Business Connectivity Market Review

Consultation on adding dark fibre to the remedies for business connectivity markets

TalkTalk response to consultation

December 2017

NON-CONFIDENTIAL VERSION

1 Summary

1.1 This document is TalkTalk's response to the Ofcom consultation the dark fibre remedy for business connectivity markets ("**DFA Consultation**") published on 23 November 2017. Our response also comments on a number of aspects of Ofcom's Statement on Temporary SMP Conditions in relation to business connectivity markets ("**Temporary Conditions Statement**").

1.2 The key points in our response are:

- we agree with Ofcom's overall approach of imposing temporary regulation and proposing a restricted dark fibre access ("**DFA**") product; this was a pragmatic (though overly conservative) approach in exceptional circumstances
- however, we believe that an unrestricted DFA product is both justified and will deliver the greatest benefits to consumers and businesses. It is axiomatic that dark fibre – which opens more of the market to competition and enables increased innovation and cost savings – will deliver net benefits to consumers. Openreach's claims of harm are exaggerated and playing up to an unjustifiable aversion to risk.
- OSA filter connect provides some benefits versus the current active products but only for a small number of circuits (where demand is over 10G). OSA filter connect will not deliver the significant benefits that DFA will
- if Ofcom confirms its proposal to launch DFA on 1 April 2018 TalkTalk would start using DFA from that point. However, volumes will be lower than with the unrestricted product
- the Ethernet charge control should be adjusted to reflect that Ofcom's DFA volume estimate is too high
- Ofcom should enforce Openreach's non compliance with the charge control (imposed in 2016) during the period April 17 to November 17 (i.e. before the charge control was revoked)

1.3 This document is laid out as follows:

- Section 2: provides comments on Ofcom's market assessment
- Section 3: discusses dark fibre as a remedy
- Section 4: outlines our concerns with the Ethernet charge control

2 Market definition and SMP analysis

2.1 In this section we comment on Ofcom's market definition and SMP analysis as contained in the Temporary Conditions Statement.

2.2 The CAT found that Ofcom erred in its BCMR Statement of 28 April 2016 ("**BCMR16**") in three aspects of market definition and consequently quashed Ofcom's decision[1]:

- *Ofcom erred in concluding that it was appropriate to define a single product market for CISBO services of all bandwidths*
- *Ofcom erred in its definition of the geographic market for CISBO services in that, on its own metrics, Ofcom was wrong to find that the RoUK comprises a single geographic market including the CBDs*
- *… we consider it appropriate to quash this [competitive core] finding and remit it to Ofcom for reconsideration*

2.3 Notably in none of these cases did the CAT replace Ofcom's conclusion with its own. Rather it remitted the matter back to Ofcom for further consideration. It is quite plausible that following further analysis on remittal Ofcom may reach substantively the same conclusion on market definition and remedies. Alternatively, even if Ofcom found that very high bandwidth ("**VHB**") CISBO products are in a different market to lower bandwidth CISBO ("**LB CISBO**") services Ofcom may find that BT has SMP in the VHB market leading to the same remedies applying.

2.4 Despite the lack of definitive view of the correct market definition/SMP, in the Temporary Conditions Statement Ofcom assumed a 'worst case scenario' for market definition and SMP analysis (it was in Ofcom's words, "*cautious*" and "*conservative*"). This approach favoured Openreach since Ofcom found less extensive SMP and imposed fewer remedies on Openreach than might be warranted by a fuller analysis. Ofcom's approach was as follows:

- It assumed that VHB was in a separate market to LB CISBO. It did not reach any conclusion on whether BT had SMP in any of the VHB markets (§2.95b) though in effect it based remedies on the assumption that BT did not have SMP in the VHB market (in particular it assumed that DFA could not be used to provide VHB services)
- It assumed each of the five CBDs were separate geographic markets. It considered that the analysis supported an SMP finding for LB CISBO services in each of the CBDs. Despite this, it only made an SMP finding in respect of two of the five CBDs – Bristol and Manchester (§2.91)
- It assumed that the competitive core (where BT does not have SMP) was expanded to 107 exchanges

2.5 We agree with Ofcom that Openreach certainly has SMP in the products/areas that Ofcom has identified (question 2.4). However, we consider that the SMP findings and thus remedies should be more extensive than Ofcom has assumed and believe that on proper reflection Ofcom will reach a similar conclusion.

