

Foreword

This response is provided by Openreach Limited¹. Openreach is a wholesale network provider. We support more than 600 Communications Providers (CPs) to connect the 30 million UK homes and businesses to their networks. We sell our products and services to CPs so they can add their own products and provide their customers with bundled landline, mobile, broadband, TV and data services.

¹ Openreach Limited is a wholly owned subsidiary of BT Group Plc.

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1. Executive Summary

- 1.1. This further consultation on certain proposed remedies ("the Consultation") updates Ofcom's proposals in a number of specific areas. The key points in our response to Ofcom's updates are outlined below.
- 1.2. We welcome Ofcom's move towards a PIA pricing approach where the contribution to costs is based more on potential future use rather than historic network use but we propose adjusted share factors for Dual and Multi bore duct which better reflect the available data. Prices for dual and multi-bore duct should increase by around 44% and 80% respectively to reflect a fairer share of costs on a forward-looking basis. We also show through our sensitivity analysis that these adjusted share factors are likely to result in more price stability over the longer term.
- 1.3. As set out in the response to the January consultation, Openreach's position is that Ofcom should not impose a DFA remedy in A3 and should allow the DPA remedy to play out. Without prejudice to these comments Openreach sets out comments in this response in relation to Ofcom's proposals on DFA pricing and DFA implementation.
- 1.4. We support the update to 1920 RFS costs in Ofcom's DFA cost modelling and think that all of the changes in costs should be reflected in the final statement charge control without exception. But we disagree with the signalled treatment of dark fibre migration costs (Ofcom signal that these will be recovered only from active services) as this would be distortionary and clearly unfair in that DFA customers would make no contribution to costs caused by the introduction of DFA. As an alternative we propose that a contribution from both DFA and active services would be a fairer and less distortionary approach.
- 1.5. Openreach welcomes Ofcom's revised proposals to extend the existing implementation timetable for Dark Fibre Access ('DFA') in Area 3 from one month after publication of the Final WFTMR Statement, to a phased proposal of a 'soft' launch in August 2021, followed by a full launch of DFA in June 2022 (with increasing capability being delivered onto the product between the two dates). This better reflects the complexity and steps needed to launch this new product.
- 1.6. Openreach also welcomes the recognition from Ofcom that the phased approach may result in an element of performance volatility and that it is right to introduce QoS Standards plus SLA/SLGs when the full product capability is delivered, i.e., by 1st June 2022.
- 1.7. We do not object to Ofcom's proposal for SOGEA 40/10 being charge controlled as a single item and we agree with the way it has been structured in the draft Legal Instruments. Further, we do not object to the proposed interpretation of the basis of charges obligation for PIA ancillaries or Contractor ECCs, and nor do we object to how this is written in the draft legal instrument.
- 1.8. In relation to the proposed new reporting obligations for PIA Ancillaries, and also Contractor ECCs we propose further enagement with Ofcom to further understand and agree with Ofcom some aspects of its proposals in order to deliver this. In particular: the reporting format and source data; the nature of the submission; assurance requirements and submission timeline. We are eager to progress this engagement as soon as possible.



- 1.9. We also provide comments on aspects of Ofcom's January proposals which are not subject to this reconsultation but where there is new information² since our response to the January consultation. These include;
 - a. Updated DPA costs forecasts which we expect will increase duct and poles prices at final statement,
 - b. Updated efficiency data in relation to DF costs; and updated forecasts of FTTP volume substitution of Ethernet, both of which we propose should lead to a reduction in the DFA X at final statement.
 - c. A change to the Core Fibre RFS cost apportionments which Ofcom has queried should lead to an increase in the start charge of Dark Fibre Main Link by 6% (i.e. 0.5p).
 - d. The letter published by Ofcom justifying the use of national unit costs for setting DFA prices³. We explain how that letter did not deal adequately with the CLA area and that we consider CLA costs and volumes should be excluded in modelling DFA costs, resulting in a further increase in the DFA start charge.
- 1.10. Lastly, in appendix A, we have consolidated the various issues (and proposed adjustments) we raised in relation to the pricing legal instruments in our January consultation response and since then in calls with Ofcom and in our response to the Area 3 consultation to ensure Openreach and Ofcom have a common description of these issues.

² New and updated information is, or has been, gathered by Ofcom using its formal information gathering powers or has been has been shared with Ofcom in a number of meetings related to these topics.

³ Letter from Ofcom to Openreach, 28 September 2020, Ofcom's proposed approach to setting prices for dark fibre services, https://www.ofcom.org.uk/ data/assets/pdf_file/0020/203771/openreach-clarification.pdf

2. PIA Prices

Question 3.1: Do you agree with our revised proposals relating to calculating the shares of unit costs to be reflected in PIA rental charges?

Introduction

- 2.1. We welcome Ofcom's revised proposals that "break the direct link between the latest utilisation data and the calculation of those shares". We are also pleased that Ofcom has clarified that it was not Ofcom's "intention that the share of unit costs that a PIA user would pay would fall in future review periods as Openreach (or any other telecoms provider using PIA) deploys an FTTP network". 5
- 2.2. As we set out in our response to the January consultation, the increase in asset use reflects our own and others' FTTP network deployments and would rise further as more fibre is deployed.⁶ It would have been perverse if altnets were asked to contribute to a decreasing share of the infrastructure costs, even though their share of value (in terms of the proportion of potential customers altnets could connect to) was increasing. We therefore welcome Ofcom's proposal for altnets to pay a fairer share.
- 2.3. However, we believe Ofcom has not gone far enough, both in terms of ensuring PIA charges from 2021-26 reflect the opportunity to generate value from their use; as well as on providing clarity on the principle of fair cost recovery of long-lived assets (of up to 40 years), and which we believe Ofcom should explicitly recognise in its Statement. This principle should underpin Ofcom's practical approach to setting charges at this and each future charge control.
- 2.4. Ofcom's objective is the competitive deployment of FTTP, and it is fostering FTTP entry and expansion to that end. In practice, this means that there will be areas where Openreach deploys and other providers do not, and equally where other providers do and Openreach does not build FTTP; there will also be areas where there will be two or three parallel networks. Furthermore, Ofcom explained that "[t]elecoms providers are likely to deploy hybrid networks, using a mixture of Openreach's infrastructure and their own infrastructure". Ofcom have a difficult balance to strike due to the tension between, on the one hand, requiring Openreach to pay for maintaining the entire physical infrastructure network (to continue to provide legacy services) plus absorb the costs of network adjustments requested by third party; whilst on the other hand, setting component-based charges for PIA which allows selective DPA use i.e. to build 'hybrid' networks, that ensures recovery of all the DPA costs incurred by Openreach.8

⁴ Consultation, para 3.10

⁵ Consultation, para 3.12

⁶ Openreach response to January WFTMR consultation, para 9.81

⁷ Ofcom January 2020 WFTMR Consultation, Annex 12, paragraph A12.25.Ofcom also notes that it expects "most deployments" to be such hybrid designs".

⁸ This tension is exacerbated by Openreach being required to absorb virtually all network adjustment costs, rather than directly recovering them from the PIA users who drive the civils activity (which would be more in line with a standard cost causation approach). Ofcom explains that the framework is at least in part justified on the basis that all users of the network (including Openreach and other users of PIA) will gain from network adjustments and thus the cost of the adjustments to the common network should be recovered from all users. However, in the likely scenario that PIA

- 2.5. Openreach is required to provide the DPA network and the legacy services network to the benefit of all users. For that reason, it is important that Ofcom recognises as a matter of principle that prices should be set (and adjusted over time) so that Openreach can recover the cost of its common physical infrastructure network as the utilisation of these assets, for the provision of specific services, changes over time.
- 2.6. In a scenario where Openreach and altnets are all successful in deploying fibre, for Ofcom to achieve its ambition that "a level playing field exists between Openreach and competing telecoms providers, whilst providing Openreach with an opportunity to recover its efficiently incurred costs" Ofcom should commit now to an approach to sharing the cost of the infrastructure that is robust to a wide range of deployment scenarios. Further, a key objective for Ofcom should be to recognise the risk of regulatory error leading to under-estimation of potential line loss (or the cost of network maintenance). As a result of all of the above we ask Ofcom to provide more clarity that as part of its regulatory objective of fair cost recovery it envisages to adjust its physical infrastructure charges over time so as to enable Openreach to recover its efficiently incurred cost over many decades. It is important that Ofcom gives this clarity now, so DPA users are clear from the outset about the longer term trajectory of PIA prices.
- 2.7. We believe that under no current realistic roll out scenario would the required altnet contribution decline over time, and the sooner that prices are adjusted to reflect a future steady-state, the more stable PIA prices will be, and a more certain the investment climate.

We agree PIA prices should be set by reference to the resulting share of revenue opportunity

- 2.8. We agree with Ofcom's objectives to set prices based on an "assessment of how competing telecoms providers might use the physical infrastructure over the medium term, the opportunity to earn revenues related to that usage, and the consequential impact on Openreach's opportunity to earn revenues from its own network". 11 We also agree with Ofcom's assessment that "[m]ulti-bore duct and chambers tend to be located further inside the Openreach network (i.e. closer to the exchange with cables that go on serve many more premises)". 12
- 2.9. We therefore agree with an approach to the sharing of the cost of the infrastructure that means altnets contribute less towards multi-bore duct located closer to the exchange than towards single bore duct located closer to the periphery of our network. This is because currently we connect more services in multi-bore duct close to the exchange (such as business market connections and core fibre), and so we can extract more value from our use of the infrastructure as things stand today. But we do not agree that "it is reasonable to assume that competing telecoms providers deploying one sub-duct will not compete for all end customers served by that duct/chamber, and/or that there is greater potential for multiple competing telecoms providers to be sharing these ducts/chambers".¹³ This is particularly true because, as Ofcom notes, of deployment of multi-service networks (MSNs).

customers selectively use and cherry pick which sections of the Openreach physical network they use, potentially driving costs which are primarily to their individual benefit, long-term cost recovery will be put at risk.

⁹ Consultation, para 3.18

¹⁰ Consultation, para 3.12 is helpful in this respect in clarifying at least that it was not Ofcom's intention that PIA prices would fall

¹¹ Consultation, para 3.16

¹² Consultation, para 3.17

¹³ Consultation, para 3.17

2.10. Once a CP has accessed a particular duct run that CP has the opportunity to compete for as many customers as Openreach. We note that Ofcom has not attempted to assess how many customers altnets will be in a position to compete for when they use infrastructure closer to the exchange. As we set out below, typically we expect CPs will deploying sub-duct equivalent of cables will be in a position to compete for all the customers served by those duct runs.

