Vodafone response to Ofcom's Wholesale Fixed Telecoms Market Review

Part Three

Proposed competition and market modelling

May 2020

Contents

1. Introduction

1.1 In summary

- A cost benefit analysis for setting regulated prices above cost is required: Incentivising investment and gifting corporate shareholders with additional returns and dividends needs to be considered in light of the additional prices consumers and businesses will pay.
- Benefits of investing in Business Connectivity Network remain unclear, whilst the benefits from 5G innovation are material: Although network investment may bring consumer benefits in the future, limiting dark fibre geographically will limit the capacity of 5G networks and reduce the clear benefits they can bring as we have demonstrated here.
- Excessive profits distort retail markets: Prices in SMP markets are regulated to cost to safeguard and ensure the successful functioning of downstream markets. Ofcom therefore needs to consider whether potentially gifting Openreach £2.5bn of excess profits could harm the retail market.
- The separation of Openreach: Fundamental to the question of whether excessive profits for Openreach will distort competition is the issue of the structural separation of Openreach. Ofcom therefore needs to evaluate the effectiveness of legal separation in tandem with this review.
- Openreach products and services need to be fit for the next generation of global development: Ofcom needs to consider the environmental impact of Openreach and their regulated products and services. Ofcom must therefore push Openreach to ensure their exchanges, and all ancillary regulated services, can be optimised for power and equipment efficiency. Dark fibre is the environmentally friendly product of choice.

1.2 Ofcom is an independent expert economic regulator whose decisions and actions are required to be supported with sound economic reasons, evidence and analysis. Ofcom has acknowledged in their consultation document that their approach to regulated pricing in this market is focussed on striking a balance between incentivising new fibre build and protecting consumers from excessive prices. Ofcom explains that they need to strike a balance between:[1]

> *-providing access seekers with incentives to build new, competing networks themselves and/or enter into commercial arrangements with alternative network builders as opposed to overly relying on buying wholesale services from Openreach, as well as providing Openreach with the incentive to invest in fibre; and*

[1] Paragraph 1.5, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

-protecting consumers from excessive prices and maintaining retail competition in the short term while network competition develops.

1.3 We believe that 'increased fibre build' is not an end in of itself. The balance Ofcom is trying to strike is not between higher consumer prices and increased fibre build, but actually between higher consumer prices and the potential future benefits consumers may enjoy from fibre as well as lower priced broadband.

1.4 Ofcom need to be clear about the cost benefit analysis it is carrying out and the actual balance it is seeking to achieve. This would enable a clear comparison through an impact assessment. When carried out accurately and diligently, such an assessment would help ensure that the negative impact of higher-priced wholesale services on the market is 'less' than the positive impacts of innovation and service improvements that consumer fibre broadband would bring. This assessment would also provide a scorecard by which Ofcom could measure their progress and the 'success' of their chosen strategy.

2. The negative impact of these proposals

2.1 Ofcom have attempted to calculate future benefits in terms of excessive profitability that Openreach, the dominant incumbent, will enjoy as a result of these pricing proposals:[2]

In area 2 these are:

- **£100m to £450m** on CI access services at 1 Gbit/s and below.
- **£140m to £490m** on CI access services at Very High Bandwidths.
- **£125m** on MPF SML1 rentals.
- **£90m to £215m** on FTTC 40/10 rentals.
- **£210m to £590m** on FTTC above 40/10 rentals.

In area 3 these are:

- **£20m to £85m** on CI access services at 1 Gbit/s and below.
- **£30m to £110m** on CI access services at Very High Bandwidths.

Across both areas

- **£80m to £410m** on all Inter-Exchange Connectivity services including Ethernet and WDM services at all bandwidths to BT-only and BT + 1 exchanges

[2] Paragraph A16.10 to A16.16, https://www.ofcom.org.uk/__data/assets/pdf_file/0031/188923/wftmr-annexes-1-23.pdf

2.2 These amounts appear to suggest Openreach will be able, by Ofcom's best estimates, to recover between **£615m and £2,475m** in excess of their currently permitted and regulated profits over the market review period in question. This triggers three additional questions:

(a) Why is the range between Ofcom's upper and lower estimates so large?

(b) What are the assumptions Ofcom have made that have produced these estimates? And most importantly -

(c) What actions have Ofcom taken to ensure Openreach cannot distort competition as a result of these additional profits?

2.3 It is very difficult based on the information included in the consultation to precisely answer the first question (a) why is Ofcom's range so large? Is it because Ofcom simply did not seek to narrow the range? Is it because outcomes in this market are so uncertain? Alternatively, is it is because the modelling exercise that Ofcom performed was limited in its accuracy and robustness?

2.4 However, it is easier to comment on question (b) what are some of the assumptions Ofcom have made. It is worth noting that Ofcom have not included the complete detail of all their modelling assumptions. It is nevertheless possible, after reviewing the annex[3] of their consultation, to consider whether some of the assumptions are reflective of realistic market outcomes and whether the modelling of Openreach's potential excess profits are over- or understated.

2.5 Ofcom's modelling assumptions produced an excess for Openreach that ranges up to £2,475 million. However, when reviewing the consultation and annexes, questions emerge that cast serious doubt on whether the upper end of the excess range calculated by Ofcom is realistic or reflective of a likely set of industry outcomes. Consumers being asked to pay nearly £2.5bn extra is a significant additional burden. But based on the material presented in the consultation, this already high figure appears to underestimate the true amount.

3. Summary of modelled input;[4]

3.1 Included in Ofcom's consultation is a table that shows Ofcom's 'Low' and 'High' summary of modelled scenarios (shown below). It is assumed that the 'Low' scenario relates to the higher calculated excessive return amount for Openreach (£2,475m) because it includes cost assumptions that would lead to lower costs and therefore higher profits.

[3] Annex 16, https://www.ofcom.org.uk/__data/assets/pdf_file/0031/188923/wftmr-annexes-1-23.pdf
[4] Table A16.12, https://www.ofcom.org.uk/__data/assets/pdf_file/0031/188923/wftmr-annexes-1-23.pdf

Table A16.12: Low and high-cost scenario parameters assumed

Parameters	Low	High
WACC	Other UK Telecoms: 6.9% Openreach: 6.1%	Other UK Telecoms: 8.9% Openreach: 8.1%
Efficiency	LL operating costs: 7.0% LL capital costs: 6.0% WLA operating costs: 6.5% WLA capital costs: 5.0%	LL operating costs: 4.0% LL capital costs: 3.0% WLA operating costs: 3.5% WLA capital costs: 1.0%
Volumes	LL: assumed higher exogenous growth, greater demand for higher bandwidth services, no impact of PIA and no impact of Dark Fibre WLA: assumed lower Openreach FTTP and greater impact from alternative networks	LL: assumed lower exogenous growth, greater demand for lower-bandwidth services, high impact of PIA and high impact of Dark Fibre WLA: assumed greater Openreach FTTP and lower impact from alternative networks
Accelerated depreciation	Depreciation after 2030/31 brought forward	Depreciation after 2030/31 brought forward

3.2 However, the 'Low' scenario does not appear to include all the correct 'low' assumptions. For example, the volume assumption 'Low' includes '*WLA – greater impact from alternative networks*' This assumption would have the impact of increasing Openreach's unit costs and therefore reducing their excessive profits, therefore it is unclear why this selection is included in the 'Low' scenario. It would appear that the 'low scenario' that relates to the calculation of the higher excessive profits is actually a mixture of assumptions, some that would lead to higher profits and some that would lead to lower profits. Therefore, we conclude that the calculated higher profitability derived at £2,475m is not actually the highest calculated profit that Ofcom's model would produce and therefore not representative of a true high profitability range estimate.

3.3 We would be very interested to understand what the true high profitability estimate is in a scenario where all assumptions are truly designed to reflect a lower modelled cost scenario.

Inclusion of scrap copper value

3.4 Historically, BT has received proceeds from the sale of copper recovered from its core network[5] where that copper was no longer required or had been replaced. This has generated just over £700 million net proceeds over the 6-year period from 2010/11 to 2016/17. Openreach have provided an estimate of the amount of E-side copper they have in place, which they (probably conservatively)

[5] Paragraph A22.2, https://www.ofcom.org.uk/__data/assets/pdf_file/0020/112493/wla-statement-annexes-17-27.pdf

estimate at 226,600 tonnes. We do not know how much D-side copper there is, but a conservative assumption could estimate this at half the amount of E-side copper.