2.6 Despite our view that SMP is more extensive than Ofcom has found, we agree that Ofcom's approach was a pragmatic and appropriate approach in these particular

[1] CAT Judgement BCMR16 Market Definition (1260/3/3/16) §350, §433, §464

exceptional circumstances where regulation had to be put in place urgently. The alternatives were not attractive:

- Ofcom could have conducted a more detailed analysis but this would have taken more time and resulted in a delay to the launch of dark fibre and an extended regulatory lacuna even in areas where there was no disagreement that the remedies were appropriate (e.g. charge control on LB CISBO products)
- Ofcom could have accepted voluntary undertakings from Openreach but this would have inevitably resulted in a compromise and a worse outcome for consumers than Ofcom could have imposed through regulation

2.7 We note that Ofcom is consulting on the market definition and SMP analysis (§2.10 §2.12). Given the very short consultation period we have not responded on Ofcom's market definition and SMP analysis. However, our current view is that Openreach's SMP is more extensive than Ofcom has assumed and in particular VHB is part of the same economic market as 1G or, if VHB is in a separate market, Openreach has SMP in that market. We will in due course provide Ofcom with more analysis and evidence regarding the appropriate market definition and SMP analysis in light of the CAT's judgement. Any absence of comment should not be taken as agreement with Ofcom's position.

3 Dark fibre proposals

3.1 Ofcom has proposed dark fibre as a remedy to Openreach's SMP in the LB CISBO market only.

3.2 Below we comment on the case for dark fibre in general, the proposed restricted DFA remedy, launch timing and volumes.

3.1 Case for dark fibre

3.3 Dark fibre was and remains a remedy that will deliver significant consumer benefits (including for businesses, residential broadband and mobile) .

3.4 In simple terms, dark fibre opens up more of the value chain to competition leading to the well understood benefits: more innovation; greater investment [✂ ✂ ✂]; more competition and choice; lower costs and prices; higher demand; and, freeing up downstream markets from regulation. It will also force Openreach to improve to compete.

3.5 The obvious proof point here is LLU. LLU was a similar remedy introducing a remedy further upstream than then existing regulation – moving from active (bitstream) to passive ('dark copper'). LLU led to substantial improvements in innovation, investment, choice, cost and prices, uptake and significant deregulation. Even Openreach agrees that LLU was a success for consumers – even though, like DFA, they vigorously fought against its introduction.

3.6 Both theory and history show conclusively that benefits from competition are significant. To argue against dark fibre is tantamount to arguing against competition.

3.7 Given the improvement in benefits that competition generally brings the starting presumption must be that DFA will deliver net consumer benefits (albeit that the presumption is rebuttable). Ofcom's analysis should start from this position.

3.1.1 *Benefits of dark fibre*

3.8 We have not rehearsed here the generic and well known consumer benefits that additional competition enabled by DFA will deliver. It is axiomatic that greater competition will bring benefits and this should be self evident particularly to Ofcom. Rather, below we have commented on some of the bogus arguments advanced by Openreach and points missed by Ofcom.

Innovation

3.9 Innovation is not just about new technology but can come in many different ways that improve the service to customers including: speeds, latency, features, pricing structures[2], quality[3] and lower costs (leading to lower prices). It is important that Ofcom recognises the broad number of ways in which competitors seek to improve their propositions. In particular a competitive market with result in a diversity of offers to meet that differing needs of different customers rather than a 'one size fits all' approach that a monopoly tends to deliver.

3.10 [✂ ✂ ✂]

3.11 Openreach suggest[4] that having a monopoly supplier of active products (i.e. Openreach) will deliver as much innovation benefits as if there were competition based on DFA. Openreach claim[5]: "*In reality, there is no realistic scope for the dark fibre remedy to give rise to any significant benefits for innovation which could not equally be achieved in the absence of a dark fibre remedy*".

3.12 Openreach's statement is blind to the critical role of incentives. Currently, Openreach's incentives to innovate are dulled since it is insulated from the pressure to innovate to be competitive. With DFA the active layer becomes contestable driving operators (including Openreach) to continually innovate and invest in order to grow profits. Furthermore, under the current structure with Openreach as a monopoly supplier of active products with equivalence obligations, CPs' incentives to request Openreach to make developments are also reduced since they are unable to

[2] For example: usage based tariffs; burstable speeds; 'pre-upgrade'; different contract terms; different minimum term; balance of connection and rental

[3] For example: lower fault rate and/or more rapid repair of faults in active equipment through for instance: more reliable equipment; better monitoring and proactive maintenance; hot standby; better fault handling; more engineers; added resilience

[4] BT amended notice of appeal 1260/3/3/16 §247 onwards

[5] BT amended notice of appeal 1260/3/3/16 §249

gain any first mover advantage[6]. Openreach's claims that DFA will not enable more innovation are palpably incorrect.