Ofcom has not robustly estimated cost shares for our infrastructure

- 2.11. Ofcom justifies sharing 25% of the cost of dual bore with altnets by arguing it is "consistent with an assumption that a competing telecoms provider deploying one 25mm sub-duct will compete for 50% of the customers ultimately served by that 2 bore duct".¹⁴ This appears inconsistent with Cartesian's Full Fibre Cost Modelling, (prepared for Ofcom), which we understand indicates that a full fibre provider will deploy on average only 1.8 sub-duct equivalents in any area (across all types of duct), and yet compete for as many customers as Openreach. This implies that typically altnets deploying a single sub duct equivalent will often be able to compete for the same number of customers as Openreach does currently. It is therefore difficult to see how Openreach contributing almost double to infrastructure cost meets Ofcom's "objective of ensuring a level playing field exists between Openreach and competing telecoms providers".¹⁵ This is especially true of dual bore duct, where we expect that more often than not, competing providers will deploy only a single subduct equivalent.
- 2.12. The second bore was originally deployed to meet the network needs at the time and was an efficiently incurred cost i.e. the second bore is a cost that Ofcom intends should be recovered in PIA prices. On that basis, we consider Ofcom's proposed approach would not provide "Openreach with an opportunity to recover its efficiently incurred costs" for dual bore duct.
- 2.13. These level playing field and cost recovery issues are only amplified in the case of multi-bore duct, where Ofcom implicitly assume that an altnet deploying one sub-duct will only be able to compete for 20% of the customers served by that duct.
- 2.14. Further, we note that having already accepted that its previous methodology was not an appropriate way to set PIA prices, it is curious that Ofcom appears to have anchored its new share of cost to the previous shares, proposing shares "which are similar to the shares ... consulted on in the January 2020 Consultation."¹⁷
- 2.15. Whilst we welcome a move by Ofcom to anticipate future use in its assumptions of cost sharing, we consider that Ofcom could better reflect a fairer share of duct costs in its prices by marrying the available engineering data regarding the network required to deploy FTTP networks and the forecast coverage of those networks.
- 2.16. In the next sub-section we propose an alternative approach to estimating a fairer cost share.

Engineering data suggests PIA prices should reflect a higher share of infrastructure costs

2.17. Ofcom's proposed cost sharing between Openreach and altnets using our infrastructure is partly anchored on use of the infrastructure by Openreach's legacy copper services. As the market transitions from copper to

¹⁴ Consultation, para 3.19

¹⁵ Consultation, para 3.18

¹⁶ Consultation, para 3.18

¹⁷ Consultation, para 3.18



fibre, if altnets continue to contribute to the cost of our infrastructure based on a volumetric charge that is anchored to that legacy use, they will not make a sufficient contribution to cost recovery. This is because, as we set out in our response to the January consultation, copper services use up a lot more space than more modern fibre services.¹⁸

- 2.18. Instead, we propose an approach to sharing our infrastructure costs based on a projected long-term use of the infrastructure that is derived from our engineering data. This approach converts the space taken up by our legacy copper network into the space that is forecast to be used by Openreach, and others, to deploy fibre networks: our proposed approach is set out below. The key benefit of our proposed approach is that it should provide much more 'stability' for access seekers as sharp PIA price adjustments would be avoided as time moves on and the copper network is decommissioned. This would clearly send more efficient investment signals. The approach is based on long term coverage forecasts for alt nets, which we would expect to change over time but only move gradually by the very nature of them being long term forecasts. None the less we would propose that revision to the forecast usage should be undertaken at every market review to avoid any significant error.
- 2.19. We have estimated the future use of our infrastructure (by us and altnets) by considering the outputs from our NGA Cost at the DP (CAD) model which calculates, amongst other things, the length of fibre cables required to provide full fibre services in any given area. We then placed those cables in our duct network, before converting to sub-duct equivalents.
- 2.20. Based on that assessment on average there will be %% and %% sub-duct equivalents in each meter of our dual and multi-bore duct respectively. This implies an altnet contribution of %% and %% and %% respectively (as opposed to Ofcom's proposed cost share of 25% and 10%)
 19. This would mean prices for dual and multi-bore duct should increase by around 44% and 80% respectively to reflect a fairer share of costs on a forward-looking basis. We have also carried out a sensitivity analysis and this confirms the reasonableness of our proposal. The detailed assumptions and outcomes of this sensitivity analysis are laid out in Annex B.
- 2.21. For the avoidance of doubt, and consistent with our response to the January consultation, we agree with Ofcom's approach to sharing the cost of single bore duct which we think accurately reflects the value that could be extracted from that use.

Adjustments consistent with the change in dual and multi bore duct shares should be made to joint boxes and manholes

2.22. First, we agree that "most joint boxes are nearer the periphery of the Openreach network [and] it would be expected that joint boxes are generally used to connect duct routes with relatively few bores". Second, we also agree that the share of joint boxes should lie "between the share for single bore duct (50%) and the share for 2 bore duct". ²⁰ But we consider that the share used for pricing purposes should be considerably closer towards the share of single bore duct. This is because ≯most of our duct is in single bore runs, with only ≯ less in each of dual and 3+ bore duct. As a result, far more of our joint boxes are on single bore runs that have less entries and exits.

¹⁸ Openreach response to January WFTMR consultation, para 9.81

¹⁹ Consultation, Table 3.2.

²⁰ Consultation, para 3.19



- 2.23. Ofcom have proposed to increase the cost sharing of joint box entry and exits by 4.2% compared to its January consultation which we think is reasonable on Ofcom's terms. However, we do not consider this increase is enough in light of our analysis of a fairer share of dual and multibore duct. On the basis of our proposals, we think the share should be increased to 15.8% (from the 15% currently proposed).²¹
- 2.24. On the same basis we consider that Ofcom's proposed share for manholes is also too low. We believe althet contributions should be increased to reflect the increased contribution althets should make to our multi-bore duct. This would increase the althet contribution to 6.1% (from the 3.3% currently proposed).²²

Other issues

2.25. We would like to take this opportunity to repeat our views, for the avoidance of doubt, regarding three key outstanding issues:

Increased DPA investment due to increased Openreach planned FTTP deployment

2.26. At the time of our response to the January 2020 consultation, Openreach had not announced its ambition of building full-fibre services to 20m homes by the mid to late 2020's. We consider that Ofcom should account for the additional PIA investment that will be required to achieve our ambition of building full-fibre services to 20m homes by the mid to late 2020's. We are in the process of providing Ofcom with our best view of the details behind this investment in a format that they can input to their cost modelling. We are happy to collaborate with Ofcom to help them review and reach a decision on how include these important future costs.

Poles costs

- 2.27. Ofcom's proposed reduction in the pole valuation to reflect the age of poles does not reflect the economic value of the poles and results in rental prices below other European benchmarks. We proposed that Ofcom roll-forward the pole valuation used in their WLA 2018 decision taking into account actual capital expenditure and depreciation from that date.
- 2.28. Further, Ofcom's modelling of future poles costs in the January consultation during the charge control period was based on a starting point of the 2017/18 RFS. This view understated the cost of keeping our pole network safe (pole testing) and the costs that we are now incurring in order to make our physical infrastructure available to altnets. Although not mentioned by Ofcom in this consultation, it is our understanding that Ofcom intends to update their pricing model with the 2019/20 RFS information and take into consideration the additional operational forecast costs that we have provided. We would be grateful for Ofcom's confirmation that our understanding is correct.

Cable Coil and In-line Splice Hosting

- 2.29. In our response to the January 2020 consultation we explained that we disagreed with Ofcom's proposal to remove rental charges for hosting services. Cable Coil and In-line Splice Hosting is not part of this consultation and we have had little engagement with Ofcom in relation to its proposal since our response to the January 2020 consultation. The key points were made in our response January 2020 consultation are at paragraphs 6.184 to 6.196.
- 2.30. Our key concerns were that:

 $^{^{21}}$ Based on a weighted average of the increased cost share across single and dual bore duct \gg .

²² Based on an increase in altnet contribution towards 3+ bore duct (18% / 9.8% * 3.3% = 6.1%)



- a. Volumes are increasing, and so Ofcom's assertion that low volumes meant that hosting rentals contributed little to cost recovery is not valid in the WFTMR period;
- b. There is a significant value in recording the volumes and locations of hosted equipment for planning, security and operational reasons, so even if the charge was set at zero we consider it essential that the product should still be an orderable service and that accurate and up to date usage and location information should be recorded and maintained by PIA customers in the PIA inventory system;
- c. A free hosting facility would be very likely to lead to inefficient network use and additional cost to maintain Openreach physical infrastructure.
- 2.31. We would like to re-iterate our request to discuss these points with Ofcom ahead of the Final Statement.

3. Dark Fibre Pricing

Question 4.1: Do you agree with our revised proposals relating to dark fibre pricing?

- 3.1. As set out in the response to the January consultation, Openreach's position is that Ofcom should not impose a DFA remedy in A3 and should allow the DPA remedy to play out. Without prejudice to these comments, in this section, Openreach sets out comments in relation to Ofcom's proposals on DFA pricing.
- 3.2. In response to this question we outline below our comments on Ofcom's proposals here and some additional comments regarding adjustments we consider Ofcom should make at Final Statement.

Ofcom's proposals in this consultation

Update of base year costs

- 3.3. It is entirely appropriate that Ofcom update its dark fibre proposals to reflect the most up to date financial information, in this case the 2019/20 RFS.
 - a. It ensures Ofcom's cost modelling is based on the most recent RFS data, reflecting the most up-todate view of business costs and volumes. This provides the most suitable start point for forecasting dark fibre costs over the charge control period.
 - b. The 2019/20 RFS includes improved allocation methodologies that should be reflected in DFA pricing, including:
 - i. A superior assessment of the fibre usage factors for EAD standard and EAD LA circuits, based on actual network inventory data. This is a significant improvement on the previous usage factor assumption which had resulted in an understatement of fibre costs per end. We believe the 2019/20 data should be used to avoid setting a price below cost.
 - ii. Other changes to the fibre and duct allocations (for example, more appropriate apportionment of spine and inter-exchange fibre costs to FTTP and ensuring BDUK costs are ring-fenced to BDUK-provided services). These are improvements to allocations which ensure a more appropriate allocation of fibre and duct costs across the various services and markets. We believe the DFA cost should reflect these latest allocations.
- 3.4. Further, we observe that Ofcom took the opportunity to review the allocation changes as we went through the 2019/20 RFS production cycle and did not raise any significant concerns at that time or since with Openreach and BT.

Migration costs and Stranded costs

3.5. Ofcom have acknowledged in this re-consultation that they are still considering the additional costs of rapidly migrating to dark fibre that we raised in response to the January consultation. However, Ofcom also noted they "expect that the proposals in [the] January 2020 Consultation to charge control leased line active services in Area 3 at CPI-0% could allow for the expected recovery of these additional costs.".²³



3.6. Ofcom should follow cost causation in this case and this would ensure allocative efficiency is optimised i.e. customers choosing dark fibre would pay for the direct costs of that decision including migration costs. It appears that Ofcom does not want to follow cost causation in this case. Nevertheless, we firmly believe DFA customers should at least contribute towards these costs just as customers of active services should. Under our approach, all circuits in Area 3 make the same contribution to cost recovery, which preserves undistorted competition. We explain this in further detail below.