3.5 This would mean that the total amount of copper Openreach has in its network that could be sold is approximately 350,000 tonnes. A conservative estimate of copper's current value is £4,500 per tonne. The value of copper in Openreach's network is approximately £1.5bn, but if the amount of D-side copper were the same as E-side then the estimate would be closer to £2bn.

3.6 In contrast to this, Ofcom have modelled a value of just £240million for Openreach's copper. This was done in 2017 and Ofcom have not revisited their estimates from the last market review.

3.7 If Ofcom more accurately calculated both the amount of copper Openreach has as well as its true sales value, then we believe that the value of this asset - gifted to BT Group at the time of privatisation and paid for by UK taxpayers - is in fact considerably more than £240million even after the costs of retrieval and sale disposal have been taken into consideration.

Openreach's market share will drastically reduce;

3.8 In their consultation Ofcom state the following modelling assumptions:[6]

- the total number of fixed line households will increase from 26 million to 27 million
- the total number of Openreach lines will fall from 25.0 million to 22.6 million;
- the total number of customers on alternative networks will increase from around 6 million to 10 million;

3.9 We consider Ofcom's assumption that Openreach's market share will fall by 10%, within the context of a market growing by about 5%, to be wholly unrealistic. Ofcom have assumed than Openreach's number of broadband lines will fall by 2.5million and that new third party networks, which today cover far fewer than half a million premises, will by 2025 pass 10million customers and then secure 6 million active customers. These wildly ambitious assumptions dwarf anything that has been experienced in the UK to date, where customer take-up rates are typically 40% for non-Openreach infrastructure. Ofcom's assumptions are also not supported by the experience from other European markets, making them appear implausible.

3.10 It is unclear to us what the precise implications of these assumptions are on Ofcom's cost modelling. However, it is assumed that by including assumptions that reduce Openreach's volumes, the modelled unit costs increase and therefore is it likely that the excessive profits calculated will be

[6] Paragraph A16.76, https://www.ofcom.org.uk/__data/assets/pdf_file/0031/188923/wftmr-annexes-1-23.pdf

underestimates. If Ofcom assumed Openreach's volumes would in fact remain in line with where they are today, we would be very interested to understand what the modelled excessive profits would be.

3.11 The examples presented above are just some of the reasons why we believe Ofcom's calculated range of the excessive profits Openreach may enjoy over the period are inaccurate and unlikely to reflect UK market realities. We believe the estimated excessive profits Openreach will enjoy as a result of the proposed regulatory pricing approach is likely to be considerably more than Ofcom's upper end estimate of £2,475million. In such circumstances, consumers will end up paying considerably more for the services they consume.

3.12 Even if we take the £2,475 million of excessive profits at face value, this equates - using very simple maths - to approximately £100 for every broadband household in the UK. In policy terms, this results in Ofcom enabling Openreach to overcharge every UK household and businesses an excess of £100. This surcharge, sanctioned by Ofcom, will have a profound impact on many consumers and Ofcom should take great care before proceeding with a framework which permits this kind of return in a market where Openreach will continue to have the lion's share of all connections.

3.13 The subsequent question is what benefits do households receive from paying this £100 surcharge. However, in answering this question we also need to consider the other negative impacts of Ofcom's regulated pricing approach.

4. Negative Implications of bandwidth growth from higher prices

4.1 Ofcom's policy approach of using a static baseline starting point based on today's prices and bandwidth gradients means that the natural evolution of higher bandwidth demand and pricing cannot evolve in a market-led way. Consumer demand shifts over time, with trends focused on more speed and prices for higher bandwidth services declining as a result. By using a 2020/21 baseline, Ofcom's regulatory approach interrupts that progression, leaving higher bandwidth services priced higher than they otherwise would be. Having higher prices in the wholesale market will, to a degree, reduce the willingness of wholesale purchasers and retailers to procure higher bandwidths. This is especially true for wholesale charges that remain priced significantly above cost, for example, 10Gbit/s Ethernet leased line products.

4.2 10Gbit/s Ethernet products are currently priced by Openreach at approximately £5,000 (annual rental), yet it can be seen from BT's regulated financial statements that the actual underlying cost of providing 10Gbit/s circuits for Openreach is less than £2,000. Therefore, 10Gbit/s circuits are currently priced at approximately double the true underlying fully allocated cost. This would almost

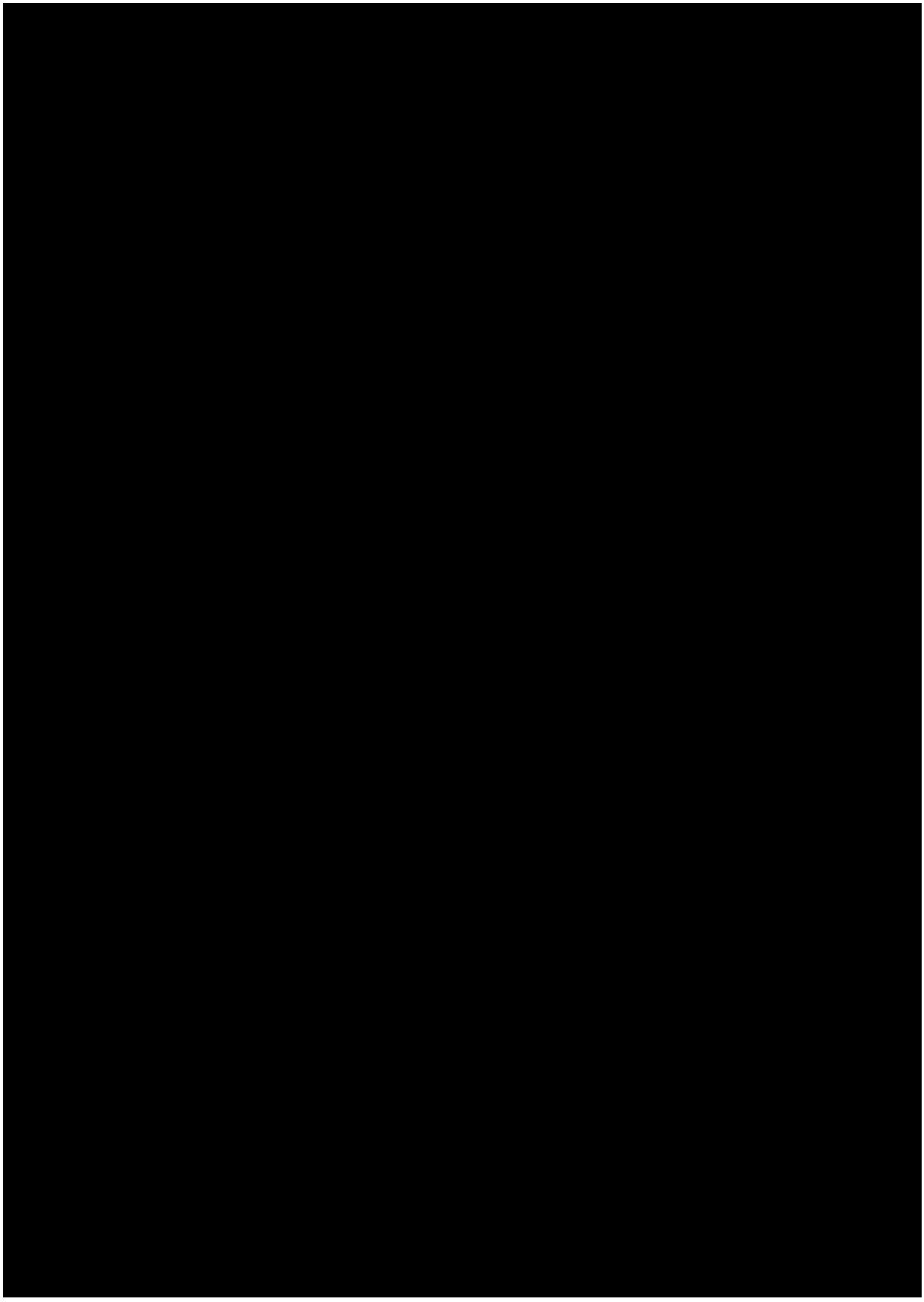
certainly have an impact on whether customers would upgrade their business services from 1Gbit/s to 10Gbit/s. Just as importantly , it has an impact on when mobile operators upgrade their backhaul, which predominately uses 1Gbit/s today. Backhaul should, in a significant portion of the country, be upgraded to 10Gbit/s to enable truly transformative 5G services.