3.13 It is also notable that Openreach itself has elsewhere recognised the benefits and innovation potential from CPs having access to dark fibre. OSA filter connect ("**OSA-FC**") allows CPs access to dark wavelengths (which is similar in some respects to dark fibre) – albeit at an excessive price and with unnecessary equipment costs incurred. Openreach description of the benefits include several innovation advantages[7]:

- "*Low incremental scaling costs*
- *Flexible and configurable services that allow CP control*
- *Ability to support fast evolving technology (e.g. synchronisation)*"

3.14 This shows that contrary to what BT and Openreach has argued to Ofcom and the courts, it recognises that there are innovation benefits from dark fibre.

Productive efficiency

3.15 Ofcom highlight the productive efficiencies that come from reducing the number of active boxes required. We agree that there are significant benefits from removing duplication.

3.16 [✂ ✂ ✂]

3.17 In Appendix 1 we provide details of the active equipment configuration we expect to deploy (as requested in Questions 4.2 and 4.3).

3.18 However, Ofcom must be clear that the benefit of DFA based competition does not depend on this specific benefit. In the case of LLU there was no similar reduction in duplication (in fact the opposite was true since more equipment was required e.g. TAMs) yet LLU delivered significant consumer benefits.

3.19 Reducing the number of boxes will also result in fewer faults since there will be fewer points of failure.

3.20 Significant productive efficiencies will also arise from CPs reducing active layer costs in other ways e.g. by using different suppliers, operating maintenance, monitoring and repair services differently. Entrants will have strong incentives to reduce the costs of providing the active layer. Also, Openreach's incentives to reduce active layer costs will increase with the introduction of DFA since they will have higher powered cost reduction incentives than under current charge controls.

[6] Under equivalence of inputs and non-discrimination obligations Openreach is required to offer any new products to all CPs at the same time

[7] Openreach: Optical Spectrum Access (OSA) Filter Connect Product Proposal Industry Consultation October 2017

3.21 Productive efficiency will also improve by ending the absurd and inefficient approach to provisioning 2G of bandwidth. Currently due to Openreach's steep price gradient, it is lower cost (to a CP) to purchase 2 x 1G circuits rather than 1 x 10G circuit even though the underlying cost of 2 x 1G circuits is almost twice that of a 10G circuit. Such a situation is unequivocally inefficient – more costs are incurred for a lower quality service. DFA will remove this inefficiency.

Other benefits

3.22 There are several other benefits of dark fibre that Ofcom has not reflected in its analysis:

- [✂ ✂ ✂]
- Competition will become more effective through two effects:
  - CPs using Openreach will become more competitive against CPs using other infrastructure
  - There will also be reduced ability for Openreach to discriminate in favour of BT (e.g. BT Global Services) since Openreach is no longer able to set price gradients or control active layer product development to favour BT's downstream divisions
- Greater innovation, productive efficiencies and more effective competition will lead will lead to new applications and increased demand
- Simpler regulation. In time Ofcom should be able to move to regulation of DFA only removing regulation of active services. This will result in simpler regulation because the regulation of active is necessarily more complex than regulation of DFA since it involves, for example, multiple bandwidths, different technologies and the need to assess an MEA. DFA does not have these complexities

3.1.2 *Costs of dark fibre*

3.23 Though the presumption should be that increased competition from DFA will bring net benefits to consumers, it is right to consider whether there is any compelling evidence that costs or disbenefits outweigh the benefits.

3.24 Introducing dark fibre will have a number of consequences such as flattening of the active pricing gradient and changing market structures. Openreach (and sometimes Ofcom) attempts to portray these changes as risky or harmful playing on Ofcom's unjustified risk aversion[8]. However, in reality:

- these changes are, in some cases, of unclear impact or may in fact be beneficial;

[8] Ofcom's risk aversion can be seen in its adoption of the active minus pricing proposal to slow the introduction of DFA to mitigate bogus risks despite Ofcom simultaneously arguing (correctly) that DFA delivered significant consumer benefits

- in the few cases where there might be genuine harm, the harm is small in comparison to the benefits.

3.25 Such a conclusion that overall costs are small and certainly smaller than the benefits should not be surprising since introducing dark fibre increases competition which generally is in consumers' interests.