Migration costs

- 3.8. We consider this approach reasonable and pragmatic. Whilst the extent of the level of migration costs is not permanent, just as are connection costs in a period of high service growth, they need to be recognised and recovered nonetheless. The treatment of migrations costs akin to a capitalised labour cost mitigates the short term impact by spreading the cost over assumed asset life, so much of the cost will go into 2026-2031 period. By allocating the cost over both active and passive services in Area 3, customers of DFA will pay no more of the direct costs of migration they cause, than customers who continue to use our active services.

Stranded assets

- 3.9. We explained our approach to migration costs in paragraphs 9.261 to 9.264 of our May Response and in slide % of the presentation we used at the meeting with Ofcom on %. Our calculations show a total loss of c.£%m, equivalent to an average loss on each migrated circuit of £%.
- 3.10. For cost recovery purposes, we allocated direct costs of stranded assets over all leased lines services in Area 3 (both active and passive) as they are specific to Area 3 and we do not consider it to be reasonable for customers in Area 2 to pay towards equipment which is stranded due to an intervention in Area 3. For indirect costs, incurred to provide UK-wide services associated with leased line services, we allocated costs across all Area 2 and Area 3 circuits (both active and passive). As a result of this process, c.£×m of costs were allocated to DFA and so just under 30% (£×m/£×m) of the costs of stranded assets were allocated to DFA.

Additional comments

- 3.11. We consider Ofcom should adjust its proposals to reflect other key points raised in our response to the January consultation and our more recent Area 3 consultation response and further reflect the information shared with Ofcom since our January consultation response regarding (1) the impact of Openreach's FTTP ambitions on future Ethernet volumes and (2) likely future improvements to core fibre cost apportionments in the RFS. ²⁴
- 3.12. In particular, Ofcom should:

 $^{^{24}}$ We discussed the impact of \gg and \gg

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- Reduce the efficiency target it assumes in its cost modelling so that it is more in line with historic and forecast evidence and exercise more caution in setting the target at a time of increased uncertainty due to COVID and Brexit;
- b. Correct errors in its cost modelling and base year adjustments;
- Remove CLA costs and volumes from its assessment of DFA costs;
- d. Reflect higher fibre unit cost for DFA in the charge control period to account for the expected increase in FTTP substitution of Ethernet services in the period post 2026; and
- e. Reflect a likely future improvement to core fibre allocations in the RFS in its proposed Dark Fibre Main Link price.

Efficiency target

- 3.13. We understand that the X ranges quoted by Ofcom reflect (amongst other elements) the upper and lower operating cost efficiency bounds proposed by Ofcom in their January consultation, i.e. 4.0%-7.0% for Business Services.
- 3.14. It would always be damaging to investment incentives if Ofcom sets a price for Dark Fibre based on an efficiency target we cannot meet. The potential damage of setting an excessive efficiency target would be more damaging due the five year charge control period. Further, we are entering a period of great uncertainty with the impact of COVID, Brexit and equipment diversification (following the Government's decision on Huawei) likely to be key headwinds in terms of our ability to generate cost savings. The length of this control and the very uncertain environment would suggest Ofcom should exercise extreme prudence when considering the target efficiency to apply in its cost modelling.
- 3.15. In our response to the January consultation we proposed an efficiency range of between 0.5% and 3.5%. This was based on pairwise analysis for three "pairs" of years (2016/17, 2017/18 and 2018/19) and forecasts of the efficiency outlook within our 2019 Medium Term Plan.
- 3.16. We have since updated our analysis with the latest information. Our analysis still suggests that the efficiency target should be at the lower end of, or below, Ofcom's proposed range. This is before we consider the potential headwinds caused by COVID and Brexit.

Pairwise analysis

- 3.17. We have updated our pairwise analysis to include the latest 2020 RFS. The 2019/20 numbers have been prepared on an IFRS16 basis, whereas the 2018/19 restated numbers were not. This means that lease expenditure was included in 2018/19 restated numbers, but were not included in the 2019/20 numbers (as the leases are capitalised and depreciated). Our pairwise analysis for 2019/20 therefore adjusts the 2019/20 costs to include the depreciation on lease payments to ensure costs for 2019/20 and 2018/19 are prepared on a more like-for-like basis. On that basis we have calculated the efficiency for 2019/20 as –><%.
- 3.18. We can see from Ofcom's information requests²⁵ \times , the historical evidence suggests that a target below the bottom of Ofcom's proposed range (4%) is still appropriate i.e. we estimate efficiency for 2019/20 as $-\times$ %.

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MTP 2020 - PVEO analysis

3.19. We have updated our PVEO forecasts for the 2020 Medium Term Plan, which shows an average operating cost efficiency forecast of >< % over the 5-year period to FY2024/25. Please note this forecast was finalised in April and did not include the impact of Brexit and only a short term (i.e. 6 month) view of the impact of COVID.

Uncertainty caused by COVID and Brexit

- 3.20. There is great uncertainty around the impact of COVID and Brexit (whether a deal or no deal) and the implications of the Government's decision on Huawei on equipment diversification which will impact our ability to meet our efficiency targets in the short to medium term. The cost of this uncertainty is exacerbated where regulatory efficiency targets are set by reference to past efficiency measures, which have much less bearing on our future ability to meet them while we are in the midst of events causing (COVID), the requirements to diversify equipment and Brexit impacts. The impact of Brexit is still largely unknown not least because negotiations have not concluded, and its long-term impact on the economy is widely considered to be greater than the impact of COVID, which is seen by many as temporary. While COVID has increased the importance of connectivity due to home working, it has also put greater strain on our network and our ability to service it. Further, it will adversely impact the outlook ×. We consider that these disruptions are likely to continue as we move into the next charge control period.
- 3.21. The shock to the macro-economy due to COVID and Brexit is likely to be cumulative. They impact our business as a result of ≫.
- 3.22. Our MTP is currently being updated to account for these likely impacts, and even once forecasts are adjusted to reflect the impacts of COVID and Brexit as we see them today key uncertainties over demand are likely to remain.²⁶
- 3.23. In this context there are some specific indicators of impact we already have today:
 - a. We are seeing a step change to our levels of repair since the beginning of the COVID pandemic: more people are working from home and greater levels of faults are being reported, adding additional strain to our repair service. Furthermore, faults caused by CPs proactively raising issues continue to increase at high levels due to a change in CPs behaviour.
 - b. Our Ethernet operational performance has dropped as a direct result of the lockdown of business customers because of the COVID pandemic with a refocus on Critical National Infrastructure (CNI, which accounted for ≫% of billable circuits completed), with completions and demand down. In addition, during lockdown we were not able to access business premises and therefore orders were terminated outside the premises. Note: ≫
 - c. We have a Brexit strategy in place which includes increased stockpiling when we leave the European Union on new rules implemented from 1st January 2021, in turn impacting our working capital requirements.
- 3.24. More generally, there is evidence that across the UK economy, there has been a significant impact on productivity growth and efficiency savings as a result of COVID, and that the potential for improvements will

²⁶ See also **≫**

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be limited in the next few years while we recover from this recession and adjust to new trade arrangements. Against this backdrop, Ofcom's assumption that Openreach would be able to deliver and pass through an annual 4-7% efficiency improvement (much of it driven by productivity growth) is looking unrealistic.

- a. Productivity measures are strongly pro-cyclical, so the economic downturn will have a dampening effect even after the economy starts to pick up. The ONS analysis²⁷ shows that output per hour worked declined significantly in Q2 2020 and picked up after the first lockdown restrictions were lifted in Q3. However, over the longer term, productivity in the UK has been well below 2% since the financial crisis of 2007-08, delivering a weak rise in GDP per capita over this period.
- b. The pandemic and the resulting lockdowns have resulted in the biggest quarterly reduction in GDP in the UK in recent history. Businesses and households have been supported through unprecedented financial stimulus packages. Even then, reductions in demand, due to trading restrictions as well as business and consumer confidence, will lead to business failures, and in turn, demand for connectivity services. Adapting to new ways of working may also mean short term increases in costs and reductions in productivity.²⁸
- c. The general consensus amongst economists is that Brexit will probably reduce the economy's potential growth rate in the long run which will be more certain if there is an uncooperative or no deal on 31 December. Even if there is a cooperative deal, there are severe limitations to policy responses available to further support the economy given the new frictions that have been introduced to trade and supply chains.

Error corrections and base-year cost adjustments

- 3.25. In our response to the January consultation, we proposed several changes to Ofcom's CPI-X and Dark Fibre modelling which have a material impact on the start charges and / or the value of X.²⁹ Our analysis suggests that these errors have not been addressed in this consultation and, further, Ofcom makes no mention of addressing them here.
- 3.26. For the avoidance of doubt, our position remains unchanged from our response to the January consultation we consider these to be errors that will need to be corrected for at final statement in order that the Dark Fibre prices correctly reflect Ofcom's view of costs.
- 3.27. These errors include the following items:
 - a. Modelling corrections:
 - i. Missing Ethernet Fibre Component costs (WES component MEA)
 - ii. RAV Adjustment error
 - iii. Holding gain / loss treatment error

²⁷ ONS, UK productivity flash estimate: July to September 2020.

https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/gdpandthelabourmarket/latest

²⁸ https://productivityinsightsnetwork.co.uk/2020/04/how-will-covid-19-affect-productivity-in-the-uk/

 $^{^{\}rm 29}$ Openreach response to January WFTMR consultation, table 9.7, p259

- b. Base-year cost adjustments:
 - Sales and product management costs
 - ii. System development costs
 - iii. Service Level Guarantee costs

CLA costs and volumes

- 3.28. In the January consultation, Ofcom proposes to maintain the approach of including the unit costs of supply of dark fibre in the CLA in the costs relied upon by Ofcom to set the charge control in Area 3 i.e. national costs. In our response to Ofcom January consultation, we disagreed with this approach on the basis that it was unreasonable and disproportionate³⁰.
- 3.29. In the 28 September 2020 letter to Openreach³¹, Ofcom explained that it took an approach similar to the approach adopted in relation to other services by basing a charge control on national costs: "We have proposed to set the charge control for dark fibre services based on Openreach's national costs (the same approach as proposed for MPF and FTTC services, as noted at paragraph A18.15 of the consultation). We consider that our proposed approach allows Openreach cost recovery overall (i.e. across Area 2 and Area 3) and is consistent with cost recovery over time. We also consider that setting charges based on national costs will allow for recovery of forward-looking incremental costs in Area 3."

Is the approach here "the same approach as proposed for MPF and FTTC services, as noted at paragraph A18.15 of the consultation"?

