Non-Confidential

Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26

<u>*Summary*</u>

1. Virgin Media welcomes this consultation together with its objectives and intended outcome. Indeed, Ofcom's position reflects the stance Virgin Media took in our response to the last Wholesale Local Access review in 2017. There, we made the case that Ofcom should forebear from setting Openreach's wholesale prices at cost in order to preserve the incentives to invest in infrastructure, and thereby make good on Ofcom's 'strategic shift':

> *Ofcom sets up a false dichotomy in its deliberation about how it should proceed: do nothing or set wholesale prices to cost. There is another, more proportionate, approach that really does err on the side of investment incentives.* ***Ofcom could impose a safeguard cap on Openreach's 40/10 wholesale product at today's prices.*** *In the contemporaneous consultation on duct and pole access remedies Ofcom proposes just an approach: setting a maximum cap on charges to prevent wholesale prices from rising. This type of simple intervention would both prevent the threat of higher prices, and support those willing to risk their capital in digging trenches and laying fibre.* (emphasis added)[1]

2. Given Ofcom's intention to depart from cost-oriented charge controls on Openreach's anchor product for the bulk of premises, we strongly support the large majority of proposals in the consultation. Nevertheless, we use this opportunity to make a few substantive points in response rather than comment in detail on Ofcom's underpinning analysis. In summary:

    a. Investments in gigabit-capable infrastructure to the home are long-dated commitments. We would like greater certainty about Ofcom's intentions *beyond* the current market review period to be set out in the Final Statement. On the call with analysts after the consultation was issued Ofcom was clear about its intent to perpetuate the proposed regime beyond the five-year market review horizon. To include such a statement of intent within the Final Statement would not fetter Ofcom's discretion; rather it would set an expectation or a baseline for future reviews to analyse against and provide a further degree of comfort for investors. At the very least, Ofcom could outline the conditions under which it would expect to change its mind.

[1] From the summary of Virgin Media response to the 2017 Wholesale Local Access Market Review.

b. Ofcom's laudable intent is that that wholesale price increases will manifest in higher ARPUs and therefore greater returns from investment in end-to-end networks. However, vertically-integrated investors will be back at square one if consumer regulation strips away these additional margins. Ofcom's work plan for the coming year indicates that there is a real risk that this could be the case (and end of contract notifications will anyway dent the lifetime value of a cohort of customers). We are not suggesting that Ofcom should be inert, but its focus should be on customers that are vulnerable rather than continuing to seek tariff optimisation for the many. This 'middle ground' has the advantage of directing interventions at customers who need the most help, whilst preserving the intended incentives to invest in infrastructure. We urge Ofcom to implement the proposals in this consultation, but not to undermine their objectives and benefits by regulating elsewhere. If anything, the coronavirus has brought (or should have brought) a sharper focus on the need to get the *aggregate* incentives right to ensure that the UK has capable, extensive, reliable and secure broadband networks.[2]

c. There will invariably be those that claim that Ofcom's intentions will augur bad times for customers because prices will rise. This is just scaremongering. Average revenue per user may increase slightly, but the unit price per gigabit passed will continue on its exponential path downwards and households will continue to work for less of their day to pay for a broadband service of materially better quality than they did a decade ago.

d. It seems that Ofcom has abandoned its more purist notion of the 'fair bet' from a few years back. We accept (and support) that Ofcom is reducing the demand risk from Openreach's fibre build, but we do not understand why it cannot be clear upfront about the returns it will permit Openreach to earn before it will return to cost-orientation; or perhaps instead the time period over which it will allow Openreach to earn a return in excess of its cost of capital. Virgin Media seeks further clarity in Ofcom's Final Statement.

e. We support the proposed changes to PIA especially the fixed price lead-in charge but remain concerned that the product is still some way from being fit for large scale deployment. There are critical operational issues still to be resolved. We highlight in our response the gaps in Openreach's build records presented to its PIA customers (but not its own planners) which put the former at a disadvantage; together with the laborious processes involved in operators completing their own network adjustments followed by a lengthy and overly complex arrangements to reclaim costs incurred from Openreach. We urge Ofcom to intervene to strengthen the PIA processes by imposing further requirements on Openreach to ensure transparency of build records and to enable access to its passive infrastructure in a timely and efficient manner.