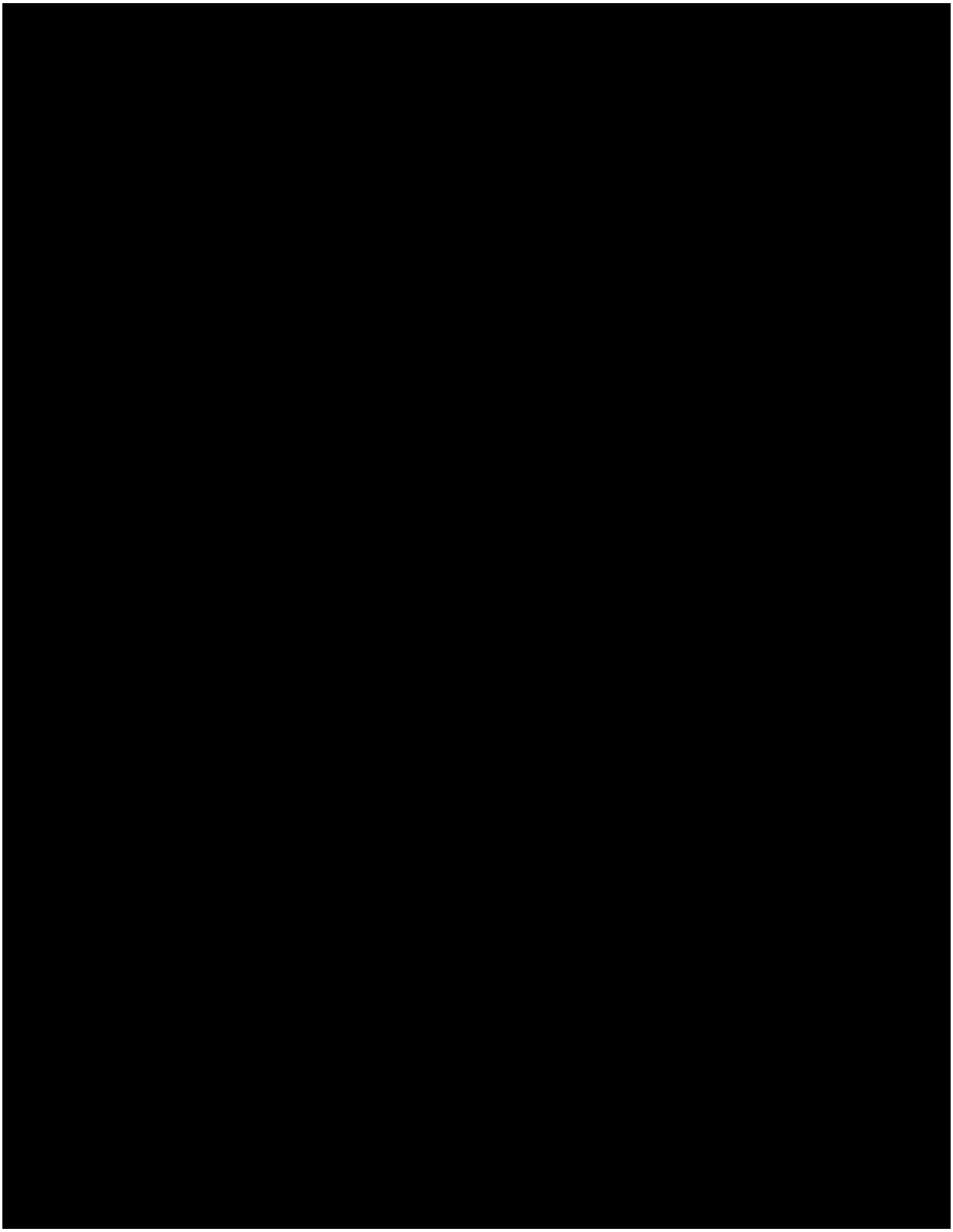
4.3 The implications of this are significant. In addition to the excessive profits that Openreach will enjoy as a result of this regulatory pricing approach, which Ofcom estimates to be between £170 and £600 million for Areas 2 and 3 services, products that require these circuits are less likely to be consumed (or consumed in lower quantities than they otherwise would have been).

4.4 The innovation and possibilities that 5G will enable in the future are very real and needs to be supported by 10Gbit/s circuits that are competitively priced in relation to their underlying cost of provision. Ofcom appear content to allow Openreach to charge prices for these transformational and essential enabling products that are far in excess of any competitive levels for the next five years. This outcome will limit mobile operators from upgrading the capacity of their backhaul networks.[7]

5. Unleashing the true potential of 5G – the need for affordable underpinning backhaul

[7] Our changing 10Gbit/s network forecasts





6. The benefits of regulatory pricing above cost

6.1 In its consultation, Ofcom has not quantified the benefits of its pricing proposals. Instead, it has merely stated its belief that its pricing approach will encourage alternative home fibre network build (FTTP).

6.2 The question that needs to be answered is what benefits will regulated prices above cost bring, over and above the counterfactual (continued cost based regulation). This requires careful analysis of when operators announced investment and plans for FTTP roll-out and whether these changed after Ofcom's last business connectivity market review (which was the first review to move away from cost based regulation) or since the commencement of this consultation.

6.3 If there is indeed evidence of a link between Ofcom's specific regulatory pricing approach and investment in the UK, Ofcom should seek to quantify such a link. Ofcom know the degree to which they allow Openreach to price above cost, so Ofcom should calculate the benefits this accrues to the investment plans of alternative investors.

7. The necessary evil of excessive profits is neither necessary nor justified

7.1 In its consultation, Ofcom suggested four possible approaches to setting regulated prices over this review period:

1) **Pricing continuity;** basically holding prices for most services at current levels and allowing inflationary rises;

2) **Cost-based price caps**; Ofcom's historic method of regulating prices to the level of the efficiently incurred costs of providing them;

3) **Adaptive regulation**; a regulatory approach that rewards investment but sets prices to costs that occurred prior to that investment as long as they were incurred efficiently;

4) **Copper Wedge**; a regulatory approach that only rewards costs in line with actual incurred costs and 'ear-marks' or reserves the remaining revenue from regulated service for fibre investment.

7.2 Ofcom have, in its consultation[8], then discussed the relative merits, advantages, disadvantages and factors that they have considered when arriving at their proposed approach that is mainly (a) **Pricing continuity**. However we believe Ofcom has not given due care or attention to the following three factors in its discussion:

(a) **Higher retail prices;** the negative impact of their pricing continuity approach on the retail market – namely that consumers and businesses will suffer from higher prices.

(b) **Market damage from excessive profitability**; The damage that Openreach will be able to inflict on the market as a result of having up to, and possibly in excess of £2.5bn in additional profits. Openreach would be able use to these excessive profits to enhance their competitiveness against other operators.

(c) **Consequence of 'inefficient' investment**; Ofcom's pricing proposals knowingly seek to price wholesale services above their efficient cost. This is in an attempt to enable providers that are otherwise less efficient than Openreach - due to scale, scope and a range of other factors - to roll-out or extend fibre networks to the home which wouldn't otherwise would have happened had their businesses plans had to include prices baselined against Openreach's efficiently incurred costs.

7.3 We will expand on the issues associated with Ofcom's lack of attention to these factors below, however we cannot emphasise enough the importance of Ofcom giving due weight and consideration to these issues when assessing its pricing approach. In the real world, these issues are by far the most important; will consumers pay more for services than they otherwise would have under cost-based pricing? If consumers pay more, how will they benefit? Do they actually want the benefits that may be accrued to them because of this pricing approach? How could Openreach distort the market with the excessive profits that will accrue to them? What will be the results of attempting to drive a competitive market by enabling one operator to enjoy profits above a competitive level for a prolonged period? How long will inefficient investment last? If other operators' costs are truly higher than Openreach's, is their survival simply a matter of time?

7.4 Even if Ofcom can answer all the questions above, the simple fact remains that Ofcom's pricing approach does not give control to alternative operators and enable them to invest more in

[8] **Volume 4 pricing remedies,** https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

alternative networks. This pricing approach simply gives more market control to Openreach, enabling Openreach to decide when it wants to reduce prices and eliminate the competition. It gives BT the freedom to direct retail market outcomes, affecting the lives of UK consumers. We have already seen Openreach reducing prices below regulated levels with the GEA offers that encourage bandwidth speed upgrades (on to non-price regulated products). Giving further control to Openreach over the next five years will only distort market outcomes even further.