3.26 Below we address the particular claims of harm.

Flattening of active prices

3.27 There is currently a very steep active price gradient – 10G prices are about three times 1G prices despite very little difference in underlying costs. This price gradient will naturally flatten as a result of dark fibre being introduced as Openreach responds to competition in the active layer. Flattening will mean that whilst average prices will remain the same, higher bandwidth prices will fall and lower bandwidth prices will rise.

3.28 However, neither Openreach nor Ofcom have advanced any evidence that (allocative) efficiency will be reduced as a result of such flattening:

- Ofcom itself states it does not have such evidence[9]
- The best that BT and its experts can manage in BT's extensive BCMR appeal is that "*… it is reasonable to expect that the structure of prices had dark fibre not been introduced to have been reasonably efficient …*"[10]

3.29 For Openreach's pricing gradient to be efficient would require that the price elasticity of low bandwidth is over ten times that of high bandwidths which seems implausible.

3.30 It is possible that <u>some</u> gradient is more allocatively efficient than no gradient if higher bandwidths have lower price elasticity – this is known as Ramsey pricing. However, just because no gradient is less efficient than <u>some</u> (but unknown) gradient it does not follow that no gradient is less efficient than the very steep gradient that Openreach have imposed. However, that is exactly what Openreach is claiming and Ofcom is presuming.

3.31 Without supporting evidence it is procedurally wrong for Ofcom to suggest that flattening is a risk or cost – in fact allocative efficiency might improve as a result of

[9] BCMR Statement April 2016 §19.95: "*Overall, we do not seek to determine whether the current active pricing structure is definitively "efficient" or otherwise, as this would be highly complex (given the detailed information and data that would be required, as well as the complex range of factors that would need disentangling), and we consider there is no clear way to achieve a meaningful result*"

[10] BT amended notice of appeal 1260/3/3/16 §287

flattening since Openreach has several strong incentives to adopt an inefficiently steep price gradient to increase its profits[11].

Disruption due to price flattening

3.32 Disruption could occur if flattening resulted in significant price increases for customers that was not foreseeable[12]. Prices could rise since price flattening will lead to lower bandwidth (e.g. 100M) prices rising (relative to higher bandwidth prices). However, any price rises will be small or non existent:

- The rise in 100M prices required (if it happened overnight) is about 10%[13]
- Assuming that rebalancing and flattening occurs over 3 years
- Over a three year period average costs and so average prices are likely to fall by about 5% to 10% a year (in the previous charge control costs fell by over 10% per year).
- This implies no absolute price rise on 100M due to flattening
- Furthermore, these rises would be prefigured

3.33 The customers who use 100M will also benefit from other price reductions or value improvements as a result of DFA e.g. low cost upgrade to 1G, lower broadband and mobile prices.

3.34 Given this evidence the conclusion must be that disruption is not a concern and certainly not a material concern.

Arbitrage and inefficient entry

3.35 This could occur if Openreach set its active prices materially above the cost of DFA plus the cost of active equipment (and non domestic rates). However, this is very unlikely:

[11] For example: given VHB services are not charge controlled so Openreach can increase profits by having a steep gradient for 100M and 1G services since it results in high 1G prices which allow higher VHB prices (given there is at least some constraint); since Openreach has some market power in VHB services (if not SMP) meaning that a steep gradient (i.e. high prices for 10G) is an effect of abusing this market power; Openreach will be able to reduce rivals margins more by raising prices on high bandwidth products used for LLU and mobile backhaul since CPs are less able to pass through these costs than increases in access costs. Furthermore, it would be wrong to presume that Openreach has priced in an efficient Ramsey method when it lacks the information required to do so – thus it must have used other considerations to set prices

[12] Prices reductions on certain products are not a problem (for Openreach). This is because price reductions will be offset by price rises elsewhere so that Openreach's overall revenue remains broadly constant (with adjustments to being prices into line with costs)

[13] Current 100M price is £1,800. If DFA introduced Openreach would rebalance within the charge control basket to ensure the same overall recovery. This would result in a price of about £1,950 implying an increase of 8% (= £1,950 / £1,800 – 100%).