[2] Especially when the Lex column in the FT on 20 May reports that the brokerage Peel Hunt calculates that *"UK companies have so far excised £23bn of capex".*

f. There are potentially material differences in the way that Openreach's wholesale products are regulated either side of the 70/30 boundary. The logic of Ofcom's proposals for the 70% is that material reductions in wholesale prices will deter investment by reducing the returns available at the network layer. Yet this could be the case if Openreach decides *not* to commit to building in the 30% i.e., cost-orientation and material reductions in prices for the anchor *and* higher speed products[3] – with the absence of competitive build becoming a self-fulfilling prophesy. This is less of an issue if the boundary is draw accurately, but we have a concern that it may not be. Based on desktop modelling (and our experience of building in the Test Valley), together with further improvements in PIA, we believe that up to 80% of premises could be viable to build to – although we accept that this will take time (and is uncertain). Nevertheless, we value the certainty of the current boundaries over the potential detrimental effect of a Type 1 error in the classification of postcodes. We therefore do not favour interim re-evaluations of the boundaries (i.e., within the review period) and we suggest that infrastructure investors are given sufficient time to build out in the 70% i.e., across review periods.

g. We agree with Ofcom that Openreach could use its wholesale pricing structures to reduce the returns available to investors in new networks and undermine their investment incentives. Ofcom proposes to ban some geographic discounting by Openreach. Virgin Media supports this proposal and believes it should be relatively simple to monitor and enforce; although we urge Ofcom to extend the rules to Area 3. However, it is not clear how Ofcom will strike a balance between loyalty discounts or prices contingent on large volume commitments that are essential to Openreach's business case for full-fibre roll-out from the need of alternative competing networks to have wholesale customers. Virgin Media is concerned that Openreach will exploit these forms of discount, as it could geographic discounts, to prevent customers switching from Openreach at a scale sufficient to enable rival builders to compete. We urge further clarity, especially a consideration of whether both conditions could be true i.e., Openreach's discounts are pitched at such a level that they deter rivalrous build, but they are necessary for Openreach to retain a key wholesale partner. In these circumstances, whose claim should prevail?

3. We explain these points in greater detail below.

[3] Although we infer from comments made at BT's recent results that it may be close to committing to build in the final 30%. For example: *"it is critical that we get the enablers as envisaged, and this includes extending the enablers across the whole of the U.K"*

Greater certainty for investors in infrastructure

4. Investment in new gigabit-capable infrastructure is a long-dated commitment with an uncertain payback that straddles more than one five-year market review period. Investors must decide how much to spend today in the hope of reaping uncertain benefits in the future, and the logic of Ofcom's position is that these returns depend, in part, on the regulations in place.

5. In this fashion, investors in infrastructure will invariably worry about the *time-inconsistency problem*. David Newbury explains this well:

> *"The political demands for access and "fair" or non-exploitative prices means that investors must expect that after they have sunk their capital, they will be limited in the prices that they can charge and subject to possibly onerous obligations to supply, to guarantee security, stability, and safety. If these investors are to be induced to invest, they need the reassurance that future prices will be set at a sufficiently remunerative level to justify the investment. Once capital has been sunk, the risk that the balance of advantage will shift toward those arguing for lower and possibly unremunerative prices……What would be needed to persuade investors to sink their money into an asset that cannot be moved and that may not pay for itself for many years? The investors would have to be confident that they had secure title to future returns and that the returns would be sufficiently attractive. Durable investments require the rule of law, and specifically the law of property, which is provided by the State."* [4]

6. Put bluntly, the concern is that Ofcom will change its mind once capital has been sunk.[5] Grajek and Roller have found convincing *evidence* of a regulatory commitment problem. They find that *"regulators respond to higher infrastructure investment by incumbents by providing easier access, thereby undermining incumbents' incentives to invest in infrastructure in the first place"*.[6] This was arguably the case in 2018 when infrastructure investors could have legitimately thought that Ofcom had 'responded' to higher infrastructure investment in FTTC networks by regulating Openreach's 40/10 anchor product at *cost* (resulting in an average nominal compound reduction in prices of 9.4%) whilst allowing price flexibility for higher bandwidths struck *"an appropriate balance between*

[4] David M. Newbury Privatisation, Restructuring, and Regulation. Walras-Pareto Lectures Chapter 2: The Problem of Regulatory Commitment. pp. 28-29, 2001

[5] Perhaps ironically, one of the reasons that we have independent regulators is to avoid this problem. Larry Summers *"institutions should be drafted to solve time-inconsistency problems"* (Journal of Money, Credit and Banking, 1991.