Higher retail prices;

7.5 Over the past five years, Ofcom have increased their focus on consumer welfare with a stated emphasis on the impact of both regulation and operators' actions on consumers. Ofcom have gone further and said that the prices people pay and the value they get from communication services is a key indicator of the functioning of the telecommunications market:[9]

> *The prices people pay and the value that they get from communications services are key indicators of whether markets are working well for customers. Helping customers get the best deal for them is a priority for Ofcom. Our Fairness for Customers programme includes a number of actions to help make it easier for people to find the right deal, and ensure they are treated fairly by their provider.*

7.6 Ofcom have also made the observation that people are paying the same for broadband service but receiving higher speeds and using more data:[10]

> ***List prices for dual-play landline and fixed broadband services have been broadly stable since the end of 2018.*** *This is despite significant increases in average data use, indicating that people are getting more for their money. Basic superfast dual-play list prices are around £7.50 per month higher than for those of the equivalent standard broadband services, while promoted prices are on average £5 per month higher for superfast services.*

7.7 The key driver of pricing in the retail market is wholesale pricing. Over the last 10 years, and especially over the last three years as some superfast broadband services have been regulated to cost, wholesale prices have been falling, and this fact has enabled retail operators to offer higher speeds and improved service quality for the same retail prices.

7.8 Retail broadband customers have directly benefitted from cost-based wholesale prices. This is not only true for broadband customers, but also for business customers and mobile providers that rely

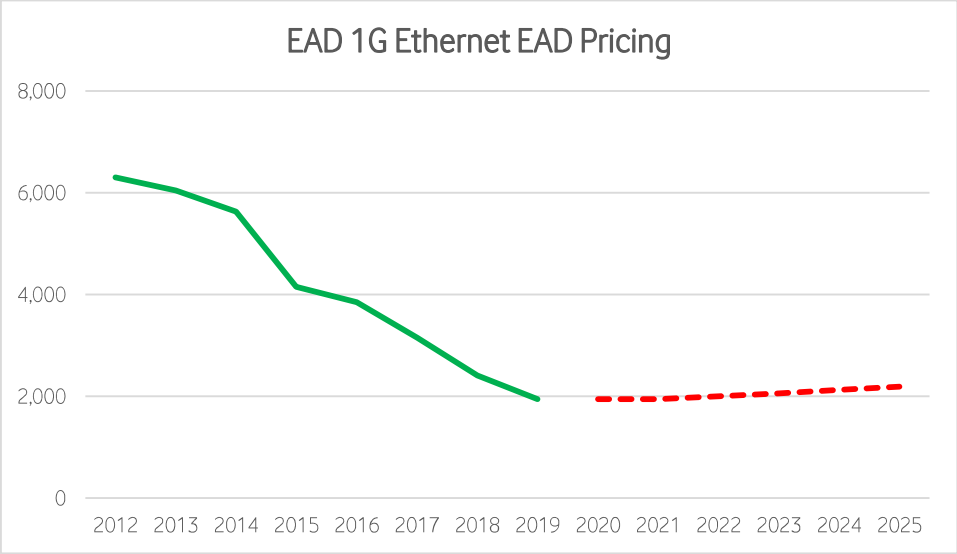
[9] Ofcom's pricing trends report, https://www.ofcom.org.uk/__data/assets/pdf_file/0022/189112/pricing-trends-communication-services-report.pdf

[10] Ofcom Broadband pricing report, https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2019/fairer-prices-for-broadband-customers

on leased lines to carry their mobile traffic from base stations to their core network. The graph below shows the pricing over the last eight years for 1Gbit/s Ethernet services, compared with the next five years. It clearly shows that customers have seen a significant fall in price for 1Gbit/s EAD services from over £6,000 annual rental in 2012 to less than £2000 today. This is representative of all Ethernet services and what has underpinned retail pricing in the market.

7.9 Ofcom's cost-based wholesale regulated pricing approach has enabled businesses to increase the capacity of their networks as the demand for data increases and mobile operators upgrade their backhaul connectivity from 100Mbit/s to 1Gbit/s. Static prices have been critically important for retail customers as their data consumption and appetite for speed increases dramatically.

Graph 1: Graph to Show the Historic and future pricing of EAD 1Gbit/s services



7.10 However, under the current proposals, the next five years are likely to be very different. The challenges in the market remain the same, retail customers will demand increased speeds and data capacity whilst still wanting to pay the same retail prices. But wholesale prices are not going to fall in line with increasing retail consumer requirements.

7.11 There are bound to be implications for the retail market in having rising wholesale prices whilst retail consumers demand higher speeds and greater data capacity but are unwilling to stomach retail price increases. Ofcom needs to address this when it considers the various pricing approaches.

7.12 We are not in a position to accurately assess the entirety of these issues and suggest that Ofcom needs to undertake further research to fully investigate them. However, we can make high-level observations based upon past behaviour. We predict this issue will trigger two dynamics in the retail and wholesale markets.

7.13 Firstly, the purchasers of wholesale services will delay the purchase of higher speed services and higher capacity products. As part of Openreach's GEA offers, we have seen discounted wholesale prices offered by Openreach for higher speed services drive uptake of those services in the retail market. We suggest the reverse would also be true: increased prices for higher speeds would also delay the upgrading of services and speeds in the retail market. As part of our mobile backhaul network upgrade, we have seen our upgrade plans from 1Gbit/s to 10Gbit/s [redacted]

7.14 Secondly, having wholesale prices in the market rise above efficiently incurred costs when the wholesale provider is also a retail provider - as is the case for Openreach and BT - hands a 'product advantage' to that fully integrated operator. Although all retail operators in theory have to pay the same regulated wholesale prices to a vertically integrated operator, the wholesale price it pays itself is simply a transfer of wealth from one division to another. Vertically integrated operators are therefore less concerned with higher wholesale prices that retail operators whose wholesale payments represent cash transfer outside of their business. When Vodafone buys from Openreach, this a represents a real cash outflow, so when these prices rise we feel the pain. When BT consumer buys from Openreach, it is simply a transfer from one internal division to another with any alteration in the balance of profitability due to a price change largely neutralised at BT Group level.

7.15 We can see examples of this in two areas for BT group, firstly with FTTC GEA broadband speeds. BT's retail divisions did not actively sell 40/10 speed broadband products; instead they sold higher 55/10 speeds at the same price as other retail operators. Secondly, EE (a division of BT Group) has announced that it will upgrade all of its 5G mobile base stations to 10Gbit/s backhaul from 1Gbit/s. EE is the *only* mobile operator to give this commitment.

8. Market damage from excessive profitability

8.1 Ofcom have calculated that Openreach will enjoy excessive profits up to £2.5bn, as explained above, although we believe the excessive profits could be even higher than this. Also, as stated above, this equates to Openreach enjoying £100 in excessive profits from every broadband user in the UK. The question is what will BT Group do with these additional profits? There are several options:

(a) Return extra cash to their shareholders in terms of dividends;

(b) Invest the funds in fibre or other capital expenditure;

(c) Provide targeted discounts in order to reduce the number of competitors in the market;

(d) Provide additional services and enhanced services to enable the growth of their wholesale and retail market share.

8.2 Clearly we do not have a crystal ball and cannot be certain what BT Group will do with additional future excessive profits, however we can calculate the medium to longer term benefits of all the options. Options (a) provides no future benefits other than to please BT shareholders. Option (b) could produce some future benefits, but BT's past behaviour shows that having excessive profits and their incentives to invest in fibre networks are not linked. Options (c) and (d) both ensure long term future gains for BT Group. In option (c), if BT is able to reduce competition then it is likely they will be able to charge higher prices in the future. In option (d), if BT Group invest in improved consumer propositions (be that enhanced services or cheaper prices) they will be able to win increased market share.

8.3 While it is not certain what BT Group will do with their excessive profits generated as a result of Ofcom's regulatory pricing approach, it is likely that they will act rationally and in the long term interests of their shareholders. They will therefore follow a strategy in line with either option (c) offer targeted discounts or (d) seek to win a higher market share. Both of these options will be detrimental to the long-term competitiveness of the UK telecoms market. What do we want Ofcom to do?

9. Consequence of 'inefficient' investment

9.1 Ofcom state in their consultation:[11]

> *Our approach to price regulation in recent market reviews has been based on our view that setting price caps somewhat above Openreach's costs better supports investment in competing networks.*

9.2 However, Ofcom must concede that prices in truly competitive markets, tend towards the efficient costs incurred to deliver them. Ofcom must also concede that setting prices in the way that they have proposed in this consultation (ie. above the efficient cost to the incumbent dominant operator) enables Openreach to reduce prices down to the efficient level if they see any true threat from competing network providers.