- 3.30. For MPF and FTTC, BT has SMP nationwide this includes the CLA geographies. For Business Connectivity services the CLA is unregulated, no operator including BT has been assessed by Ofcom to have SMP. So in the case of MPF and FTTC, Ofcom has considered only the costs and volumes in the markets where BT is assessed to have SMP. Whereas, for Dark Fibre, Ofcom has considered the costs and volumes in the markets where BT is assessed to have SMP plus the costs and volumes in the market (CLA) where BT is assessed not to have SMP. Further, CLA unit costs for Business Connectivity services are significantly lower than in the rest of the UK (this is one of the reasons why competition has emerged in CLA). In short, the approach for Dark Fibre incorporates the costs of supply in a completely unregulated market in order to set a price in a regulated market, whereas the approach adopted for MPF and FTTC does not. On that basis, it is clear that the approach adopted for Dark Fibre is both entirely different to that adopted for MPF and FTTC and unjustifiable.
- 3.31. We do not believe that Ofcom's approach to set the charge control for Dark Fibre in Area 3 is appropriate or reasonable. As a matter of principle, after defining the relevant markets and assessing which operator has SMP, Ofcom should seek to impose remedies to address the competition concerns on each of the markets, having in mind the competitive conditions in each of those markets. The CLA is a separate market where the cost of supply is very different from the cost of supply in the SMP markets where regulation applies.³² On this basis, it is not appropriate for Ofcom to take into account the costs of supply of Openreach in the CLA to assess the level of the charge control in Area 3.

³⁰ See Para 9.196, Openreach response to the January WFTMR Consultation

³¹ https://www.ofcom.org.uk/ data/assets/pdf file/0020/203771/openreach-clarification.pdf

³² Openreach response to the January WFTMR consultation, paras 9.204 to 9.207

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- 3.32. For the reasons above, we do not believe Ofcom's letter adequately addresses the issue of CLA costs in relation to DFA price setting. As outlined in our response to the January consultation, it is wholly unreasonable and disproportionate for Ofcom to (i) base any assessment of costs of supply of dark fibre in Area 3 on the costs of supply in a market with such different competitive characteristics that Ofcom has decided it is effectively competitive; and (ii) justify any under-recovery of costs that may arise in SMP markets, by reference to revenues and profits which Openreach makes in a market which Ofcom has identified as effectively competitive (essentially putting it at a disadvantage in that effectively competitive market compared to other market participants).
- 3.33. On the basis of the above, Ofcom should exclude the CLA costs and volumes from any assessment of DFA unit costs and overall cost recovery.

Further FTTP substitution due to expansion of FTTP rollout plans

- 3.34. In the January consultation, Ofcom's Leased Lines (LL) volume forecast was broadly aligned with our own view. Since then Openreach has announced plans to build full-fibre services to 20 million homes by the mid to late 2020s and others have also announced expansion of their full fibre build plans. Consequently we expect there will be significant migration of leased lines services to full-fibre services (FTTP).
- 3.35. At a meeting with Ofcom on \approx 2020, we explained our initial view³³ of the impact of the expansion of our full fibre plans to Ofcom.
 - a. The forecast LL volumes during the charge control period ≫ than the volumes Ofcom used at consultation;
 - b. The LL forecast longer term, post the charge control period, we expect to show a \times of Ethernet i.e. \times .
- 3.36. On ≥< 2020 we shared the key outputs of the market research with Ofcom. Figure 1 is a summary of the key findings. Clearly this shows that there is a real risk of Ethernet substitution from FTTP services. ≥<

Figure 1 - Potential for FTTP substitution of the Ethernet Base

3<

Source: Insight report prepared by × for Openreach, September, 2020

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3.37. We have refreshed our MTP21 guidance; figure 2 below shows the impact of FTTP substitution on Ethernet volumes in this plan.

Figure 2 – MTP21 Market Guidance (with and without FTTP substitution)

×

Source: Openreach

- 3.38. The replacement of Ethernet volumes by FTTP volumes is a specific example of the more general market transitions from Openreach's current portfolio (copper and Ethernet) to full fibre. In the case of the copper portfolio, Ofcom has made allowances for this transition in its cost modelling through accelerating depreciation of the underlying copper assets. We believe a similar approach should be adopted here and for the same reasons i.e. to ensure total cost recovery of legacy assets over the lifetime of the legacy network.³⁴ In this case the legacy assets are EAD equipment and fibre cables rather than copper cables, but the same principle applies.
- 3.39. We estimate the impact of adopting a depreciation approach consistent with that applied to copper to full fibre transition would reduce the X (i.e. make it less negative) by 0.75% for <1gb services and that this would have a direct read across to the dark fibre access charge control, reducing the DFA X by the same amount. We urge Ofcom to make this change in its final decision.

Proposed change to Core Fibre allocation

- 3.40. Ofcom has recently queried the way in which we apportion Core Junction fibre in the RFS. The RFS apportions Openreach core junction fibre between Core and Backhaul services using management accounting data which uses data from 2006/07 (on ≫% Backhaul, ≫% Core split).
- 3.41. Current up to date data shows that if we were to update this apportionment this would move a greater proportion of costs to Backhaul circuits (on a ≤% Backhaul: ≤% Core split) and would increase the cost to Openreach markets by £≤m.

³⁴ Ofcom January WFTMR consultation, Vol 4, para 3.33



3.42. We consider using latest available data is superior and propose Ofcom reflect this in their modelling. This would have an impact of increasing the unit start charge of Dark Fibre Main Link by 6% (i.e. 0.5p).

4. DFA Implementation

Question 5.1: Do you agree with our revised proposals relating to DFA implementation?

Key points

- 4.1. As set out in the response to the January consultation, Openreach's position is that Ofcom should not impose a DFA remedy in A3 and should allow the DPA remedy to play out. Without prejudice to these comments, in this section, Openreach sets out comments in relation to Ofcom's proposals on DFA implementation.
- 4.2. Openreach welcomes Ofcom's revised proposals to extend the existing implementation timetable for Dark Fibre Access ('DFA') in Area 3 from one month after publication of the Final WFTMR Statement, to a phased proposal of a 'soft' launch in August 2021, followed by a full launch of DFA in June 2022 (with increasing capability being delivered onto the product between the two dates). This is more consistent with the complexity and steps necessary to launch DFA.
- 4.3. Openreach also welcomes the recognition from Ofcom that the phased approach may result in an element of performance volatility and that it is right to introduce QoS Standards plus SLA/SLGs when the full product capability is delivered, i.e., by 1st June 2022.
- 4.4. Openreach supports the revised Ofcom approach to DFA implementation as set out in this Consultation. The proposals reflect the Openreach updated position and revised plan as set out to Ofcom by Openreach at a meeting in September 2020 (set out further in this response). Openreach considers that the new proposals are the best way to support Ofcom's overall policy objectives for DFA in Area 3 and enable CPs to consume DFA at scale as soon as is reasonably possible. This revised approach by Ofcom will allow Openreach to design and deliver a robust, high quality product to market in challenging but achievable timescales. This programme of work has been agreed and prioritised within Openreach by the relevant product and CTIO³⁵ management teams and it remains part of our plan to deliver against this new proposed timetable.
- 4.5. The previous Ofcom approach set out in the January 2020 consultation required Openreach to deliver a product one month after publication of the Final Statement. This was not feasible or proportionate and was based on an erroneous assumption that Openreach could simply re-use the DFA 2016 design (which is not in fact correct). A one-month timeline would also have severely limited negotiation and interaction with Industry on the design of the product ahead of its launch, which would have been in nobody's interests. The revised, and timeline will now allow proper interaction between Openreach and Communication Providers ('CPs') ahead of product launch.
- 4.6. As Openreach set out in its May 2020 response to the January 2020 consultation, it continues to believe that delivering a manual interim DFA product with limited functionality (which would have been the only possible way to meet Ofcom's previously proposed implementation timeline) is not the correct approach to take. It would lead to inefficient duplication of Openreach design resource, it would deliver a product with major gaps

³⁵ Chief Technology Information Office



- and quality problems and would in consequence not give CPs what they need in terms of either quality or capability.
- 4.7. In this context, Openreach therefore agrees with Ofcom revised implementation proposals as the best way to deliver a product as quickly as possible, but with sufficient time, given the complexity of the product and other commitments, to deliver a product with the requisite capabilities in a quality manner. The alternative would be to launch "an inferior product with poor customer experience³⁶". This would not be in the interests of any stakeholder and for these reasons, Openreach supports Ofcom's revised timetable as set out in Section 5 of the Further Consultation.
- 4.8. As set out above, Openreach plans to deliver against the proposed revised implementation schedule for the soft launch of the DFA remedy by the 17th August 2021. Design activity has already commenced in Openreach and the plan is to begin industry engagement on both the product specification and the terms of the draft Reference Offer shortly after publication of the WFTMR Final Statement next year. More details on the Openreach proposals and approach are set out below.
- 4.9. Ofcom should note that delivering the product capability and agreeing the product description and supporting contractual terms are only part of the delivery journey and that operational readiness plays a major part in launching the DFA product to the market. In proposing the revised timeline to Ofcom to facilitate the soft launch in August 2021, Openreach also set out the risks and the temporary limitations of the product journey at launch (i.e. incomplete testing, no modify capability and manual repair until Oct 2021). Openreach also reiterated the plan to negotiate a phased operational roll out with industry (similar to that agreed for DFX IEC in 2019) allowing Openreach and CPs to test and scale DFA so that the product is ready to be consumed by industry at volume by June 2022. It would be helpful for clarity if Ofcom referenced and acknowledged this approach with the associated product limitations in the Final Statement.

Openreach Revised Implementation Timeframe/Plan

- 4.10. The revised Openreach implementation timeframe and delivery schedule to deliver DFA in Area 3 is set out below in Figure 3. This sets out the Openreach Systems development schedule for 12 months, from March 2021 to March 2022 and a high-level overview and delivery releases of the various capabilities and functionality for the DFA product³⁷. In order to fulfil and meet this requirement it has been necessary to start the design work in June 2020 in order to meet the scheduled systems release.
- 4.11. In the May 2020 response to the WFTMR January 2020 consultation, Openreach set out an alternative phased implementation plan for a soft launch in October 2021, followed by a full launch in June 2022. That proposal was based on a detailed analysis of the development activity required to deliver the product and the availability of systems development capacity within the EMP systems given other high-profile developments, in particular for FTTP and PIA that could not be moved without creating negative consequences elsewhere.
- 4.12. Following subsequent discussions with Ofcom, Openreach proposed a revision to its original DFA timetable, bringing forward the soft launch date from October to mid-August 2021. Whilst Openreach were clear it was

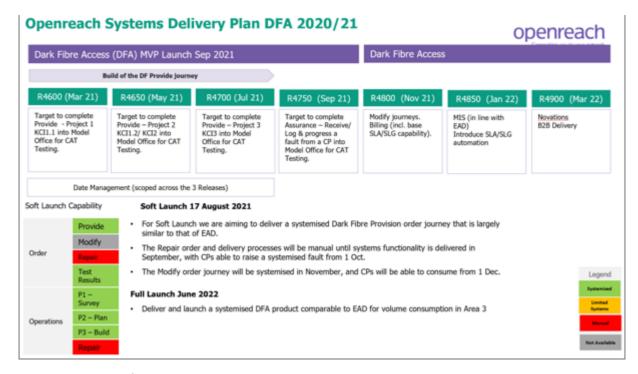
³⁶ Consultation, Para 5.16

³⁷ Confirmation of the functionality to be delivered within each specific systems development schedule will be confirmed to industry post publication of the WFTMR Final Statement

unable to 'squeeze' the development schedule any further without impacting key developments of PIA and FTTP etc. (noting that each systems release is scheduled months in advance and has finite capacity and resources available to deliver them), it was prepared to expedite aspects of the DFA provision order journey (and forgo the normal period of testing with limited functionality) to bring forward the soft launch date to August 2021.