- Openreach has strong incentives to rebalance and flatten its prices to remain competitive and profitable. It would be fundamentally incorrect for Ofcom to base its economic analysis on the assumption that Openreach behaves irrationally
- Even if it takes some time for Openreach to rebalance its prices, material inefficient entry is unlikely to occur since it will take time for CPs to build scale and payback will require several years
- There is no ability to arbitrage between different pricing structures[14] since both EAD and DFA are priced in the same way (per circuit for the access portion and per km for the main link)

3.36 Furthermore, it is logically incoherent to argue both that prices will flatten and also that there will be arbitrage. You can have one or the other but not both

Impact on infrastructure competition

3.37 It is possible that introducing dark fibre may lead to a small reduction in future investment and innovation in duct and fibre used to provide business connectivity products. It is also possible that the opposite is true and that introducing dark fibre might increase investment in duct and fibre due to the 'ladder of investment' and other mechanisms[15]. Furthermore, DFA may reduce inefficient infrastructure investment.

3.38 However, even in the worst case scenario that there was such a reduction in investment, the harm to consumers (through lost competition, investment and innovation in the duct/fibre layer) would be significantly outweighed by the additional benefits of competition, investment and innovation in the active layer (e.g. in Ethernet equipment) for two reasons:

- the increase in competitive intensity in the active layer will be greater than the decrease in competitive intensity on the duct/fibre layer since there are far lower scale economies in the active layer; and,
- there is more innovation potential in the active layer than the duct/fibre layer.

3.39 [✂ ✂ ✂]

Change in structure of competition

3.40 There may be a change in the structure of competition since purchasing dark fibre requires slightly greater scale than purchasing active products. However, smaller

[14] For instance if EAD were priced per access circuit and DFA were priced per km (of access) then arbitrage of short circuits might in theory be possible

[15] For example, an operator may build a greater share using DFA and then have to scale to invest in their own infrastructure (e.g. ducts and fibre). This is sometimes referred to as the 'ladder of investment' model. Alternatively, availability of DFA may mean an operator who was otherwise planning to use active products uses a combination of DFA and new infrastructure to serve customers

players will still be able to offer competitive downstream services since they will be able to purchase competitive wholesale active products from CPs who purchase DFA from Openreach and wholesale active products [✂ ✂ ✂]. However, the pertinent question is not whether there is a change in market structure but rather, if there is change, would such change be harmful to consumers. Neither Openreach nor Ofcom have advanced any evidence of harm to consumers from such changes in the structure of competition.

Openreach cost overall recovery

3.41 As Ofcom have made clear (§4.66) there is no threat to Openreach's cost recovery since Ofcom can and have structured the charge control to ensure full recovery of efficiently incurred costs

Fault repair

3.42 DFA requires a different approach to detecting and diagnosing fibre faults than for active circuits since the CP will have to report any fibre fault to Openreach rather than Openreach being able to detect them itself. However, Openreach and CPs have designed an approach to repairing fibre faults which is effective and involves limited additional cost or delay – the approach may improve in time. Specifically, the only material differences (compared to the approach for active circuits) is that rather than Openreach seeing an alarm itself, the CP will see an alarm and if it shows a fibre fault they will telephone Openreach who will dispatch an engineer to the exchange to test the circuit. This may add an hour of additional time in the repair process against an average repair time of 12 hours[16] and also there will be the additional cost of an engineer visit. The impact is not that significant particularly given the number of fibre faults is low.

3.43 Against this relatively small additional delay/cost there will be improvements in fault repair for the active layer (which is the majority of faults[17]) since identification and repair of these faults will be within the full control of the CP and CPs will have incentives to innovate and improve quality.

3.44 In any case, if the change in fibre fault repair approach resulted in materially higher costs and/or lower quality in certain cases then this harm would not materialise. Rather, if the cost was high there would be no or reduced demand for DFA.

3.45 Overall the net impact on fault repair could be beneficial or harmful though whatever impact there is is likely to be small.

[16] Currently the SLA on EAD circuits is 5 hours. This is a mix of faster repairs (~2 hours) on active equipment (which account for about 2/3rds of faults) and slower repairs (~12 hours) on fibre faults

[17] BT in its response to the BCMR consultation stated that 65% of faults are in the active layer

Summary of claimed costs

3.46 The majority of these concerns amount to little more than playing to an irrational 'fear of change'. It is important that Ofcom does not pander to stakeholders lobbying for their particular commercial interests by exaggerating the risk from change. Ofcom must not get dragged into detailed debate and respond to each and every trivial point or think it needs to carefully manage the remedy to address these bogus risks[18]. Rather, Ofcom must focus on what is genuinely in consumers interest – rapid adoption of DFA – and not lose sight of the improvement in competition that DFA will bring.