[6] Michal Grajek and Lars-Hendrik Roller; Regulation and Investment in Network Industries: Evidence from European Telecoms. Journal of Law and Economics, 55 (February 2012).

encouraging network investment and protecting customers from the risk of higher retail prices".[7] And this was after having adopted a *"major strategic shift"*.[8]

7. Virgin Media is nevertheless encouraged by Ofcom's comments in the analysts' call on the day of the release of the consultation:

> *"Yes, we did mention that but I'm happy to reiterate that our intention would be that we wouldn't return to cost orientation in a second cycle, so for the period for the next market review after this one. So ten years of stability and certainty.*
>
> *Now, if my general counsel was here, she would point out that I can't actually be bound by that because we will have to look at the facts at the end of this current five-year period. But, certainly our intention would be to provide that kind of ten-year certainty."*

8. We see no reason why this intention cannot be reiterated in Ofcom's Final Statement without any issues that Ofcom would be fettering its discretion (as we agree future decisions would be reliant on market conditions as at the time of any review). Indeed, we urge Ofcom to go further and outline the conditions under which it would deviate from this intention in five years' time. (See also the discussion of the fair bet below).

Trade-offs: wholesale price increases undermined by retail regulation

9. Ofcom has taken a "*strategic approach*" to its statutory duties. It deems that the interests of citizens and consumers will be furthered by creating *"appropriate conditions to incentivise both Openreach and other operators to invest in fibre networks"*.[9] This is a position Virgin Media supports. For the areas of the country where Ofcom believes that rivalrous infrastructure competition is in prospect it intends to *"propose remedies which encourage communications providers to build networks for themselves".*[10] Importantly, this will be done by regulating access

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[7] Wholesale Local Access Market Review: Statement March 2018 paragraph 1.36:

Table 1.1 VULA charge controls[3]

	Current annual charge	Annual charges (£-nominal)* 2018/19	2019/20	2020/21
FTTC 40/10 ('up to 40 Mbit/s') rental	£88.80	£69.59	£61.12	£59.91
Copper access[4] rental	£84.38	£85.46	£84.95	£84.84
Combined rental charge	**£173.18**	**£155.05**	**£146.07**	**£144.75**

**Some of the figures in this table and paragraph 1.41 below have subsequently been amended as set out in the explanatory note:* https://www.ofcom.org.uk/__data/assets/pdf_file/0011/114203/Explanatory-note-modification-SMP-condition-7a.pdf

[8] 1.5

[9] 1.4

[10] 1.9

services *"such that network investment by competitors is viable"*.[11] (our emphasis). Ofcom has undertaken modelling to ensure that its *"proposals sit within the range necessary to deliver both cost recovery for Openreach and alternative network operators".*[12] In colloquial terms, Ofcom wants to see 'more juice in the system' to encourage competing providers of end-to-end infrastructure to 70% of premises.[13]

10. Ofcom summarised its new strategy on a call with analysts on the day the consultation was released (our emphasis):

> *We're capping it to CPI but that's a significant departure from the past. If you imagine the past, the counterfactual would have probably been a CPI-X type arrangement. The upshot for that is* ***we're injecting a lot of additional margin and returns for the whole industry in terms of the network builders****. So, effectively, this is very pro- infrastructure.*
>
> ***We've talked about indexing prices and leaving greater margin in the network layer. Again, that would help the investments in these cases****. And, we've also talked about the fact that we will only regulate what we consider to be the entry-level product, which is a 40 Meg product and actually give pricing flexibility above that, again* ***giving more margin and pricing flexibility for those investors.***

11. The intent is clear: to improve the prospective returns to builders on *competing* infrastructure to give them greater incentive to build. This, in turn, will motivate (and continue to motivate) Openreach to upgrade its network with fibre to the premises. We support this approach. However, we note that the one of the major scale network builders in the UK[14] –Virgin Media– is a vertically integrated entity and is therefore affected by other regulations focused at the retail level that can limit the extent of viable returns which in and of itself has knock-on consequences for incentives for network expansion and fibre deployment.[15]

12. To substantiate this point it is instructive to look at Ofcom's recently revised Annual Plan. We list below some of the consumer-facing activities that are scheduled for this financial year.