4.13. Openreach considers that offering a revised timetable for implementation to Ofcom bringing forward the soft launch date to August 2021 was and remains the right thing to do in order to meet the twin aims of Ofcom's stated policy objectives in Area 3 and allow Openreach to deliver a scale, fit for purpose product to market in challenging but realistic timescales.

Figure 3: Openreach systems delivery plan



Source: Openreach

- 4.14. Based on the development schedule detailed above, Openreach proposes to soft launch the DFA product in August 2021. This will provide a fully automated provision journey for a DFA order. The CP will be able to place an order for DFA on the EMP system BAU as comparable to the provision order for EAD. The background order journey will then proceed in an automated fashion, through initial planning, survey and network build, with appropriate Key Performance Indicators ('KPIs') generated to keep the CP informed of progress.
- 4.15. As set out above the design activity for the DFA product has already commenced within Openreach in order to meet the revised soft launch proposals and Openreach remain committed to delivering against this timetable.
- 4.16. Ofcom should note however, that as set out by Openreach to Ofcom at the 22 September 2020 meeting, there are inherent risks in bringing forward the provision capability for DFA. The provision order journey design will not have undergone the rigorous testing normally required for a complex product pre-launch and



- any defects detected would need to be corrected 'live' in systems. In addition, the 'modify order' capability will not have been delivered by August (scheduled for Dec 2021) and should a repair fault occur, this will need to be supported by manual means until October 2021. All of these issues will be discussed with CPs as part of the planned industry engagement programme (see below).
- 4.17. Also inherent in this risk is the operational roll out associated with a national product launch. Bringing forward the soft launch date to August 2021 means that the Openreach Fibre and Network Delivery ('FND') teams will have had little opportunity to conduct meaningful volume 'field tests' of the product prior to launch. Given the lack of systems <u>and</u> operational testing prior to soft launch, Openreach propose to limit the number of DFA orders per region during the period of product stabilisation, with volumes increasing steadily prior to full launch. Again, this will be worked through with industry as part of the planned industry engagement programme (see below).

Why the revised implementation plan is the correct approach for Ofcom to take

- 4.18. As set out in its response to the January 2020 consultation and in subsequent meetings with Ofcom, Openreach has been clear that it wants to meet the requirements of the regulatory remedy (assuming it is imposed via the WFTMR) by delivering a good customer experience, a robust quality product, a product agreed with industry and capable of being consumed from Day 1. These objectives cannot be achieved within the one-month timeframe originally proposed by Ofcom³⁸.
- 4.19. Allowing Openreach the additional time to deliver an automated strategic solution design capable of consumption from soft launch remains the correct solution for industry and Openreach and the correct approach for Ofcom to take. It will deliver on Ofcom's policy objectives for DFA as a remedy capable of being consumed at scale in Area 3. The DFA design is based on the EAD codebase, which will deliver a comparable product to EAD from soft launch as required (provision order only) and allow the DFA product, from full launch to remain synchronised going forward with relevant functional enhancements delivered where possible ³⁹for EAD. It will also ensure that DFA is scalable to high volume use scenarios.
- 4.20. The automated solution proposed by Openreach offers CPs a product process they are already familiar with requiring little systems capability to consume. It offers a range of functionality and order management such as view my job etc. at a standard and quality that they and CPs and their customers expect, and we believe will deliver a good customer experience.

Why a manual approach is not the correct solution?

4.21. In contrast to the above, a requirement from Ofcom for Openreach to deliver a DFA solution within one month of the publication of the Final Statement would force Openreach to deliver a manual suboptimal solution at a speed that would massively compromise quality. As set out in our response to the January 2020 consultation, Openreach strongly opposed this manual approach on the grounds that:

³⁸ Ofcom January WFTMR consultation, Volume 3, para 6.82

³⁹ An exception to this is Re-Imagining Ethernet (REP). As discussed with industry, the REP suite of developments are intended for initial trial on EAD products only. Should the Trial be successful, only then will REP be rolled out for other products such as DFA. This was previously set out at Footnote 176 in the Openreach response to the January WFTMR Consultation



- a. It would not deliver the right level of quality required for an Openreach product that is complex in nature and that is likely to be consumed at scale;
- b. It would not provide parity with the active portfolio as stipulated in the January 2020 consultation.
- c. It would be wasteful in terms of design and operational resources as Openreach would have to a) divert resource away from the strategic design to support the manual process and b) put in place ring-fenced teams at each stage of delivery process to progress an order;
- d. CPs and Ofcom would not get the product they want, nor a means to consume it at scale; and
- e. It would bring a number of negative consequences, including delays to the progress and delivery of the preferred automated solution.
- 4.22. For the reasons set out above, Openreach agree with Ofcom that a manual DFA launch would result in "an inferior product with poor customer experience" and that in these circumstances "a manual DFA launch would not be appropriate".⁴⁰

Soft Launch to Full launch

4.23. The proposed systems delivery plan set out at Figure 3 above details the timeline of the proposed functionality and capabilities that will be contained within each systems release from March 2021, building up to full launch on the 1st June 2022. This modular development approach is reasonably familiar to Openreach CPs and will be presented and regularly discussed with industry as part of the industry engagement programme (see below). CPs will be able to consume the product enhancements as the varying functionalities 'go live' up to June 2022.

Industry Engagement

- 4.24. Key to any product launch is the engagement with industry and key stakeholders. This engagement provides Openreach customers with the opportunity to discuss, adapt and understand the final product specification prior to launch and for Openreach to give due consideration to any comments or concerns raised. Openreach plan to engage with industry on the DFA product launch shortly after the publication of the WFTMR Final Statement. The Proposed Industry engagement is set out below
 - a. <u>Industry Working Group (IWG)</u> Openreach intend to use the existing DFX IWG as the main vehicle for industry negotiation, with ad hoc specialised sessions arranged as required. The DFX IWG currently meets once a month and going forward will cover all aspects of the Openreach Dark Fibre portfolio. Frequency of meetings will be reviewed as required (possibly moving to bi-weekly prior to Full Launch). The aim is to host a 'DFA Kick Off' session 2 weeks after the WFTMR Final Statement is published (e.g., if the Final Statement is published on 1st April, the DFA IWG will be held w/c 12 April). This will allow Openreach to fully digest the content of Final Statement and make any adjustments as required. Given the likely wider industry interest, Openreach will also publicise the DFA event at the Ethernet Products and Commercial Group ('EPCG') as well as issuing an invite via the BAU 'all industry' General Briefings. The 'Kick off' event would aim to present an initial high level DFA product specification to industry for discussion.

⁴⁰ Consultation, para 5.16

- b. <u>Reference Offer/Contractual negotiations</u> Openreach aim to circulate a draft Reference Offer for discussion and industry comment, 4-6 weeks after the WFTMR Final Statement is published and publish a Final Reference Offer 28 days before the DFA soft launch (i.e., w/c 19th July). To be consistent with the approach of the Connectivity Services contract which covers both the Ethernet and Optical portfolio, Openreach intends, subject to industry agreement, to combine the DF IEX and DFA product under a single Dark Fibre Services Contract (via amendment to the DF IEX contract) and Reference Offer. Separate contractual meetings will be organised as required, with regular updates provided at the DF IWG. A revised Reference Offer will be published prior to full launch of DFA in June 2022.
- c. Operational Roll out as outlined above the revised implementation time frame with a soft launch in August 2021 provides little opportunity for FND to test the new DFA processes in volume in the field. To confirm Openreach cannot re-use the previous DF IEX training as the DFA product will require different processes and procedures and Openreach will need to upskill their field teams to install, test and repair DFA circuits (including associated systems on their iPhones). To note that training material can only be completed once the final design of the DFA product is known and understood. To minimise the risk of operational failure and the associated negative consequences on the CP order journey, Openreach propose to negotiate a phased delivery programme with industry similar to that agreed for the DF IEX product launch in 2019. For DFA however, we propose to launch DFA nationally from soft launch as we believe CPs are ready to consume the product on a national basis, but that we constrain the number of DFA orders per region, increasing in volume as Openreach and CPs have had the opportunity to test and scale the product ahead of the full launch in June 2022. The exact scale of the volume constraint will be discussed and agreed with industry via the IWG.

Comments on Legal Instrument

4.25. Openreach comments and recommendations to be included in the WFTMR Final Statement to enact and enable the revised DFA implementation proposals are set out in Table 1 below.

Table 1 – Openreach comments and recommendations to be included in WFTMR final statement

Review of the 6 November Consultation and accompanying Revised Legal Instrument				
Revised Dark Fibre Implementation Proposals				
Revised Proposal	What is required to enable the revised proposal in the WFTMR Final Statement and accompanying Legal Instrument	Comments and recommendation on the Final Statement & Revised legal Instrument		
Ofcom have proposed a revised implementation timeframe for DFA of 1. Soft Launch of DFA date of 17 Aug 2021 2. Full Launch by 1 June 2022 Ofcom have proposed a revised publication date for the Reference Offer by 17th August 2021 for Soft launch;	1. Final Statement to be updated with the new proposed implementation timeframe and accompanying justification 2. Legal Instrument to include the proviso for both soft and full launch implementation dates The new Reference Offer publication dates to be reflected in the Final Statement and Legal Instrument	 The Final Statement: suggest Ofcom replicate the substance of Para 5.5, Table 5.1, Figure 5.2 & Para 5.19 of the Nov 6 Consultation Legal Instrument: Covered by the proposed revised Condition.2.6 The Final Statement: suggest Ofcom replicate, Table 5.1 of the Nov 6 Consultation 		

by 1st June for Full Launch		2.	Legal Instrument: Covered by the proposed revised Condition 7.12 (a) & (b)
Ofcom have introduced the new concept of a phased launch of DFA capabilities, i.e. Soft launch requires an automated provision journey to be available, with manual repair permitted until October 21 Full Launch – DFA to be comparable to EAD	1. Final Statement — would be helpful and offer greater clarity for Openreach and Industry if Ofcom acknowledge what is proposed by the Openreach 'soft launch' in any accompanying text 2. The Legal instrument to provide for a phased approach in delivering the required DFA functionality and roll out	2.	The Final Statement: suggest that Ofcom recognises in the accompanying text that during the Soft launch period, Openreach (a) can process orders differently (i.e., manually, with limited functionality) (b) that in the absence of systems and operational testing, the number of concurrent orders is to be discussed and agreed with industry (c) parity with EAD (with justifiable differences) will not be achieved until Full Launch in June 22 Legal Instrument: Whilst the concept of Soft Launch approach is not specified in the Legal Instrument, Openreach consider that the phased soft launch approach above is provided for by the proposed revised Condition 2.6
Ofcom have proposed that from the 1st June 2022 SLAs/SLGs come into force QoS standards to apply	 The new implementation dates for SLAs/SLGs to be reflected in the Final Statement and the Legal Instrument The QoS Schedule to be updated 	1. 2. 3. 3.	The Final Statement: suggest Ofcom replicate, Table 5.1 of the Nov 6 Consultation Legal Instrument: Covered by the proposed revised Condition 7.12 (a) & (b) QoS Schedule: Ofcom to include the revised DFA implementation date

Source: Openreach

Summary of the Openreach position to deliver the DFA 2021 Remedy

- 4.26. Openreach offers its full support to the revised implementation timetable proposed by Ofcom in this consultation. That Openreach be required to deliver a national roll out of an automated DFA solution:
 - a. By soft launch in August 2021, delivering the key components of an automated DFA solution i.e., an automated provision journey (excluding 'modify order'), with order volume limitations per region (as agreed with industry), and a manual repair facility until October 2021; followed by
 - b. A full launch of the DFA product, comparable with EAD, but potentially with justifiable differences, in June 2022, with QoS standards, and proactive SLAs and SLGs in place.
 - c. That a manual interim solution is not is not the right answer to this issue for the reasons set out above.
- 4.27. This approach is the only sensible and proportionate one to take and will enable delivery of a good quality product that will support Ofcom's policy objectives in challenging but achievable timescales.