3.47 Furthermore, Ofcom must resist any suggestion that a restricted DFA product that cannot be used to offer VHB services or 100M services is better than an unrestricted one. Consumers interests will be best served by allowing use of DFA for all bandwidths. The benefits of DFA outweigh the costs for each level of bandwidth individually. Also there are economies of scope and scale from being able to use DFA for all bandwidth levels (as Openreach enjoys). This means that the greatest consumers benefits will come from an unrestricted product.

3.48 For completeness we think the unorthodox active minus approach was ill conceived (question 5.2). It essentially sets regulated prices significantly above cost in order to mitigate claimed risks particularly flattening of the price gradient. However, this logic is flawed. Firstly, Ofcom is trying to be half pregnant – it rightly accepts competition based on DFA is beneficial to consumers and then intentionally places barriers to slow the progress to this goal. Second, as we discuss above the risks of flattening are bogus.

3.49 We hope that in the next BCMR, Ofcom jettisons its flawed active minus approach and moves DFA prices rapidly to a cost plus basis.

3.1.3 *OSA-filter connect*

3.50 Openreach have suggested that OSA FC reduces the need for DFA and is "*more beneficial*" than DFA[19]. This is nonsense and just demonstrates how out of touch Openreach is from CPs' and consumers' needs[20]. OSA FC will offer certain benefits

[18] For example, DFA consultation §4.92 "*We also consider that the risks can continue to be managed through careful regulation in future market reviews*"

[19] From The Register article based on interview with Clive Selley: "*Openreach has since offered CPs an alternative to the Ofcom-proposed Dark Fibre Access (DFA) product and Selley says another is in the pipeline. He believes that providing a managed service will actually be more beneficial to providers. He says if the managed service fails, then dark fibre will probably be back on the table. "The regulatory view that specified dark fibre was informed by BT's woeful performance. And I'm guessing, I don't know, the thinking was 'you are rubbish at this, so just for goodness' sake give up a piece of your dark fibre and build the rest.' We are not that same company any more, we are actually very good at Ethernet."* https://www.theregister.co.uk/2017/11/09/clive_selley_interview/

[20] Another example of Openreach's misunderstanding of the need for DFA is the suggestion that DFA was to address poor provisioning performance (see footnote 19 above). DFA will not materially improve provisioning performance since the vast majority of provisioning delays resulted from delays in providing the underlying fibre circuit not in connecting the boxes on either end.

over EAD/OSA in the small number of user cases (about 1% of all active circuits) where demand is for multiple 10G circuits – elsewhere it is useless. It is not a credible alternative to DFA:

- the overall price of OSA FC is 3 to 4 times that of DFA meaning it is not cost effective to use OSA FC for the 99% of active circuits which are at 10G and below
- the product introduces additional equipment (WDM filter and active equipment) which in 99% of cases is not required reducing potential cost savings that DFA would allow and limiting innovation

3.51 One potentially beneficial aspect of OSA FC (versus DFA) is that by Openreach lighting one wavelength fault detection/diagnosis becomes a little simpler. However, this capability comes with the added cost and complexity of Openreach providing a filter and active equipment on one wavelength. If Openreach genuinely believes that this feature of "*providing a managed service will actually be more beneficial to providers [than DFA]*" then the consumer and competition friendly approach would be to offer this feature as an optional variant of DFA (priced at cost). If the feature is beneficial then CPs can choose to take it in circumstances where it genuinely adds value but not use it where it is unnecessary. Ofcom should require Openreach to offer this variant as a cost based option in the case that restrictions on use for VHB are lifted.

3.52 It is notable that Openreach only introduced OSA FC in response to the threat of DFA. This provides support for a number of points we make elsewhere:

- Openreach lacks regular commercial pressure and incentives to innovate implying that Openreach has market power in VHB services
- Openreach is willing to game the regulatory process to protect its profits
- Openreach recognises the innovation benefits of dark fibre

3.2 Proposed dark fibre remedy

3.53 We explained above dark fibre will deliver significant consumer benefits. Below we discuss the particular DFA remedy that Ofcom has proposed.

3.54 In BCMR16 Ofcom imposed a dark fibre obligation that allowed DFA to be used for all bandwidths. However, its use was artificially restricted by Ofcom's ill conceived use of an 'active minus' pricing approach that inflated the cost of DFA substantially above cost making it unviable to use for 100M circuits. Despite this restriction TalkTalk was committed to using DFA – [✂ ✂ ✂].

3.55 In its Temporary Conditions Statement, Ofcom has proposed that the DFA product be further restricted in that it cannot be used to provide VHB services[21]. Therefore, in practice DFA can only be used for a single bandwidth – 1G.

