corresponding active service.[30] Therefore Openreach considers that these costs which are directly consequential from the changes Ofcom is proposing should be recoverable. We consider that, in the current circumstances, the most practical and appropriate way for Openreach to recover these additional costs would be through a change to Component 3. Openreach expects therefore when implementing these costs for Component 3 to be adjusted in a way which leads to an additional £[✂] on the rental charge. This has been calculated back to a per circuit charge using the higher volumes that Openreach believe will demanded.

6.13 There are two further specific practical issues which need to be taken into account in implementing this approach. Openreach has some visibility of how CPs pay their NDRs though this information may not be possible to obtain if the method of paying NDRs changes in the future. We would request this information from CPs, however given the opportunity to benefit from lower DFA prices if on the DCR method, there is a risk that CPs will 'game' Openreach and not submit correct information. Therefore we believe either Openreach or Ofcom should be able to audit a sample of CPs to verify the basis on which they pay NDRs. The CP would have to provide appropriate evidence to verify its payment basis, such as correspondence with the VOA.

6.14 Openreach will also be required to reflect changes to NDRs in a timely fashion under the proposed amended SMP Conditions. We currently understand that the poundage rates only tend to change on an annual basis at the turn of the tax year and that these are generally based on inflation changes (currently RPI) from the previous October. The following year's poundage rates is therefore available in advance of the period for which the relevant NDRs are due. On this basis, we consider that this could be incorporated into Openreach's usual pricing cycle, which generally expects a pricing change anyway around April into which this could be an additional element. However, should poundage rates change at a different time in the year or not be available in advance in this way then this could create issues going forward. It would lead to a need for an additional pricing change creating additional instability in pricing and hence short term volumes which could impact operational delivery.

6.15 Another operational issue we would wish to flag is that other CPs could deduce the NDR payment method of other CPs from the price they pay. This would compromise the confidentiality of CPs' tax arrangements. This will arise when our Quick Quote quoting system provides the price payable by a CP based on the CP ID entered. CP IDs are publicly known, so anyone could use the Quick Quote tool to request a quote for DFA entering another CPs ID, and from the returned price the NDR payment arrangements could be deduced. To avoid this we would need to remove DFA prices from our Quick Quote tool, but this would impact CPs ability to know they price they would pay for a circuit (with a calculation main link distance) for DFA in advance of placing an order, so that they could quote to end customers. We believe our CPs would not be supportive of DFA prices being excluded from Quick Quote.

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[30] See, for example, paragraph A24.24 where Ofcom set out its guidance on assessing BT's pricing of DFA.

*Modifications to the SMP Conditions*

6.16 This section of our response considers the modifications to the relevant SMP Conditions proposed in the Consultation compared to the proposed approach discussed in the body of the Consultation. Although we believe that some amendments to this approach would be suitable, this review of the legal instruments themselves, in this sub-section, is solely concerned with whether they appropriately reflect the approach set out in the Consultation (on the assumption that the approach is confirmed exactly as set out in that document). As currently drafted we believe that a small number of changes are required to the drafting of the legal instruments to ensure that they are fit for purpose and reflect Ofcom's policy statements consistently.

6.17 The first point relates to Condition 4 which requires Equivalence of Inputs. Condition 4.1 requires that DFA (provided under Condition 2.1(c)) must be provided on an Equivalence of Inputs basis and DFA is not subject to any of the exemptions listed in Condition 4.2. The definition of Equivalence of Inputs (in Part 2 of the legal instrument) includes the following:

> *"Equivalence of Inputs means that the Dominant Provider provides, in respect of a particular product or service, the same product or services to all Third Parties (including itself) on the same timescales, terms and conditions (<u>including price</u> and service levels) by means of the same systems and processes …"* (emphasis added)

6.18 Assuming that there are some CPs whose NDRs are assessed on the DRC method as well as others who are not, this means that as currently proposed it will not be possible to comply with both Condition 4.1 and the proposed Condition 10C1.A. The latter requires a different price to be charged to different types of CP in contravention of Condition 4.1. BT currently expects that the easiest way to deal with this issue would be to add a point (f) to Condition 4.2 which disapplies Equivalence of Inputs from DFA provided under Condition 2.1(c) to the extent this is required in order to comply with Condition 10C1.A. BT also notes that were Ofcom to agree with BT that it is inappropriate to set different prices for the same product based on different purchasers' costs then this particular inconsistency would fall away.

6.19 As set out in paragraph 5.20 above, BT also considers that the Ethernet 1Gbit/s EAD and EAD LA Sub-basket should be adjusted in the Third Relevant Year of the charge control period, to ensure consistency with the approach taken in the Final Statement (given that no other relevant changes to this element of the Final Statement have been raised or discussed in the Consultation). As such, the proposed modifications to Condition 10A in the Consultation should also include defining X as equal to 6.75 in the First and Second Relevant Years, and 6.25 in the Third Relevant Year (mirroring the equivalent changes to X for the Ethernet Services Basket).