5. The maximum charge for the SOGEA 40/10 service

Question 6.1: Do you agree with our proposal that the maximum charge for the SOGEA 40/10 service should be equal equivalent to the maximum MPF charge plus the maximum VULA 40/10 charge?

- 5.1. The pricing regulation for SOGEA 40/10 proposed by Ofcom in the January 2020 WFMTR SOGEA was fair and reasonable charges. Ofcom is now proposing instead that SOGEA 40/10 is charge controlled as a single item, with the price ceiling for the first year of the control being calculated as the FTTC 40/10 2021/22 price ceiling plus the MPF SML1 2021/22 price ceiling.
- 5.2. Ofcom believes that this change is necessary because "Openreach has an incentive and ability to fix and maintain prices for [SOGEA] at an excessively high level and/or impose a price squeeze so as to have adverse consequences for end-users (including through a weakening of retail competition)." They see the key benefit of its proposals as being "For those customers that rely on FTTC provided using SOGEA (rather than FTTC using VULA as an overlay to the existing copper service), our proposal will provide more certainty and clarity about the maximum charge that they will face for the service."
- 5.3. Based on past regulation, Openreach notes that Ofcom would not normally consider a charge control as a single item in the early stages of a product's life cycle. Where it has intervened in the pricing of new products in the past, it has preferred pricing regulation that offers more flexibility, such as Fair and Reasonable. Openreach considers that Ofcom's past approach is appropriate for a product early in its life cycle e.g. it gives Openreach some pricing flexibility to react to circumstances as the product is launched and demand become more certain.
- 5.4. We also believe that the charge controls on MPF SML1 and FTTC 40/10 will exert a sufficient anchor on SOGEA 40/10 so Ofcom's proposed charge control on SOGEA isn't required. Openreach has an incentive to encourage customers to move from copper plus FTTC towards SOGEA, as it supports PSTN closure and in the longer term, exchange closure. Therefore, it needs to set a price for SOGEA that is attractive for copper and FTTC customers. The combined price of MPF plus FTTC 40/10 forms a commercial ceiling that the SOGEA 40/10 price couldn't exceed without being unattractive for customers.
- 5.5. On the basis of the above, we do not oppose SOGEA 40/10 being charge controlled as a single item and we agree with the way it has been structured in the draft Legal Instruments.

6. PIA ancillaries

Question 7.1: Do you agree with our proposed interpretation of the basis of charges obligations for PIA ancillaries related to network adjustments and other PIA ancillaries and contractor ECCs?

Question 7.2: Do you agree with our proposed changes to the legal conditions related to PIA ancillaries related to network adjustments and other PIA ancillaries?

- 6.1. Ofcom is proposing that the charges for PIA ancillaries and Contractor ECCs, which are currently cost orientated, should have a more clearly defined cost standard. We note that only the text for the PIA basis of charges regulation has been changed in the draft legal instrument, with no change for ECCs in Condition 12 and assume that this is intentional on Ofcom's part. Furthermore, Ofcom is requiring formal reporting of the PIA ancillaries and Contractor ECCs to demonstrate how the regulation is being met.
- 6.2. We do not object to the proposed interpretation of the basis of charges obligation for PIA ancillaries or Contractor ECCs, and nor do we object to how this is written in the draft legal instrument. As Ofcom are aware, this is exactly how Openreach has always interpreted the basis of charges obligation for these products. This means it will have no impact on how we price currently or intended to price during the WFTMR period, but does help provide clarity and reassurance for other stakeholders.

7. Regulatory reporting requirements

Question 7.3: Do you agree with our proposal to require BT to provide us with cost information on i) PIA ancillaries related to network adjustments and other PIA ancillaries and ii) contractor ECCs as part of its regulatory reporting requirements?

- 7.1. We would be able to produce a submission for Ofcom that would provide cost detail on PIA Ancillaries, and also on Contractor ECCs. However we would need to further understand and agree with Ofcom some aspects in order to deliver this:
 - a. Reporting Format and source data
 - b. Nature of submission
 - c. Assurance requirements and submission timeline

Reporting Format and Source Data

- 7.2. The proposal for cost information would require Openreach and Ofcom to agree the structure of this reporting and agree the sources of the data.
- 7.3. We propose that this would be produced outside of the Regulatory Financial Statements, given the low materiality of these individual products they are not tracked within the RFS at the required level of detail. It is important to note that this means the information in the proposed AFI would not be directly reconcilable with the RFS. Ofcom proposes that the service costs could be estimated outside the cost accounting system which allocates the detailed costs to services. While the total costs are inevitably captured through the financial ledgers and then relevant costs subsequently allocated to reported services, the cost allocation system does not detail these costs which are subsumed into other costs that are grouped together through classes of work.
- 7.4. We would instead propose that the data is taken from the cost models used to set prices. Table 2 below is the Openreach proposal for the format of the AFI.

Table 2 - Proposed AFI format

	Third party charges	Other direct cost items e.g. stores	Overhead recovery on third party items	Direct labour costs	Overhead recovery on direct labour	Working Capital Employed	Fully Allocated Cost	Price as at 31/3/20
	£	£	£	£	£	£	£	£
Cable recovery (light) - per 100m								
Cable recovery (heavy) - per 100m								
Cable recovery (large) - per 100m								
Fit ladder in a manhole								
Network Adjustment Verification (Simple)								
Customer changeover, per pole visit	N/A	N/A	N/A	N/A	N/A	N/A		
Customer changeover - hourly rate	N/A	N/A	N/A	N/A	N/A	N/A		

Source: Openreach

- 7.5. Costs would be presented at a unit level rather than total level, and would come from our price setting models (which are already structured in this format) and would be sourced as follows:
 - a. Third party contractor costs would be sourced from the ONSA contracts, selecting the rate for the relevant synthetic. Given that the costs paid to suppliers are pre-determined by the contract, we have very high certainty when setting the prices that this will be the actual cost incurred.
 - b. Other direct cost items (generally stores costs) would be sourced from ONSA contracts, or other relevant third party contracts.
 - c. Direct labour costs would be the task times for the activity (as defined in the product (many PIA ancillaries items are set up as a per hour charge) in the work allocation unit or WAU) multiplied by the cost of labour per productive hour. There are very few items which are delivered by Openreach direct labour however.
 - d. Overhead uplifts would be from calculations based on our regulatory financial statement data. An explanation of the way this is calculated would be included in the explanatory notes, but in summary it seeks to replicate the level of overheads that would be allocated if these products were reported individually in the RFS by setting up a 'dummy cost' in Cost Perform.
 - e. As no items would be sourced from the RFS and services aren't reported in the RFS at this level, there would be no reconciliation to RFS costs. We do not track these items at a unit level in our systems, but against an order (such as an Ethernet circuit for contractor ECCs). This means we do not have volumes which we could use to create a cost times volume calculation to reconcile to total costs in the RFS. We would also be unable to reconcile revenues given that the vast majority of these revenues

- are not billed to customers, as they come within the ECC Exemption of £2,800 or the PIA Network Adjustment Limit of £4,750 per km.
- f. Calculations to produce these figures would not be supplied as part of the submission which would only include the output as it typical for an AFI, however Ofcom would be free to request additional data for specific queries, as they do today.
- 7.6. Where we have items which are set to align to another regulated product, we would list the item in the AFI with "Not Applicable" in the cost template, as per the example above for "customer changeover hourly rate". This charge is set to be the same as the Regulated Hourly Labour Rate defined by Ofcom in the charge controls for SFI and TRC. Similarly, the PIA Co-op survey is set to be the same price as the charge controlled ECC survey and so we wouldn't provide cost data.

Nature of submission

- 7.7. Given that this would be a document that demonstrates the alignment of unit prices to unit costs and not be strictly reconciled to the RFS, we believe this document would primarily function as evidence of compliance, rather than function as additional reporting information per se i.e. it is not a more granular breakdown of reported costs. We would welcome Ofcom's view on this.
- 7.8. If Ofcom's intention is to gain comfort on the veracity of costs underpinning the charges, particularly of contractor ECCs, the extensive process undertaken in the 2016 BCMR to demonstrate the third-party procurement costs and limited overhead costs allocated should offer assurance. This process has remained in place since and should achieve Ofcom's aim without the need for an additional AFI.

Assurance Requirements and Timelines

- 7.9. The nature of the document, whether considered by Ofcom to be a compliance submission or AFI, may impact the level of assurance that Ofcom requires, particularly in regards to a third party statement of findings. Openreach undertake numerous internal controls, including %. This is normally a sufficient level of internal governance for an AFI, and so we presume it would be adequate for this document. We would welcome Ofcom's view on this.
- 7.10. We would request that the timescale to supply this information is appropriate. While Ofcom have included this as a reporting requirement rather than a compliance submission, as the submission would be completed by the Openreach Pricing team rather than the regulatory reporting team, and so we would welcome aligning deadlines with compliance submissions. In our WFTMR consultation response we have requested a submission date of 31 August for compliance submissions, and would request the same deadline for this submission. This is particularly key is an external assurance statement is required. Again, we would welcome Ofcom's view on this.