3.56 Despite this additional restriction on DFA TalkTalk remains committed to using DFA given the commercial benefits it offers:

- cost savings through reducing duplication of boxes
- cost savings through operating the active layer more efficiently than Openreach e.g. lower equipment prices, leaner operating model
- greater ability to innovate and gain first mover advantage
- more control over customer experience
- [✂ ✂ ✂]

3.57 We also note that the restrictions on DFA usage may be lifted in future which will materially improve the commercial attractiveness of the product:

- In BCMR16 Ofcom stated that it envisaged DFA becoming the primary remedy in the business connectivity markets[22] after a transition with both active and DFA remedies. If this occurred it would be logical for DFA prices to be based on cost (rather than the active minus approach)[23]. This would result in DFA prices being reduced from about £2,200 to around £1,300 allowing more margin on 1G and above circuits and/or allow DFA to be used to serve 100M customers (and allow them to upgrade to 1G at no/low cost). This change will provide greater innovation and higher scale and scope economies
- TalkTalk's view is that an unrestricted DFA product is wholly justified and therefore it is likely that when Ofcom completes the remittal and/or BCMR19 that the restriction on using DFA for VHB services will be lifted. This will allow more widespread use of dark fibre, greater innovation and increased economies of scale

3.58 Therefore, we strongly support Ofcom's proposal to impose a DFA remedy (albeit that it is inappropriately restricted) and that it is launched as quickly as reasonably possible.

3.59 It is important that DFA is launched as quickly as possible rather than, say, launching it after the completion of the BCMR19 which would mean launch is unlikely before May 2019[24]. Delaying DFA launch would materially reduce the benefits consumers will enjoy from dark fibre:

[21] It will be Openreach's choice as to whether they use contractual limitations to prevent use for VHB circuits (§1.11).

[22] BCMR Statement April 2016 §1.33, §1.37, §7.49, §7.50, §7.82

[23] Whilst it is ill-conceived to have DFA prices based on active minus when the active price is regulated it would be absurd to have DFA prices based on an active minus basis when the active price is not regulated since Openreach could raise active prices to raise DFA prices

[24] Assuming BCMR19 final statement published March 2019 and 8 weeks to launch

- if the launch is delayed to May 2019 the benefits of DFA for providing 1G services will be delayed and deferred (the effect of this 13 month delay will persist for several years). The benefit also applies to using DFA for VHB and 100M services (in the case Ofcom lifts the restrictions in BCMR19) – a launch in April 2018 will allow trialling, testing, SLA/SLGs to be completed earlier and so allow commercial launch of DFA for VHB services soon after the restrictions are lifted rather than waiting for the trialling to be completed
- growth in Ethernet services is reducing. Thus, a later launch will make it more difficult for competitors to build scale and deliver innovation and cost savings. As a general principle it is easier to establish competition whilst markets are growing
- [✂ ✂ ✂]
- [✂ ✂ ✂]

3.60 Regarding the restriction of using DFA for VHB services Ofcom indicate that it will be Openreach's choice as to whether to impose a restriction and that it can be done via contract. We agree with Ofcom (§3.19) that it will be straightforward for Openreach to monitor usage. In any case, any costs of monitoring this anti competitive measure should be borne by Openreach (i.e. not be recoverable from regulated charges).

3.3 Launch timing and volumes

3.61 We support Ofcom's proposal that the launch date for DFA is 1 April 2018.

3.62 We think that it is feasible for Openreach to meet this launch date. When Openreach opted to postpone the launch of DFA (on 15 August 2017[25]) it was within 6 weeks of launch – implying that Openreach only had 6 more weeks of effort to be ready to launch. Assuming that Ofcom publishes its draft statement (for comment from the EC) in early February, Openreach will have 8 weeks notice to launch on 1 April 2018. This will be sufficient notice given the position they reached before.