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[11] 1.10
[12] 1.25
[13] In Volume 4, page 19, paragraph 1.84 (subparagraph b) Ofcom does actually admit that *"retail prices may increase slightly"*.
[14] We will also upgrade our entire network to gigabit capability by 2021. This process has already started: Virgin Media has upgraded its network in Southampton, Reading, Manchester, Birmingham, Coventry (plus surrounding areas in each location)
[15] We do not address the question of whether BT is a vertically integrated entity. Openreach is a legally separate entity with its own Articles of Association, but the cheques are still written by BT and therefore we believe that the reasoning outlined in this section also applies to BT. Put another way, BT Consumer is Openreach's largest customer and retail regulation which dents the lifetime value of customers will reduce the returns that BT Group derives from investing in fibre, and presumably its appetite to do so.

- Monitoring the impact of end-of-contract (EoCN) and annual best tariff notifications (Ongoing)
- Implementation the European Electronic Communications Code (by 21 Dec 2020) - *"We also expect to consult on further changes to how customers are able to switch their landline and broadband services in Q2."*
- Open Communications – "*We are developing proposals for an open communications initiative. This would enable people and small businesses to share data about their use of telecoms (such as their current tariff or data usage) with third parties to help them navigate the market and get a better deal." Q2 2020/21*
- Collective switching – *"We will be reviewing how providers have implemented these {end of contract] notifications, their impact on customer behaviour and whether consideration of other remedies, such as collective switching, may be appropriate"* (Ongoing)
- Personalised pricing – *"We will publish a discussion document on personalised pricing, including the use of data and algorithms that support these practices."* (Q1 2020/21)
- Charges on non-geographic numbers - ***"****We will continue our strategic review of the telephone numbering plan to make sure it provides what consumers understand, want and need from numbers for the coming decade. In particular, we will be considering the future of area codes, 084/087 numbers and we will continue our programme to address anomalies in the use of and charges for calls to 07 numbers. We will carry out this work alongside our review of the charges for non-geographic numbers."* (Ongoing)

13. Ofcom's comments on collective switching are particularly revealing. The implication we draw is that if end of contract notifications *do not* reduce the bills of a sufficient number of customers (through re-contracting at lower rates), Ofcom will consider further action in the form of imposing collective switching. Put another way, Ofcom seems determined to find a retail intervention that will claw back some or all of the greater margin that it is intending to inject at the network layer, thereby undermining the very investment case it is seeking to promulgate. This plan of action is summarised on page 30 of the revised annual plan,[16] with the Wholesale Market Review covered on page 27, but with no acknowledgement that there may be a trade-off between the two.

14. Taking the first issue on the list above: end-of-contract and annual best tariff notifications; various analysts have looked at the impact on Virgin Media:

- **HSBC (29 January 2020):** *We see UK ARPU under more pressure in 2020 and now forecast a small ARPU decline (vs small growth previously) despite a*

[16] *"We expect these notifications to have a significant positive impact in helping customers engage with the market and take advantage of the wide choice of offers available. We will be reviewing how providers have implemented these notifications, their impact on customer behaviour and whether consideration of other remedies, such as collective switching, may be appropriate."*

likely price increase in H2 2020 of 3-4%. Despite a potential price increase in H2 2020 that we anticipate, we believe Virgin Media will have a hard time in growing its average base ARPU during 2020 as a result of the "transparency regulation". Next to continued voice and out-of-bundle revenue declines as well as some discounting in the base (nothing new), we expect a portion of the base to optimise its subscription which may lead to some re-contracting at lower absolute price points or dropping TV or telephony components of the bundle.

- HSBC (29 April 2020): *For Q2-Q4 we are more cautious on ARPU development as we may see more spin-down when unemployment rates in the UK increase, as well as some negative impact from the (Ofcom regulated) price transparency letters that are sent to customers…… While the impact so far has been moderate, we believe that the majority of letters still need to be sent for customers that were already out of the minimum contract when the new regulation applied. UK operators have until 31 January to inform customers of prices for alternative or speed equivalent offers….. According to management during Q4 2019 investor call, cGBP50m of implied negative impact had been backed into the guidance for this new regulation and potential customer reaction (CFO Charlie Bracken mentioned GBP100m total cost headwinds, with transparency letters being the biggest)…..Nevertheless, not all letters are being send at once (so as to not overload customer call centres), so we expect the impact to be spread to all quarters of 2020 and well into 2021, where we now also forecast a small negative ARPU. While we expect ARPU growth in Q1 to be +0.9% YoY, we expect it to turn negative from Q2 (-0.4%) and increasing negatively towards Q4 (-1.3%). This is related to the above mentioned impact from the transparency letters, likely higher unemployment rates in the UK, a potentially delayed price increase (see following discussion), and lower pay-per-view live events in 2020. For 2021, we now expect a -0.6% ARPU decline YoY despite an anticipated small price increase in late 2021.*