Annex A - Pricing implementation issues

- 1. In our response to the January consultation we requested that Ofcom address a number of pricing implementation issues as a matter of urgency.
- 2. This is an additional submission that repeats and builds on our prior submissions and May response to the WFTMR consultations, specifically relating to the implementation and structure of the charge controls within the legal instruments. The aspects relating to implementation take greater focus as it becomes clearer that the WFMTR Final Statement will only be issued shortly before the start of the regulatory period, and we will not have the benefit to see a draft a month before publication.
- 3. Within this submission we cover:
 - a. Changes we request to the legal instrument to be more consistent with Ofcom's policy intent;
 - b. Changes we request so that the regulation can be implemented on time, and as Ofcom intended; and
 - c. Corrections that need to be made to the legal instrument so that it reflects Ofcom's stated intent

In particular, we believe that there are some material points that should be addressed:

Structure of the Ethernet and WDM basket

- 4. The Ethernet and WDM basket in the WFMTR are defined as services up to and including 1Gb as well as over 1Gb. This is the first time all bandwidths would be included in a single basket.
- 5. As previously flagged to the Ofcom compliance team (December 2019) we are unable to reconcile the Optical Spectrum Services (OSA and OSEA) products to the RFS revenues, meaning we don't have the revenue weightings needed to calculate the compliance formula.
- 6. Optical products are modular, with circuits designed by Openreach and the CP for their specific requirements. A circuit is a combination of bearers, wavelength cards and potentially additional chassis, amplifiers and filters. OSS revenues are tracked in our financial systems by circuit, rather than by modular component, as this is the unit that makes sense for Openreach to track commercially.
- 7. The contents of the charge control are defined by reference to the price list, which lists the modular components. This means that we can't reconcile revenues by modular item in the price list to revenues reported in the RFS.
- 8. We have investigated a number of systems to see if we can generate the revenue by modular price list item. We concluded that given our current systems this would take a disproportionate level of manual processing.
- 9. This means we won't have any flexibility to rebalance prices within this expanded basket and will operate a CPI-% sub cap on each charge. This would not be a satisfactory solution as it does not reflect Ofcom's intention and removes the flexibility required for Openreach to adapt to the market.
- 10. Therefore, we ask that Optical Services are held within a separate basket, which would mean there would be two baskets: an Ethernet basket and a WDM basket.

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Implementation of the first year of the control

11. The intended publication of the WFTMR Final Statement only days before it comes into effect, combined with the unprecedented scope of the regulation, and the lack of a draft Final Statement for the European Commission, mean that Openreach will be unable to implement the WFMTR regulation in time for the effective date of the regulation. A late implementation of the current proposed control could mean Openreach would lose revenue from indexed price increases for the first year of the control, which was intended by Ofcom to support FTTP deployment.

12. We ask that Ofcom:

- a. Standardise the structure of all the controls so that compliance in the first year is assessed based on the average price in effect across the year. This is already the structure of MPF SML1 and all the BCMR controls, and the approach for all controls from year two onwards and,
- b. Waive notice periods for the implementation of the control, which, as such, should have no market impact as there is already a clear expectation in the market that prices will change on 1 April 2021.

FTTP premium

- 13. The FTTP 40/10 premium has been described within Ofcom's WFMTR consultation as being between £1.50 and £1.85 per month more than the combined rental price for MPF SML1 and FTTC 40/10. However the legal instrument conditions (12C.10 and 12C.11) describe this as being a premium to the monthly rental. We believe that this is an error, and that the legal instruments do not reflect Ofcom's intent.
- 14. We ask that those figures in the legal instruments are multiplied by 12 to be converted to an annual premium for the Final Statement.
- 15. More generally, we would welcome the opportunity to discuss Ofcom's charge control proposals and how they might be reflected in the Final Statement with Ofcom in advance of its publication. Updating prices through our governance process and systems takes time, and historically the draft Final Statement issued to the European Commission has allowed us to start the pricing implementation process around a month before the statement comes into effect. Guidance in advance of the publication of the Final Statement on the expected resolution to the points raised in this submission would allow us to implement Condition 12 as soon as possible after 31 March 2021.

Changes requested to the legal instruments to be more effective

16. We believe the changes below would not affect Ofcom's intent as set out in the consultation, but they would allow a better interpretation in the legal instruments and assist the operation of the charge controls.

Issue	Impact	Previously raised
Basket design for Ethernet and WDM basket	As described above.	9.289 May response and meeting ⊁
Submission timeline for compliance submissions should move back from June to August	Allows time for the new Independent Assessment requirement to take place without compromising the quality of new or existing controls and governance.	9.176 May response and meeting ><
Notification timeline for ECC Balancing charge should be June not May	We have only had to meet the end of May notification requirement once (in 2020) and this was challenging to meet while going through our governance process.	9.314 May response and meeting ⊁
Differences between DFX and DFA have not been reflected in price ceilings, for example longer travel times for Area 3 DFA.	Openreach will under recover costs.	9.278-281 May response and meeting
Remove sub cap from Ethernet Ancillary items that are linked to the basket e.g. early terminations linked to rental, cancellation linked to connection.	Could be interpreted as putting an effective sub cap on the basket item of CPI-0% as the related ancillary product can't increase by more than this.	9.289 May response and meeting 23 October 2020
FTTP Connections split new to Openreach (full price) and not new to Openreach (£0).	Should instead be full connection price where a home visit is required, which can be needed on existing network. Connections that don't require a visit should still be able to recover towards system costs, as with CP to CP migration.	9.173-174 May response and meeting ≫
Dark Fibre Patch panel rental based on lowest cost option	Incentivises Openreach to only make more basic patch panel options available	9.273-275 May response and meeting ≫

Changes requested to Condition 12 of the legal instruments for implementation

17. Ofcom are intending to publish the WFMTR Final Statement in late March 2021, to be effective from 1 April 2021. This gives insufficient time to implement the regulation. The notification periods set out in the legal instruments do not take into account this timing of the first year of the control, which means that it would be impossible for Openreach to be compliant with a maximum price ceiling or with the 28 day notification period for price reductions. We therefore ask that the implementation of the first year of the control is closely reconsidered, and that Ofcom changes the structure of the legal instruments for the first year – though this would not need to be a change in the aims of the regulation.

Notification Periods

- 18. There are a number of controls in the WLA markets where there are maximum price ceilings in the first year of the control rather than average price ceilings (as we have for MPF SML1 rental and Ethernet items). In the event that the WFTMR price rises cannot be implemented by 1 April 2021, Openreach will not achieve the expected revenue benefit of CPI indexation in year 1. In some cases, this will also flow through and impact future years.
- 19. Furthermore, where a price decrease is needed to comply with a maximum price ceiling (such as for PIA or Dark Fibre Exchange), Openreach will need sufficient time to process the price change and give 28 days' notice.
- 20. Given Ofcom have been consulting on these changes since January 2020, we believe CPs already have an expectation of prices for 1 April 2021, and notification periods should be waived for all charge controlled items for the start of the control. We note that this is consistent with the approach taken by Ofcom in previous charge controls.

Time to implement

- 21. As discussed in the meetings between Ofcom and Openreach on

 2020 and

 2020, implementation of the WFMTR will be challenging for 1 April 2021 unless the statement is issued (or the draft legal instruments are available) around six weeks prior to this. This is the time it takes to read the Final Statement, prepare around 19 pricing papers and accompanying models, take through our governance process and then load new prices on to the Openreach price list and billing system. After this point, notification periods will then apply, unless waived.
- 22. As Ofcom is intending for the Final Statement to be available only in March 2021, 1st April 2021 implementation of the pricing controls will not be possible.
- 23. This has not been expressly flagged to Ofcom as an issue in previous charge controls because of two key differences of the WFMTR.
 - a. The scale of this implementation is unlike previous controls this covers all products. We have broken the work into $>\!\!<$
 - b. Until now, a draft Final Statement has been issued to the European Commission around five to six weeks ahead of the Final Statement being published. This will not be a requirement for the WFMTR in March 2021 are the UK to exit from the European Union. Openreach has used this time to update its pricing models for final charge control values, take pricing proposals through governance, and pre-

load prices in the billing systems and price lists. These activities will only be able to start from the date the WFMTR Final Statement is published in March 2021.

We would expect our timeline to be as follows:

	MON	TUES	WEDS	THURS	FRI
MAR				25 ★	26 ★
APR	29 ※	30 ⋟<	31 ※	1 ※	2
	5	6 ※	7	8	9
	12	13 ⊁<	14	15	16
	19	20 ⋟<	21	22	23
	26 ≫	27 ※	28 ※	29 ※	30 ※
MAY	3	4	5	6	7 ※

- 24. Given the scale, the timeline above reflects the shortest possible timeframe that we could potentially achieve whilst maintaining the rigour of our governance process. In order to manage this timeline we are doing everything possible that we can. We are:
 - a. Arranging a secondment from another team to increase resource (to take pricing resource from \times);
 - b. Building the financial models and going through full sign off now, so that only the changes (start prices, level of X, CPI etc.) need to be checked and signed off once the Final Statement is published; and
 - c. For more complex pricing decisions \gg .
- 25. We believe that we would not be able to notify price changes before the end of April at the very earliest, with early May being more likely. As rental price changes need to take effect from the 1st of the month (due to constraints in our billing systems) this would mean price changes would come into effect form 1 June 2021, even if the notice period is waived. This would result in Openreach not complying with maximum price ceilings which are below the current price in time for 1 April (though of course we would prioritise these first).

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- This would also result in Openreach being unable to achieve the intended revenues had the maximum price ceiling been in effect for the full year.
- 26. This is because for a number of controls in the WLA market, Ofcom has set maximum price ceilings for the first year of the control rather than an average price ceiling. This is not consistent across the WFTMR however and explained in the table below.

Product Area (Condition)	Control
PIA (12A) and DFA (12I)	Maximum price ceiling that must be applied at all points during the year. Some regulated price ceilings below the current price, price reductions are required to comply.
GEA and TRC/SFI single item controls (12C, 12D)	Regulated maximum price ceilings that apply at all points during the year. 90 day notification periods will prevent this price being in place for the start of the control. Conditions 12C.3 and 12D.2 stop this impacting subsequent years however, as they reset the price ceilings for years two to five to be driven by the maximum price ceiling for year one rather than the actual average price in year one.
LLU single item controls except MPF SML rental (12B)	As for GEA and TRC/SFI, but as the CPI control for year 1 is based on the actual weighted average price in year 1, this would cause the issue to flow through into all future years as there is no comparable principle to 12C.3 in Condition 12B.
LLU baskets and MPF SML1 rental (12B)	No issue – basket controls and the MPF SML1 rental charge control have been set based on an average price that can be achieved across the year, rather than a maximum price ceiling at any point during the year
All BCMR active product conditions (12E, 12F, 12G, 12H)	No issue – all basket and single item controls have been set as a movement in the weighted average price from one year to the next.

27. We have set out below a number of possible solutions to address fully or partially the implementation issues explained above:

	Implications
1. Publish March, Notice not waived, Maximum price ceilings set for yr1 (as per consultation)	★
2. Publish March. Notice not waived, Average price ceilings set for Yr 1	*

	Implications
3. Publish March. Notice <u>waived</u> , <u>Average</u> price ceilings set for Yr 1	★
4. Publication after March, Average price ceilings set at the same level as for a 12 month first period.	★

- 28. We believe that only Option 3 waiving notice periods and setting average price ceilings for all charge controls will fully address the issue. We also believe that this is entirely in line with Ofcom's intended regulation:
 - a. The prices in effect should be anticipated by CPs having been consulted on since January 2020 so the waiving of notice will not impact CPs unduly
 - b. The prices in effect on average for 2020/21 will be those Ofcom intended to be in effect at all points during 2020/21
 - c. This will standardise the charge control design across all products, simplifying the regulation.