9.3 In fact, in setting prices as Ofcom have proposed, Openreach have a very clear pricing decision tree. Maintain prices at the regulated level (as there is no prohibition on pricing below) as long as the revenue they will lose from reducing the prices (either to the cost efficient level or between the

[11] Paragraph 1.16, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

regulated price and cost efficient level) is less than the revenue they will lose to other competing networks that are pricing at the regulated level.

9.4 Therefore, we would characterise Ofcom's pricing approach not as 'setting price caps somewhat above Openreach's costs' but rather 'an approach that enables Openreach to charge higher prices unless they fear a threat of competition in which case they can price at a level that enables the elimination of the competition.'

9.5 Ofcom should not underestimate the consequences of inefficient investment signalling. If network operators roll out network on the back of regulated prices that are above cost, it is only a matter of time before they run into financial difficulties.

10. The balancing act

10.1 We acknowledge there is a balancing act to be struck in this market between protecting consumers and preserving the competitiveness of the market and enabling investment and market development. However, in contrast to Ofcom we place weight on the potential disruption to the competitive landscape that excessive profitability for one industry operator may cause.

10.2 Ofcom discuss other regulatory options, namely (3) adaptive regulation and (4) the copper wedge. Both options seek to maintain higher prices in the market, but have the added benefits of either adjusting prices in a way that increases the incentives for Openreach to roll out fibre or increases funding for fibre build from commercial revenue.

10.3 We believe that having a wholesale pricing approach that includes elements such as these will be highly beneficial to the whole industry. Just as importantly, it will mitigate any risk of disturbing the competitive dynamics of the industry by potentially handing one operator £2.5bn or more in excessive profits that they can then use to entrench their market dominance.

10.4 These are some of the comments Ofcom make in regard to adaptive regulation and the copper wedge approach:[12]

> *"Adaptive regulation would be difficult to implement for a number of reasons."*
>
> *"This approach would then create an administrative burden (assuming competitive rollout did still occur to some extent) due to the need to collect data on the level of competitive rollout in each area more regularly, assess reliability of that data, publish updates, and monitor whether price caps and price floors are adhered to on an area-by-area basis."*
>
> *"Even if it were possible to implement the copper wedge option, we consider it would be disproportionate."*

[12] Volume 4 pricing remedies, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

"Using the copper wedge to support network build via competitive tender would require Ofcom to determine how the wedge funds are to be delivered, the minimum criteria which proposals to use the funds must meet, the appropriate allocation method and the appropriate mechanism for ensuring winning participants deliver on their commitments (which is likely to require an ongoing role for Ofcom in assessing delivery and enforcing non-delivery through contractual mechanisms)"

10.5 From reading Ofcom's analysis and commentary on adaptive regulation, and indeed the copper wedge approach, it appears that Ofcom does not particularly disagree with either approach. Nor does Ofcom disagree that either approach may well enhance the regulatory outcome. Ofcom does seem to believe, however, that these approaches would be 'difficult' to implement and 'burdensome'.

10.6 We believe Ofcom's lack of focus on these more suitable regulatory pricing approaches are because they have failed to consider, understand or analyse the negative impact of their proposed approach on consumers, the market and the emergence of competition in the new FTTP world. Ofcom has dismissed the solutions provided by stakeholders on how to mitigate the risk that prolonged excessive profits pose to competition. This problem needs to be addressed, as it would be unreasonable for no action to occur.

11. Essential ancillary services - Fibre build through excess construction charges

11.1 The economics of fibre build in the business connectivity market is complex and highly dependent on historic and environmental factors:

(a) Over the last 5 years alone, retail customers have provided over £200m of capital funding to the Openreach fibre network (in the form of excess construction charges)

(b) Openreach retains the right to and makes supernormal profits on these assets that have been paid for by its customers through the supply of active products with extreme pricing gradients;

11.2 Ethernet site connections requiring external or internal fibre cable or duct work have always been funded by Excess Construction Charges. In 2014, Openreach sought to change the regime with an average Excess Construction Charge being applied to all Ethernet orders by Openreach. This is implemented on every single Ethernet service connection installation through the inclusion of a component charge within its connection charge. This standardised levy contributes to an overall fund that is used to pay for an average cost installation of fibre to and within a business premise, as well as pay for extensions of spine fibre or the building of new ducts to reach the premises. If the order requires ECCs that cost more than the average and above the set threshold (£2800), then the

actual costs in excess of this threshold are levied on top of the ECCs included within the circuit connection charge.

11.3 The number of Ethernet services connected in 2015, 2016, and 2017 in the rest of the UK and the London Periphery is shown as approximately 41k, 43k and 40k respectively.[13] In meeting such demand for Ethernet services, Openreach can take advantage of aggregation savings. As more buildings are now connected, Openreach incurs minimal installation costs when other tenants in the same building wish to order Ethernet fibre, or at the very least incurs lower costs, as Openreach fibre is brought closer to many more buildings on the back of previous end customer demand. This ever-decreasing cost of connection cycle for Openreach is borne out by Vodafone's own direct experience, where 75% of Ethernet fibre orders we placed with Openreach in 2017 required little more than a simple fibre pull or they were in locations where fibre was already installed to the building, resulting in no need for costly civil works.

11.4 The threshold values in the ECC scheme have remained static for some time, failing to take account of this aggregate funding cycle. A cycle that has reduced the cost of deployment for Openreach and which was funded by communication providers. Ultimately, end customers have effectively paid in advance for Openreach to deploy large-scale enterprise fibre across much of the UK. It is now time to address this situation, ensuring the ECCs are set fairly and that no over-recovery is occurring as ECC charges are now several years out of date and fail to recognise the ubiquity of Openreach fibre deployment that has been funded across the industry through regulatory charges.

11.5 As highlighted above, the business connectivity retail sector has funded the extension of BT's network build. Every new Ethernet connection includes an allowance of £550 - £670 over the period since 2014 and any connection work (ECCs) above £2,800 is additionally funded by the retail market separately. The total network build that has been funded (conceptually co-invested) by the retail sector is not reported separately in the regulated accounts, and we have no transparency of the value of the funded asset.

11.6 The regulated accounts do, however, show the annual total funding that the retail market has provided to BT. This information for the past five years is shown below, but it should be emphasized that the retail market has been funding Openreach's network extension for a much longer period:

£'millions	2015	2016	2017	2018	2019
Excess (over £2,800) build ECC	30.5	26.5	40.2	27.2	19.5
Connection (included) ECC	18.7	25.7	28	8.8	8.5
Total	**49.2**	**52.2**	**68.2**	**38**	**28**

[13] https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2015/index.htm

11.7 This system, unchecked, allows BT to benefit from the funding provided by the retail sector in three ways:

- Use of the asset after the contract period: network extensions (fibre and duct) have extremely long lives (20+ years); however, BT only provides access for the contract period, which can be as short as 1 year. Unless regulated, the retail market potentially will not be able to access the duct and fibre extension that it provided funding for
- Revenue recognition of the ECCs when the retail provider pays: its seems from BT's regulated accounts that the complete revenue paid by the retail sector to Openreach for ECCs is recognised when it is paid
- Costs included in the regulated asset base: It is not clear when BT recognises the costs of ECCs as these do not appear to be recorded separately in BT's regulatory asset base. They could therefore benefit from further depreciation by being included in regulated prices and a WACC allowance being applied to these assets.

11.8 The table below demonstrates this using the network extension that has been funded by the retail sector for the last three years. It is worth noting that Openreach will still be benefiting from ECCs paid for in the many years prior to 2015, due to the lengthy duration of the assets' usable liftimes.

In £'million	2015	2016	2017	2018	2019
Excess (over £2,800) build ECC	30.5	26.5	40.2	27.2	19.5
Connection (included) ECC	18.7	25.7	28	8.8	8.5
Revenue Benefit (rounded)	**50**	**52**	**68**	**38**	**28**
Additional WACC on MCE over 20 years (discounted to NPV) - estimate					**£100+**
Additional capital depreciation in charge control (discounted to NPV) - estimate					**£100+**
Total Benefit					**£436+**

11.9 The table shows that although Openreach already benefits from the £236m paid by the retail sector, they gain an additional £200m+ for the same assets due to the way they're treated by charge controls and regulation.

11.10 Our analysis is based on the assumption that:

(a) *All ECCs are fully funded by Openreach customers, which includes CPs, BT consumer and BT global services.;*

(b) *The value of the ECC work is capitalised and included in BT's duct and fibre asset base; and*

(c) *These assets are then deprecated and included in product cost allocations and return [at least the nominal Ofcom] return on capital, assumed to be 10%, for the next 20 years.*

11.11 These assets are not BT Openreach's and should be identified separately in Openreach's asset register. It is unclear why Openreach is able to not only make a return on unspent capital, but also charge a premium for active products based on the fibre we have funded.