6.20 BT has also identified a drafting error in the proposed Condition 10C and in particular 2(ii)b which deals with the adjustment where more than one fibre is lit for the price paid by DRC CPs. That provision should reflect the approach described in the main text of the Consultation, especially at paragraph 2.17 and in the description in the first bullet in the proposed modifications to the associated guidance (set out in Annex 2 to the Consultation). Ofcom's intention was that to reflect that the fact "*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)*". The result of this is that the NDR deduction for dual fibre use is significantly lower per fibre than if a single fibre is used: on the figures in paragraph 2.17 this is £119.75/2 (£59.86) per fibre per kilometre rather than £95.80 per kilometre for a single fibre being lit (multiplied by the appropriate median circuit length factor).

6.21 In short, Ofcom clearly intended where two fibres are lit, the active minus price will be twice the price of a single fibre active EAD product, *less* the NDR for a two fibre configuration under the VOA's rating table (in terms of a revised Component 2; the approach to the other elements – Components 1 and 3 - of the active differential remains as currently).

6.22 As currently drafted however the approach is as follows where there are two fibres lit:

i. The charge of the active EAD service is multiplied by a factor of 2 pursuant to Condition 10C.2(i).

ii. Pursuant to 10C.2(ii), and in particular 10C.2(ii)b., an adjustment is then made from the NDR deduction calculated under 10.C.1A(i)(a)[31] calculated as the difference between:

(a) The rateable figure in the VOA Table for the NDR per km for two fibres multiplied by (i) the rateable poundage rate and (ii) by 1.9, the assumed circuit km length of the circuit; and

(b) The amount calculated under 10C.1A(i)(a).

6.23 Step ii. leads to the deduction for the NDR being the amount of a dual fibre NDR *less* the *single* fibre NDR. That is *not* the simple deduction of the NDR for a two fibre configuration under the VOA's rating table which Ofcom intended. It will lead to very different figures for the NDR deduction from those that Ofcom set out in paragraphs 2.30 or 2.38 of the Consultation. If Ofcom would like, BT can explain the arithmetical differences and BT is happy to meet and discuss this issue.

[31] In addition to an adjustment for any incremental cost saving under to 10C.2(ii)a.

# 7 Response to specific consultation question

***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.***

7.1 BT's views on the impact of the Final Determination and the proposed adjustment on the costs and benefits of introducing dark fibre is set out in Section 3 above. In summary:

- the validity of Ofcom's core argument that the dark fibre is "neutral" to BT in terms of its profitability is undermined by the CMA's logic and the proposed amendment to DFA pricing;
- the CMA's views re-emphasise the important of NDRs as causes of arbitrage which the proposed amendment does nothing to reduce (indeed, potentially creating additional such possibilities), yet the implications of this for the assessment of the costs and benefits of introducing DFA have not been assessed;
- in particular, the impact of NDR differentials between CPs paying on a DRC method on decisions to take dark fibre have not been taken into account; and
- as such the impact on incentives to take up dark fibre and the potential mix of dark fibre has not been assessed in the Consultation and it is not sufficient to assume that volume forecasts are unaffected.

7.2 Ultimately the Final Statement suggested that the risks of dark fibre could be managed through the pricing mechanism and therefore the potential for significant benefits was sufficient to justify such a remedy. As Ofcom is aware, BT has not accepted this logic and considers that the proposed amendment further undermines it.

7.3 Taking into account the Final Determination, BT also considers that the approach set out in the Consultation creates a new set of serious and adverse distortions through the introduction of differential dark fibre pricing for different customers, depending on those customers own NDR liabilities. For the reasons set out in Section 4 of this response, BT considers that this approach is wrong and should be changed.

7.4 Furthermore, if Ofcom persists in this approach following the Consultation (concerning which outcome BT reserves its position) it is critical that Ofcom clarify that this approach is limited to the specific circumstances of this case and not a general principle (as explained in Section 4 above). This approach would also lead to significant additional implementation costs and practical issues which would need to be taken into account (set out in Section 6 of this response).

7.5 BT believes it is very important that the risks associated with DFA in relation to recovery of overall efficient costs are minimised as far as possible. Consistent with the Final Determination, BT therefore agrees that there is a need for an adjustment to the LLCC and believes that some further factors should be taken into account to ensure that this adjustment is fit for purpose (as set out in Section 5 of this response).

7.6 In setting the level of the active differential, BT also considers that the median distance used (and incorporated into the proposed modified SMP Conditions) should be based on the median EAD Standard access tail length rather than the median EAD LA length. (This issue is discussed in Section 4 of this response.)

7.7 BT also considers that a number of changes are required to the drafting of the modifications to the relevant legal instruments (as set out in the Consultation) are required to ensure that these are fit for purposes (as set out and explained in Section 6).