Corrections to match Ofcom's intent

29. We believe the items below should be corrected as the legal instruments as currently drafted in the draft legal instruments, they don't match Ofcom's intent set out in the consultation.

30. In addition, there are changes that could be made to the legal instruments to consolidate the regulation that applies to WLA Area 2 and WLA Area 3 based on the WLA Area 3 consultation issued by Ofcom in August 2020. These changes have been included within our response to that consultation, and are repeated below for completeness.

Issue	Impact	Previously raised
FTTP Premium of £1.50-£1.85 should be added per month (as per Volume 4 1.85) but the legal instrument adds the premium just once to the annual charge (so adding annually, not monthly)	Legal instruments not reflecting policy intent.	Raised in meeting
Cablelink is described as a basket control, but legal instrument sets out individual sub caps.	Legal instruments not reflecting policy intent. Prevents rebalancing to better match price and cost.	9.306 May response and meeting ⊁
Condition 12D should regulate SFI Assure and Frames Direct modules	Regulation applied to modules that have been fully withdrawn.	Raised in meeting on ≫
Charge control on FTTP specified as on Transition and Voice and Data (FVA) products, which have been withdrawn	There will effectively be not FTTP price regulation unless the Data Variant is specified in the legal instrument.	9.174 May response and meeting ⊁<
Ethernet TRCs definition in the Legal Instrument references the volume (WLA) TRC products, which aren't applicable to Ethernet	Openreach unable to comply with condition as written, creates overlapping regulation with the WLA regulation in Condition 12D	9.311 May response and meeting ⊁<
Scope of services in mainlink basket, Condition 12E.8	Main Link referred to as a single service. However, the definition in Condition 12E.19 (j) is for the mainlink listed on the EAD pricing paper. Do we take from the phrase "this service" that this condition covers only a single time, EAD main link, but not the EAD RO1 main link or the EAD RO2 main link? Are any other product mainlink charges in the basket?	Clarifications paper submitted ≫, Table 9.13 May response and meeting ≫

Issue	Impact	Previously raised
PIA Network Adjustment definition (Annex to Condition 12A Part 1) includes withdrawn products	Openreach unable to comply with regulation on products not offered	Clarifications paper submitted ≫, Table 9.13 May response and meeting ≫
Withdrawn products included in the definition in Annex to 12G Part 1 Section 3	New connections to EAD Enable and EAD Sync have been withdrawn, so these products can be excluded from this definition.	Clarifications paper submitted ≫, Table 9.13 May response and meeting ≫
Withdrawn products included in the definition in Annex to Condition 12E Part 1	Bulk Transport Link (not available since August 2019) and EAD SyncE Modify – upgrade (withdrawn since September 2019) do not need to be listed here. (Section 1 or Section 2)	Clarifications paper submitted ≫, Table 9.13 May response and meeting ≫
Incorrect formula in Condition 12E.6	The formula is incorrect and missing "1+" in the first set of brackets	Communicated by email
Visit charges in condition 12D inconsistent	The Supplementary Visit charge in Condition 12D.3 (c)(i) and (ii) is listed as £43.28, however we believe it should be the same as the Visit charge set out in Condition 12D.7 (b) which is £43.30. This would then make the charge in part (ii) £21.65.	Clarifications paper submitted ≫, Table 9.13 May response and meeting ≫

31. In addition, there are changes that could be made to the legal instruments to consolidate the regulation that applies to WLA Area 2 and WLA Area 3 based on the WLA Area 3 consultation issued by Ofcom in August 2020. These changes have been included within our response to that consultation, and are repeated below for completeness.

Reference in Document	Clarification Required
Schedule 1: SMP Conditions of original WFTMR consultation, Part 1: Application, Table 1	We presume that Ofcom will make changes to Table 1 as appropriate to refer to the correct conditions that apply to WLA Area 3 when the legal instrument is finalised. For example, Condition 4.5 should now be listed as applying, and if Ofcom agreed with our feedback on simplifying the legal instrument conditions for 12B and 12C then the references for those conditions would also need to be updated.
Condition 12B.5	We believe this condition would be better expressed by using Condition 12B.3. As well as simplifying the condition, it also means that the Controlling Percentage will be calculated in the same way as all other charge controls, with the same formula to make use of the carrying forward of excess or deficiency.
	If Condition 12B.5 is included in the final version, we note that there is an unnecessary " $+$ " symbol in the formula for the Fifth year.
Condition 12B.8	We believe that this condition could be removed, and Condition 12B.6 could be changed to apply to WLA Area 3 as well as WLA Area 2. This would result in a simpler legal instrument.
	This condition refers to calculating the average charge using the formula in condition 12B.9. In the previous draft legal instrument Condition 12B.6 for WLA Area 2 referred to the weighted average price calculation on Condition 12B.10.
	If condition 12B.8 is to remain as a standalone condition (and not be replaced by Condition 12B.6 indicating that is applies to WLA Area 3 as well) then we believe Condition 12B.8 and 12B.6 should refer to the same formulas and definitions for consistency.
Condition 12C.2	We believe this condition could be removed, and Condition 12C.1 could instead refer to WLA Area 3 as well as WLA Area 2.
	As it stands, the reference in Condition 12C2 (a) to Condition 12C.4(a) is appropriate, though Condition 12C.4 would need to be specified as referring to WLA Area 3 as well as WLA Area 2.
	Currently, this condition refers to price ceilings for the First Relevant year included in 12C.6 apart for the amended 12C.2(a) which refers to 12C.4. This whole condition – if not removed and replace by Condition 12C.1 – should ideally refer to a single consistent condition.
Condition 12C.6	We believe that this condition could be removed, and Condition 12C.4 could be changed to apply to WLA Area 3 as well as WLA Area 2. This would result in a simpler legal instrument.
Condition 12C.9	We believe that this condition could be removed, and Condition 12C.8 could be changed to apply to WLA Area 3 as well as WLA Area 2. This would result in a simpler legal instrument.

Reference in Document	Clarification Required
Condition 12C.11 (draft legal instrument published with January 2020 consultation)	Condition 12C.11 could be removed if condition 12C.10 is indicated to refer to WLA Area 3 as well as WLA Area 2.
Condition 4 -non discrimination	The draft legal instrument conditions 4.1, 4.2, 4.4 and 4.7 are only indicated as applying in WLA Area 3. We presume this presentation is only for the purpose of the consultation on Area 3 and that that Ofcom still intend for these to also apply to all markets (for 4.1 and 4.2) and WLA Area 2 (for 4.4 and 4,7), as indicated in the draft legal instrument from the original consultation issued 8 January 2020. Consistent with that, we presume that the only change to condition 4 will be to apply Condition 4.5 to WLA area 3 as well as WLA area 2 (in the initial consultation). We would ask that Ofcom to confirm we have interpreted this correctly.

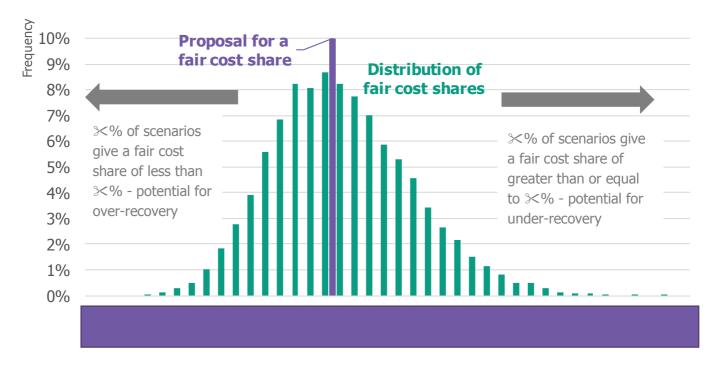
Annex B — Sensitivity analysis of Openreach's proposed cost shares values for Dual and Multi Bore duct

- 1. As we set out above, we propose adjusted share factors for Dual and Multi bore duct which better reflect the likely future use of our infrastructure. We estimated that future use of our infrastructure by considering the outputs from using our NGA Cost at the DP (CAD) model which calculates, amongst other things, the length of fibre cables required to provide full fibre services in any given area. We then placed those cables in our duct network, before converting to sub-duct equivalents.
- 2. We set out that we have also carried out a sensitivity analysis to confirm the reasonableness of our proposal. In this Annex we explain our sensitivity analysis. In our sensitivity analysis we assume: 41
 - a. Non-residential access fibres take-up between $\times\%$ and $\times\%$ of the space in our infrastructure.
 - b. Long reach tails and spine fibre cables could convert into between \times and \times sub-duct equivalents.
 - c. When we allocate cables into our infrastructure, we first place cables in all our single bore duct, and allocate the residual between single, dual, and multi-bore duct by assuming the relative amount of cable allocated to multi-bore duct will be ≫. There will be at least one other operator using between 0 and 100% of our infrastructure, with two other operators present in half of that area.
 - d. We consider althets using our infrastructure could use as little as \times % of the infrastructure that Openreach uses to pass a premise, or as much as \times % more infrastructure than Openreach.
 - e. We consider that between \times and \times % of our long reach fibres (with a mean of \times %)] are already captured by our inter-exchange fibres.
- 3. The results of our sensitivity analysis give a distribution with a mean very close to our proposed cost share %% and %% cost share compared to our proposal of %% and %% for dual and multi-bore respectively). This suggests that our proposal for cost sharing of our duct is fair. Further, our distribution is fairly narrow, with over 75% of outcomes within 15% either side of our proposed share.⁴²
- 4. The results of our sensitivity analysis also show the scale of the difference between a 'fair' cost share and the cost share that Ofcom have proposed. For example, our results show that in 99.9% of scenarios the cost share of dual bore duct should be higher than Ofcom's proposed 25%. In all scenarios the cost share of multibore duct should be higher than Ofcom's proposed 10%. This is illustrated in Figure 2.1 and Figure 2.2 below.

⁴¹ Our sensitivity analysis is based on **≫**.

For clarity, we mean percent, and not percentage point. \times % of scenarios have a fair share of dual bore duct of between \times % and \times %; and \times % of scenarios have a fair share of multi-bore duct of between \times % and \times %.

Figure 2.1 – Distribution of fair cost shares of Openreach dual bore duct



Source: Openreach

10% **Proposal for a Distribution of** 9% fair cost share fair cost shares 8% 7% 6% >< % of scenarios ≫% of scenarios give 5% give a fair cost a fair cost share of share of less than 4% greater than or equal ≫% - potential for 3% to **>**< % - potential for over-recovery under-recovery 2% 1% 0%

Figure 2.2 – Distribution of fair cost shares of Openreach multi-bore duct

Source: Openreach

5. We consider that our sensitivity analysis confirms that a 36% and 18% cost share for dual and multi-bore duct respectively is fair and reflective of the potential future use of our infrastructure. We also consider these shares do not expose access seekers to a risk that prices will be above cost. This is because the distribution of cost share is very sensitive to the assumed level of altnet coverage. Scenarios where another operator using our infrastructure is present in more than 50% of the country are more likely to imply the altnet cost share is too high, but these scenarios are unlikely to be realised in this market review period.