11.12 In Ofcom's consultation, excess construction charges are briefly discussed and Ofcom continue to believe that a system whereby the first £2,800 of a new fibre connection is funded by a portion of the connection charge is still appropriate.

11.13 Due to the distortion effect this has on competition and the progression of fibre build-out to businesses, Vodafone believes that Ofcom's position as stated above in 1.89 needs to be analysed further. Firstly, Vodafone considers it appropriate that other fibre builders have access to this fund of pooled funding (i.e. part of the connection charge allocated to new builds). Secondly, it is Vodafone's considered position that the actual level of the charge needs to be examined. It is assumed that Openreach have extended fibre to many new business premises over the past five years. It is therefore logical to assume that it is increasingly the case that they no longer have to actually extend fibre to businesses. With a subsequently smaller number of network extensions, the pooled funding is used in a lower percentage of new connections.

11.14 Vodafone does not understand the methodological change Openreach has made to the accounting of their ECCs in this year's change control notifications[14] . Openreach explain that:

> *"Ofcom's RFR statement, dated July 2019, directs all costs attributed to Excess Construction Charges (ECCs) to be decapitalised. These costs will now be treated as operating expenses and no ECC costs will be capitalised in the future. "*

11.15 Openreach then go on to explain the impact of this change:[15]

> *"An increase in costs of £32m and a decrease in MCE of £316m in the Business Connectivity markets; - A decrease in costs of £2m and a decrease in MCE of £152m in the Openreach residual markets; and - A decrease in costs of £5m and a decrease in MCE of £56m in the Rest of BT Residual markets. There is no impact on revenue at the level of detail reported in Sections 2.1 to 2.3. "*

11.16 We do not understand how this latest change corrects the position of either the accounting of Openreach's ECCs or indeed the positon of ECCs in terms of ensuring operators benefit from the pool of costs collected through the connection charge.

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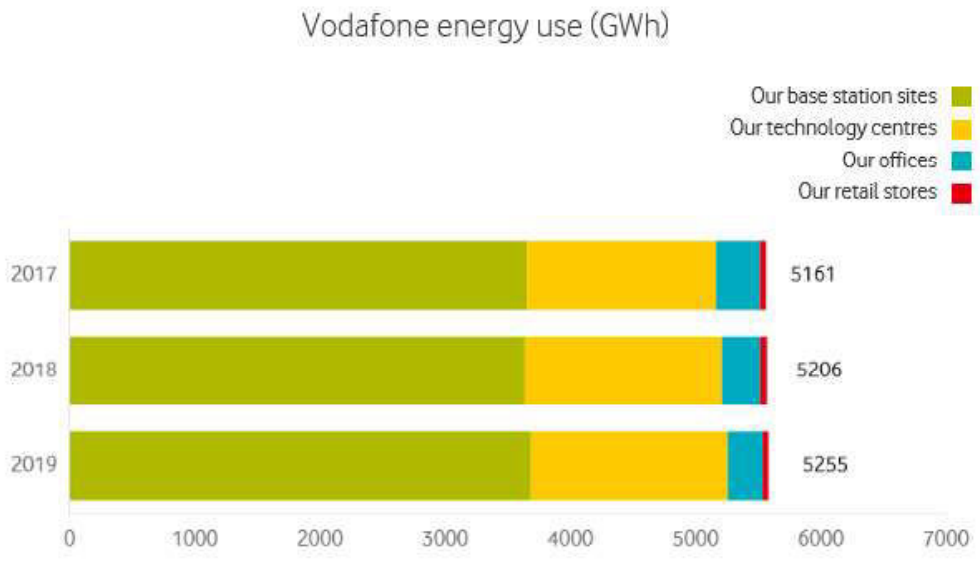
[14] Section 3.08
https://www.btplc.com/Thegroup/Policyandregulation/Governance/Financialstatements/2020/ChangeControlNotification/Downloads/ChangeControlNotification2019-20/change-control-notification-2019-20.pdf
[15] Section 3.08
https://www.btplc.com/Thegroup/Policyandregulation/Governance/Financialstatements/2020/ChangeControlNotification/Downloads/ChangeControlNotification2019-20/change-control-notification-2019-20.pdf

12. Regulated services should not be a barrier to market participants making environmental improvements: Vodafone's pledge to be carbon neutral by 2025

12.1 As customer demand for data continues to grow at a rapid rate, ever-greater demands are placed on our access networks and technology centres. We are prioritising new and existing measures to increase our energy efficiency in order to reduce the greenhouse gas (GHG) emissions associated with our operations.

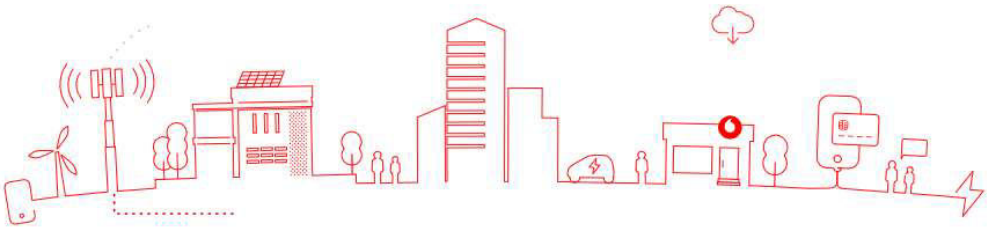
12.2 We are committed to improving energy efficiency in our base station sites and in our technology (data and switching) centres, which together account for the vast majority of our total energy consumption.

12.3 This year, we focused on implementing improved efficiency savings for power supply and cooling systems at our sites. We use large numbers of servers and other network equipment, which generate significant amounts of heat during their operation. Cooling technologies are therefore an essential part of our energy strategy, as too much heat can harm components and lead to network failure.



	Our base station sites	Our technology centres	Our offices	Our retail stores
2017	3,651	1,510	350	51
2018	3,637	1,569	308	55
2019	**3,684**	**1,571**	**282**	**45**

The amount of energy our business uses varies across our operations



66%
Our base station sites

28%
Our technology centres

5%
Our offices

1%
Our retail stores

Optimising our power-intensive equipment >

We work with our equipment vendors to ensure that increased demand and business growth do not result in a similar percentage increase in electricity usage.

Using adiabatic cooling solutions in hot climates >

We have been using free-air cooling systems in many of our technology centres for several years. They are more cost and energy efficient than conventional air conditioning solutions but are not always effective in hot climates. To address this limitation, we are introducing adiabatic cooling systems.

Increasing integration of renewable energy into national grids >

The expansion of renewable energy sources for on-grid electricity generation is a critical aspect of efforts to mitigate climate change. However, two of the most common renewable sources – wind and solar photovoltaic generation – fluctuate in efficiency depending on weather conditions.

12.4 We recognise that urgent action is needed to combat climate change and its impact. For example, we have reduced the emissions ratio for GHG per petabyte of mobile data by 36% over the last two years. We have also reduced the amount of CO2 we have produced by 2 million tonnes.

12.5 Unfortunately, we do not control or manage all parts of our network; we rely on regulated network products and services procured from other operators. In particular, we procure access Ethernet and fibre services from Openreach and in order to procure these we buy exchange space and exchange services from Openreach. In total, we spend over [redacted] on wholesale service supplied by Openreach, which is equivent to nearly [redacted] of our total revenue in the UK.

12.6 If we are to reach our global targets for Vodafone of being carbon neutral by 2025, we have to increase the environmental efficiency of the products and services we procure from Openreach. We have identified two key areas where significate carbon savings could be generated; the first is through switching from using Openreach active Ethernet service to dark fibre services and the second is by Openreach cleaning up the co-location space we rent and minimising the associated electricity charges.

Switching to dark fibre from active Ethernet services slashes carbon footprint by 50%

12.7 In places where we do not have our access network present, we procure active Ethernet products from Openreach. We spend over [redacted] procuring these products and incur a high carbon footprint as a result because these products do not make efficient use of the fibre network and use additional equipment in exchanges, which incur additional power usage and costs.

12.8 All fibre circuits that are connected from operators to end customers require an active electronics box at either end of the fibre. The boxes can be made smaller, more efficient and as environmentally friendly as possible, but one box on either end is unavoidable at present.

12.9 However, when active Ethernet circuits are procured they require firstly a box at either end supplied by the wholesaler (in this case Openreach) and then a box at either end that actually delivers the customer's service. The purpose of the box supplied by the wholesaler, in this case Openreach, is to limit/control the service that the other network operator is receiving.