- **Jefferies (21 January 2020)** uses the data in the table below and concludes *"[i]f VMED were forced to recontract all out-of-contract customers at this £47, the downside to blended ARPU could reach -£4 or -8%. Using this as a prediction would be naive - among other reasons, the natural reaction of VMED and the industry is to reduce promotional discounting (i.e., reduce the price OOC-NC and OOC-RC differentials), customer inertia almost certainly means that not all customers will recontract, and the effect would be spread over several years."*

Exhibit 4 - Ofcom data implications on VMED situation

Blended UK cable ARPU (3Q19, £)	**51.3**
Assumed mix of customers by contract status	
- out of bundle	41%
- recontracted	39%
- new	21%
Assumed ARPU differentials (£)	
- OOC vs NC	10.1
- OOC vs RC	10.5
Implied ARPUs by contract status (£)	
- out of bundle	57.3
- recontracted	47.3
- new	46.8

Source: Jefferies estimates

- **Benchmark (13 January 2020).** *We now introduce a matrix that looks at eventual 2023 Adj. OCF and 2020 price target effects from the "loyalty" pricing issue. The key elements are what percentage of homes take advantage of potential price discounts and what component of the estimated ~£10 monthly price gap is recouped with new offer alternatives (the latter could include elements like increased speed and mobile product). Fallout will likely persist into 2021 as only ~50% of Virgin customers are currently out of contract. For baseline purposes we assume that 60% of customers take advantage of the discount while ~£6 monthly is recouped through incremental product initiatives (see Figures 6-7 for sensitivities). From a rational actor perspective, it would be desirable for four of the five market participants to simply back off promotional pricing but Vodafone (VOD-NR) is the predatory anomaly as it has no "back book" homes and can aggressively pick up share….. We have also reduced our 2020 adjusted OCF estimate downward to $4,685M from $4,925M, including $110M arising from the "loyalty" issue….*

15. If we use the HSBC and Jeffries reports as the low/high estimates of the impact of end-of-contract and annual best tariff notifications on the blended ARPU (average revenue per user) of Virgin Media this gives a range of between -£0.2 and -£4. Taking the mid-point of this range as £2.10 equates to a 4% reduction in blended ARPU. Put another way, using an inflator of CPI at 2% to MPF and GEA this reduction will be only be made up for through increased margin at the network layer after just over eight years[17] – ironically close to the possible length of this particular regulatory regime (assuming that Ofcom continues with its approach – as we advocate).

16. At the launch of Project Lightning in 2015 Virgin Media made clear the importance of ARPU in the economics of network expansion.[18]

[17] Note that this ignores the cumulative effect of other interventions contemplated: Open Communications and Collective Switching.
[18] http://www.libertyglobal.com/pdf/presentations/Liberty-Global-2014-Investor-Call-Presentation-FINAL.pdf

17. We explained that returns from network expansion were predicated on: a take-up assumption of nearly 40% after three years; an initial ARPU of around £45 and a cost per premises passed of around £500.

18. In its Q1 2020 Investor Call Liberty Global reported 60-month penetration of 35% and a cumulative cost per premises (CPP) of £670.[19] The level of ARPU per premises is therefore having to 'work harder' in the economics of network expansion because the penetration is lower and the CPP is higher than originally projected. Indeed, the level of ARPU is more important as the CPP increases as build extends to more marginal areas.[20] In this vein, in its recent results, BT notes that: *"The gross build costs in schemes supported by public subsidy which we also expect to contribute to the 20m plan are significantly higher than this range; the build cost of FTTP deployed at new housing sites which also contributes to the 20m is also higher since the build and provision stages are typically collapsed into one phase and there is less existing passive infrastructure available to use."*[21]

[19] https://www.libertyglobal.com/wp-content/uploads/2020/05/Liberty-Global-Q1-2020-Investor-Call-Presentation.pdf p.17
[20] Although we hope that the use of Openreach's passive infrastructure will reduce the blended CPP.
[21] https://www.btplc.com/Sharesandperformance/Financialreportingandnews/Quarterlyresults/2019-2020/Q4/Downloads/Slides/q420-slides.pdf page 8, footnote 1.