3.63 Ofcom ask (question 3.2) when CPs would be ready to use DFA. TalkTalk would start using DFA from launch in April 2018. [✂ ✂ ✂]

3.64 TalkTalk's revised volume estimates (to Mar 2019) based on a April 2018 launch are below.

	Circuits (additions)	Circuits (period end)
Apr 18 – Jun 18	[✂]	[✂]
Jul 18 – Sept 18	[✂]	[✂]

[25] see ETH028/17 Dark Fibre Access Launch https://www.openreach.co.uk/orpg/home/updates/briefings/ethernetservicesbriefings/ethernetservicesbriefingsarticles/eth02817.do

Oct 18 – Dec 18	[✂]	[✂]
Jan 19 – Mar 19	[✂]	[✂]

3.65 This forecasts differs from our previous forecast in several ways.

- DFA launch is delayed to 1 April 2018 (from October 2017)
- Compared to our previous forecast for putting 10G and 1G circuits onto DFA our volume forecast now excludes use of DFA for 10G circuits
- [✂ ✂ ✂]
- [✂ ✂ ✂]
- [✂ ✂ ✂]

3.66 We think that Ofcom's volume forecast of 73% of new 1G EAD circuits using DFA on average across FY19[26] is an over estimate (question §5.1). [✂ ✂ ✂]

3.67 [✂ ✂ ✂]

4 Ethernet charge control

4.1 Ofcom has revised the Ethernet charge control (for LB CISBO services) in a number of ways. In particular, the steps taken/planned are:

- The BCMR16 charge control was revoked on 1 December 2017. This covered three years: FY17, FY18 and FY19
- A temporary charge control applies from 1 December 2017 until 31 March 2019 (Period 1: 1/12/17 to 31/3/18; Period 2: 1/4/18 to 31/3/19) and reflects that:
  - the geographic scope of the control is reduced to exclude the three CBDs where no SMP has been found – this slightly increases unit costs and prices
  - the scope also excludes the additional exchanges considered to be part of the competitive core
  - the DFA volume forecasts have been decreased to reflect the later launch and usage restrictions. This reduces unit costs and prices
- A revised charge control will be implemented from 1 April 2018 that will take into account updates to reflect any further changes to dark fibre (e.g. no DFA obligation or higher/lower volumes) resulting from this Dark Fibre Consultation

[26] It is the average that is relevant in this case because the average figure should be used to derive the reduced EAD rental revenue that Openreach will experience

4.2 As we highlighted above we think that Ofcom's 73% of new 1G circuits is an over estimate and should be corrected. If uncorrected it will lead to (yet more) over recovery.

4.3 We are also concerned about Ofcom's lack of enforcement of the BCMR16 charge control. The BCMR16 charge control was in place and Openreach was obliged to be in compliance with it until it was revoked in December 2017.

4.4 It appears that in the first 8 months of FY18 (April 2017 to November 2017) the price reductions were less than would be required to comply with the required full FY18 reduction (see Temporary Conditions Statement §2.48, §5.59, §5.21, §5.52).

4.5 However, Ofcom indicated in the Temporary Conditions Statement that it is not considering any enforcement action in respect of this non compliance with the BCMR16 charge control (Temporary Conditions Statement §5.59). Ofcom confirmed this in subsequent emails. Ofcom said: *"The relevant SMP charge control conditions required BT to take all reasonable steps to secure that, at the end of each relevant year, the total charges for all of the services falling within the basket have been reduced by the specified X (see for example SMP condition 10A.8). In respect of the second relevant year (i.e. 1 April 2017 to 31 March 2018), Ofcom would only have been able to assess whether BT has made the necessary price reductions in that year if the obligation had remained in force for the whole of that year. Compliance with our charge controls is therefore carried out after the expiry of the period during which the relevant charge control obligation was in effect"*[27]

4.6 We do not think this is acceptable.

4.7 First, it is mathematically straightforward and uncontentious to identify the appropriate price reductions that would be consistent for the first 8 months of the BCMR16 charge control.

4.8 Second, and most obviously, it is clearly not in consumer interests or the interests of a credible regulatory regime to allow Openreach to evade complying with a fully justified charge control.

4.9 Third, If Ofcom do not enforce then in effect Ofcom are indicating that in the case that a market definition is found to be in error and the <u>future</u> remedies are revoked then Openreach is not required to comply with the remedies in place up to the revocation even when those remedies are unaffected by the error in the market definition. This makes no sense.

4.10 [✂ ✂ ✂]

4.11 Ofcom's approach is unreasonable and is certainly not in consumers interest.

4.12 Though obviously Openreach cannot now reduce the EAD prices for the period April 2017 to November 2017 compliance can be effected by requiring any excess revenue

[27] Source: email from Georgi Pojarliev (Ofcom) to Andrew Heaney (TalkTalk) 13 December 2017

to be used to reduce future revenues consistent with the carry forward mechanism already in place[28].

[28] The carry over approach is discussed in Statement §5.92 to §5.94 and 2016 BCMR Statement Vol 2 §9.36 to §9.40

Appendix 1 – equipment configuration

[✂ ✂ ✂]