12.10 For example, if we procure an active Ethernet LA 100Mbit/s circuit from Openreach they will charge us a connection cost of £1,848 and an annual rental charge of £1,374. However, if we procure an active Ethernet LA 10Gbit/s circuit Openreach will charge us a connection charge of £5,436 and an annual rental charge of £4,146. In both examples, the supply of the 100Mbit/s and 10Gbit/s service, the underlying costs that Openreach incur to deliver the service and fibre connection from one location to another are the same. In fact, the only difference is the electronic box they put on either end to control/limit the service received by us and we would prefer this box was not included at all.

12.11 If the electronics box at either end of the fibre connection were not included by Openreach operators procuring the service would be more able to control and manage the service they actually deliver to the end customer over the fibre, whilst also reducing their power costs and enabling a simpler network design. This product would be called dark fibre and it is available in some areas of the country for some specific purposes. Unfortunately, Openreach do not want to make it available universally and despite operators repeatedly calling for regulated access for national dark fibre products, Ofcom have not implemented this to date.

12.12 When we use these services, in order to take control of the service we add additional boxes effectively replicating the ones that Openreach provides. As well as this duplication being cost inefficient, the duplication is harmful to the environment requiring surplus power and cooling.

12.13 Ofcom explain in their consultation why they have limited the scope of dark fibre access to specific areas of the country:[16]

> *"We have also ensured that cost-based dark fibre access does not undermine the case for competitive network investment by limiting the scope of the remedy to Area 3.*

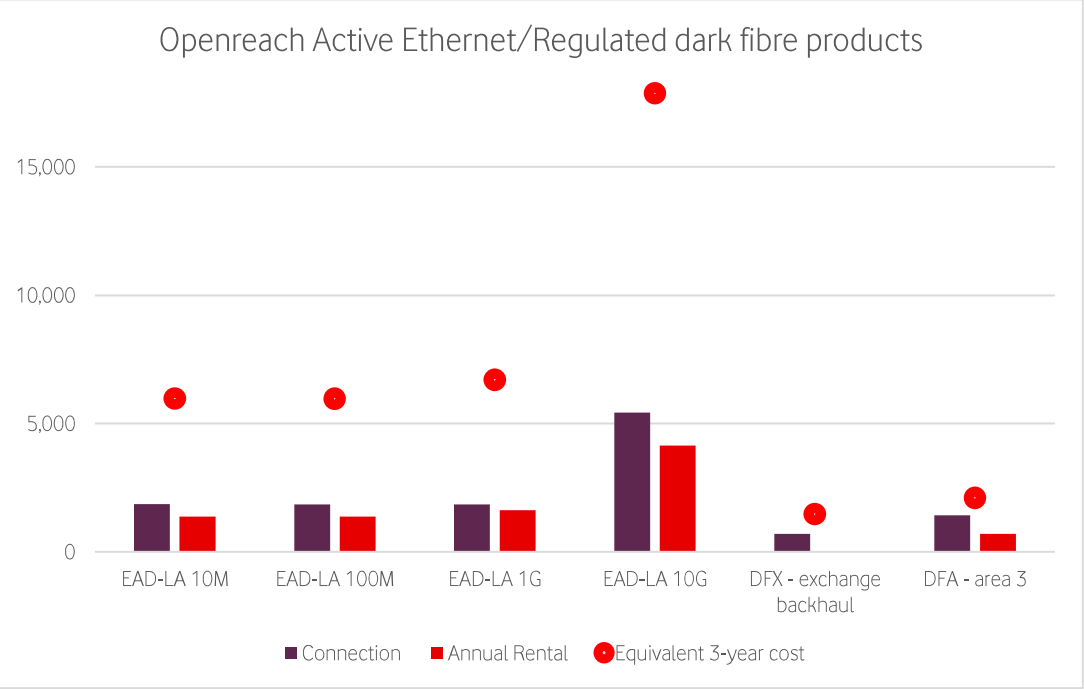
[16] Paragraph 2.104, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

As discussed in Volume 1, we anticipate that the test set out in section 88 of the Act may be amended before we issue our Final Statement, to give effect to Article 74 of the EECC. This requires NRAs, in determining whether price control obligations would be appropriate, to take into account the need to promote competition and long-term end-user interests related to the deployment and take-up of next-generation networks, and in particular of very high capacity networks. NRAs are also required to ensure that any mandated cost recovery methodology or pricing mechanism serves to promote the deployment of new and enhanced networks. We have taken this into account by proposing a set of charge controls that we consider will best promote competition and the take-up of next generation services through wholesale access to BT's network."

12.14 We do not clearly understand why Ofcom believe implementing the regulated product of choice that access seekers require nationally would undermine investment in consumer fibre to the home, especially when most of the operators rolling out fibre actually have very little interest in selling other network services. Insofar as some operators (for example CityFibre) are relying on the sale of other network services to bolster their business case for consumer fibre to the home roll-out, they are relying on selling dark fibre services, not active Ethernet services. Again, this highlights the market desire for dark fibre services rather than restrictive active Ethernet services.

12.15 Even if Vodafone considers Ofcom's argument that regulated dark fibre services available nationally would undermine network investment, a more accurate reading of this position soon emerges. What Ofcom actually means is that such regulated dark fibre services are priced at a level that makes network investment unprofitable! The sale of dark fibre, as opposed to active Ethernet circuits, cannot in and of itself undermine network investment.

12.16 Vodafone have examined the current pricing structure of Openreach's current Ethernet product offering and the regulated dark fibre that is available in some parts of the country. The diagram below shows the range of prices offered by Openreach for their products. At one extreme, the 3-year equivalent price for 10G Ethernet products is £17,874 and at the other end of the scale the price for exchange backhaul is £1,479. The costs incurred by Openreach to deliver these services are effectively the same apart from the active 10Gbit/s electronic boxes supplied with the more expensive service that network operators do not want anyway. This pricing structure for products, which are in the same market, delivered by Openreach in areas where they mostly have (apart from the London area) SMP seems odd.



12.17 Vodafone believes that making dark fibre nationally available would give network operators the product they desire, drastically reduce the carbon footprint of networks and enable operators to deliver enhanced services to end customers. We understand Ofcom's focus on network investment and their strong desire not to do anything that may discourage this and therefore we accept there is a discussion and balance to be struck regarding the pricing of nationally available dark fibre. We accept that it may not be appropriate to price all dark fibre the same, in fact we notice that Ofcom have set different prices for dark fibre in area 3 and exchange backhaul dark fibre. Even then, having to procure the same product at different prices is far easier and preferable than having to procure a whole range of different products.

Openreach could cut Co-mingling space & electricity charges

12.18 Many operators have to locate hand-over equipment and connections in Openreach's exchanges - indeed it is actually the only way some regulated services can be used. A number of these services are in areas and for products where Openreach has SMP, so for other operators to have access to co-mingling and electricity at Openreach exchanges is an integrated part of the remedy to Openreach's SMP.

12.19 Vodafone have commenced, over the last two years, a comprehensive programme to review costs. A large part of this review has focussed on building costs, utility costs and other associated network ancillary service costs. We have made significate savings in our network, we have reduced electric

costs by using more efficient equipment, rationalising equipment, reducing space required and generally integrating all parts of our network architecture.

12.20 However, a significant part of our network costs are associated with charges paid to Openreach for exchange space that we require and electric charges that we have to incur to run the active Openreach equipment in the exchanges. These costs have not reduced over time, despite us reducing the amount of Openreach space we need and trying to reduce the overall volume of exchange services we buy from Openreach. This is because prices have gone up and space is not being efficiently utilised by Openreach.

12.21 We have two questions that we would like Ofcom to answer that are not clear to us from reading Ofcom's consultation:

(a) Firstly, why have Co-mingling charges increased by over 50% over the last three years? Whilst we understand that they will track inflation going forward, we do not understand the reason for this initial rise. We speculate, that as operators have rationalised their occupied space, Openreach have had fewer places to distribute costs and they have distributed increased costs on the remaining operators. In reality, rents and power costs for housing equipment has not increased by 50% over the period and we have managed to actually reduce these costs in all other areas of our business, apart from where we are billed for them by Openreach.