19. Irrespective of their individual merits (or the extent of Ofcom's discretion in implementation), end-of-contract notifications, collective switching and Open Communications are likely to reduce the lifetime value of some acquired (and retained) customers (i.e., their ARPU over certain periods of their tenure) because their spend will be lower as they recontract onto 'front-book' prices (in the case of Virgin Media).

20. Moreover, this is unlikely to all 'come out in the wash' via a waterbed effect. As Benchmark notes above: "*From a rational actor perspective, it would be desirable for four of the five market participants to simply back off promotional pricing but Vodafone (VOD-NR) is the predatory anomaly as it has no "back book" homes and can aggressively pick up share."*[22] This perspective appeared to be endorsed by Nick Read, Vodafone's CEO in its Q3 2020 Trading Update.

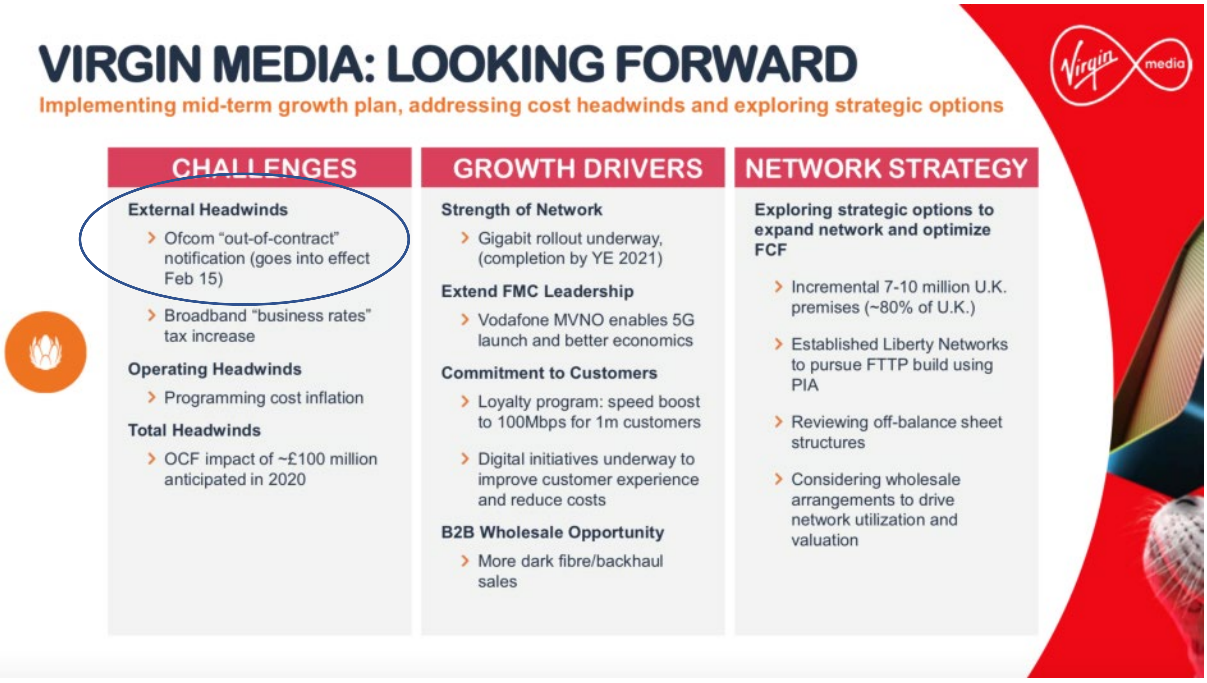
> *"I would say your second question was around the end-of-contract letters for broadband in the UK. Clearly, we see that as an opportunity. Now we've got a lot of customers coming out of contract with the ability – or having to be informed at least that they're out of contract. That we see as a very large addressable market, and I think we've shown that we've got serious traction in the UK, so we will be building plans accordingly."*[23]

21. In its full year results for FY2020 Vodafone gives an update on this opportunity saying: *"In the UK, we began a new campaign, the "Great British Broadband Switch", to coincide with new regulation relating to out-of-contract broadband customer notifications. This campaign contributed to a record number of new Consumer fixed customers added in the fourth quarter. Fixed-line broadband connections now total 751,000."*[24] Vodafone's highest ever quarterly growth in broadband occurred in the quarter in which EoCN was introduced.[25]