(b) Secondly, why have electric charges increasing at a time when the overall market for wholesale commercial electricity prices appears to be reducing? The below graph from Ofgem clearly shows reducing wholesale prices over recent periods[17]

[17] https://www.ofgem.gov.uk/data-portal/wholesale-market-indicators

12.22 Ofcom should carry out a full cost review of the space, electricity and associated ancillary charges in Openreach exchanges. A full cost review, rather than a report based on a representation of some of Openreach's costs, would show that these charges are inefficiently incurred with a detrimental cost to the environment. Every regulator has taken on the Government's ambitions to help the UK become a society that reduces its impact on the environment and reduces its carbon footprint. Ofcom need to demonstrate that they have also taken on this responsibility and challenge the regulated incumbent operator, with market power, to ensure its products and services are optimised to have the smallest possible environmental impact.

13. Regulatory Asset Values Approach in Area 3

13.1 In the consultation and in annex 18, Ofcom propose a RAB charge control approach for MPF and GEA FTTC services to incentivise Openreach's investment in fibre networks in Area 3. However if the purpose of the RAB approach is to support fibre investment in Area 3, we don't believe the RAB approach will achieve Ofcom's objective.

13.2 Ofcom state that they believe:[18]

> *"A RAB approach can help us ensure consumers are protected from excessively high prices whilst providing Openreach with incentives to invest in fibre."*

13.3 We understand from the quote above and from Ofcom's consultation that the purpose of implementing a regulatory asset base (RAB model) is:

(a) to ensure consumers are protected from excessively high prices and

(b) to provide Openreach with incentives to invest in fibre.

13.4 RAB models are used in various regulated industries; common examples are the water and energy industries. In these industries, the primary purpose of the approach is to ensure that only costs and opex approved by the regulator are recovered in the charges applied to customers. The operators are not allowed to simply recover their incurred costs. They are only allowed to recover the costs that are incurred in line with the regulators' expectations and, generally speaking, only after they have been scrutinised by the regulator.

13.5 We have assessed the impact, benefits and costs of implementing a RAB model in the telecoms industry. It is our considered position that Ofcom must, in line with the detail included in their consultation, answer the following three questions:

(a) Does a RAB model protect consumers from excessively high fibre prices?

(b) Does a RAB model provide incentives for Openreach to invest in fibre?

(c) Does a RAB model ultimately support fibre investment in area 3?

Is Ofcom actually proposing to implement a RAB model in their consultation?

13.6 In the context of the water industry, the Ofwat use a RAB approach to ensure water suppliers charge prices that are closely matched to the underlying costs they incur (plus an allowable regulated cost of capital). The process of using a RAB model to regulate the water industry involves a lengthy process between the regulator and the water operating companies. This includes a highly detailed process whereby the operators' plans are scrutinised by the regulator in a two-way process that generally takes years. For Ofwat's 2020 pricing review, their first consultation was published in July 2017[19] and an iterative process of business plan submission, review, amendment and resizing occurred over the following 2 years between the regulator and the operating water companies.

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[18] Paragraph 2.18, https://www.ofcom.org.uk/__data/assets/pdf_file/0030/188814/wftmr-volume-4-pricing-remedies.pdf

[19] https://www.ofwat.gov.uk/consultation/delivering-water2020-consulting-on-our-methodology-for-the-2019-price-review/

13.7 It appears from Ofcom's consultation that their intention is not to engage in such a process. In fact it appears that Ofcom has already estimated Openreach's spend in rolling out fibre networks between 2021 and 2025. Ofcom do not consider it necessary to further analyse Openreach's costs in this regard and are, it would appear, content to use an average cost of fibre rollout per premise to underpin their RAB model calculations.

13.8 The price of the resulting fibre services provided using the assets included in the RAB model are not, at least for the next five years, going to be price regulated (apart from the slowest anchor services delivered after the copper switch-off). This conclusion is also based on Ofcom's consultation.

13.9 In conclusion, we summarise that Ofcom has proposed a RAB modelling process that does not involve a detailed examination of Openreach's costs or include a process by which the resulting services delivered by the assets are necessarily price regulated.

13.10 For the above reasons, we believe Ofcom's proposed RAB model should more accurately be termed an "enhanced fibre roll-out and take-up incentives model". The RAB model Ofcom is proposing is effectively an 'add-on' or 'bolt-on' to their usual modelling approach. It has the effect of encouraging the take-up of fibre services and the roll-out of fibre by spreading the fibre investment costs onto copper services and thus making copper service more expensive than they otherwise would be.

13.11 The consequences for consumers over this review period are, in the case that Openreach rolls out fibre services in area 3, that copper services will become more expensive than they otherwise would be and fibre services are provided at a price to be determined by Openreach. If, as a consumer, you have a strong desire for fibre broadband and the price you pay is relatively in-elastic then Ofcom's proposal could work for you. However, if you are a consumer that is either content with your current copper-based broadband service or are unwilling or unable to pay an increased amount for broadband services, then Ofcom's proposal would be detrimental to you.

Will the RAB model achieve Ofcom's aims?

13.12 As discussed above Ofcom's stated aim of using a RAB approach is to ensure consumers are protected from excessively high prices whilst also providing an incentive for Openreach to invest in fibre services.

13.13 It is very difficult to understand how Ofcom's RAB proposal can ensure consumers are protected from excessively high prices. The mechanism Ofcom generally uses is a cost-based CPI-X charge control. In area 3, this is what Ofcom has suggested for copper-based FTTC services and this should serve to protect consumers should they desire copper-based broadband services. However, the RAB model will enable Openreach to price FTTC broadband services above cost. Therefore, in fact, the RAB model serves to do precisely the opposite of Ofcom's stated goal to protect consumers from excessively high prices. It dilutes Ofcom's traditional CPI-X cost-based approach and enables Openreach, in certain circumstances, to price above cost.

13.14 While Ofcom's RAB approach does provide incentives for Openreach to invest in fibre, we believe these incentives to be very limited. In any case, Ofcom's analysis has considered the wrong question.

13.15 The RAB model Ofcom is proposing enables Openreach to spread the risk of fibre investment in Area 3 (by increasing copper prices) and serve to encourage consumer take-up (by making copper broadband more expensive). However, the question Ofcom should be answering is not 'does our RAB modelling approach increase the incentives for Openreach to invest in area 3?' It should be asking 'does our RAB modelling approach increase the incentives for Openreach to invest in Area 3 as opposed to Area 2?' To this, the RAB model falls far short of providing any real incentives for Openreach to invest in Area 3 rather than Area 2. In the event that Openreach invest in Area 3, rather than Area 2, they will be able to charge slightly more for copper-based services in Area 3. However, they will also risk (by not building fibre in Area 2) losing customers in Area 2 permanently and losing all the associated revenue that they may have enjoyed not to mention reducing the economies of scale in Area 2 and the future increased competition risk.

13.16 If Openreach had unlimited capital funding then the point in 1.130 may not be an issue. But Openreach is actually, like every other network operator, cash constrained. It is therefore highly unlikely that Openreach will have the capital available over the next review period to roll-out fibre networks in both Area 2 and Area 3, particually as a result of recent changes in economic circumstances following the pandemic.

Does a forecast build or post-build RAB model make any difference?

13.17 In their consultation, Ofcom has discussed whether taking a pre-investment or post-investment approach would more accurately achieve their stated objectives. To enable Ofcom to consider a pre-build RAB modelling approach, Openreach would have to share plans that include rolling out their fibre network in Area 3. Openreach would then need to be prepared to commit to those plans and deliver network build accordingly. Ofcom would then need to analyse, critique and potentially adjust those plans accordingly. However, to date, we understand that Openreach do not have any firm plans to roll-out their fibre network in Area 3. We also understand that Ofcom have not seen any such plans from Openreach. We therefore conclude that a pre-build RAB modelling approach is not possible at this stage. Given all this, we also consider it doubtful that a process including the level of scrutiny required could now be performed before March 2021.

13.18 Ofcom's only option is therefore a post-build approach. Notwithstanding all of the issues mentioned above about the RAB model proposed by Ofcom, the added issue with a post-build approach is that it creates uncertainty and instability in the market. Retail businesses cannot forecast what wholesale prices may be over the next five years and other network investors cannot forecast what prices their build–out will be competing with. As is generally the case with business markets, uncertainty drives inaction.

Ofcom should be able to answer the appropriate questions and justify a RAB modelling approach

13.19 As discussed above, we believe Ofcom should answer the following questions. Only if they can answer yes to all the questions with the appropriate justification, should it proceed to implement a RAB modelling approach.

(a) Does a RAB model protect consumers from excessively high fibre prices?

(b) Does a RAB model provide incentives for Openreach to invest in fibre?

(c) Does a RAB model ultimately support fibre investment in Area 3?