22. Indeed, in its work on broadband pricing differentials, Ofcom noted that *"the waterbed effect is larger the more competitive the market, but it will only be complete in a perfectly competitive market"*.[26] In evidence, in Liberty Global's recent results (see below) it highlights 'headwinds' from Ofcom's 'out of contract'

[22] UBS makes a similar point in its note on the UK communications market, 11 February 2020: *"We think Vodafone's actions in the broadband market over the coming months will be critical. If it lifts pricing, we would see this as a positive signal for the whole UK broadband market. However, we are wary that if BT continues to cede broadband market share, then it will likely respond – it has made this point consistently in recent quarters."*
[23] https://investors.vodafone.com/static-files/7fd3eff7-ff23-454c-98e6-04528026e579 p.14
[24] https://investors.vodafone.com/static-files/4e32c6fe-6335-49e1-904f-6808e7d42bed p.5
[25] It could be that a) the asymmetric position of Vodafone compared with its broadband competitors in having no material cohort of back-book customers and b) the need to match Vodafone's aggressive new customer offers, increases front-book/back-book pricing differentials.
[26] https://www.ofcom.org.uk/__data/assets/pdf_file/0018/168003/broadband-price-differentials.pdf p.3.46

notifications i.e., they are not expecting that the rebalancing of tariffs will negate the effect of end of contact notifications / annual best tariffs.[27]



23. Ofcom's laudable efforts to inject more margin into the network layer may therefore be undone by its work to increase customer engagement. We accept that Government avoided giving guidance in how to evaluate these trade-offs in its Statement of Strategic Priorities, requiring that Ofcom both prioritises *"nationwide deployment of gigabit-capable broadband networks at pace"* as well as tackling the 'loyalty penalty' through *"bolder use of existing enforcement and regulatory powers"*.[28] Nevertheless, Ofcom must evaluate these trade-offs if it is to achieve its pro-investment objectives. Hviid and Waddams put this well in their work on Retail Energy:

> *"In particular we argue that, in the frictionless world which underlies many economic models, the market structure will naturally tend towards monopoly; with more than one firm, the competition would be too aggressive to enable firms to fund their fixed costs. If for policy reasons we prefer the market to support several suppliers,* ***some money needs to be left on the table to cover fixed costs.****[29]"* (our emphasis).

[27] Of course, Virgin Media and others will be trying to increase ARPUs through persuading customers to migrate to packages with higher speeds. However, as Ofcom points out, for example, in volume 1 paragraph 2.40 this is subject to risk.

[28]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/842918/SSP_-_as_designated_by_S_of_S_.pdf

[29] Morten Hviid and Catherine Waddams Price, Well-Functioning Markets in Retail Energy, European Competition Journal, April 2014

24. Of course, the effects above (investment incentives undermined by consumer regulation) does not just impact Virgin Media.[30] In a recent report Enders Analysis note: *"[t]o be fair, BT is battling a barrage of competitive and regulatory hits that are affecting all in the sector, but these show little sign of abating, with broadband pricing dipping down in 2020 after a promising upwards trend in 2019, and a number of regulatory measures hitting in H1 2020."*[31] In its recent note (11 May) Citi research estimates that BT will face at £250m EBITDA risk from out-of-contract notifications in 2020/21.

25. These types of interventions undermine the benefits that Ofcom seeks. If it is less compelling for Openreach's rivals to invest, it is less compelling for Openreach to invest; it might as well sweat its copper assets for a few more years. The art of regulation in the coming years is surely to ensure that the incentives to invest are preserved (given the benefits to consumers and the economy)[32] but that vulnerable customers are protected. Recently the firm Assembly has both conducted a survey of studies on the benefits to the economy through investment in fibre and 5G and provided their own. They estimate that *"assuming rollout is completed by 2025, the UK could stand to benefit from £51.4bn GVA, growing to £68.8bn in 2030, should current rollout targets be met"*. Although we concede that it is an 'apples to pears' comparison it is worth comparing these figures with Ofcom's estimates of the quantum of the 'loyalty penalty' in broadband at between £800-900m (ignoring any reduction following the consequential rebalancing of prices).[33]

<u>Impact on retail prices</u>

26. In a recent press release announcing the appointment of a new Director of Corporate Affairs, the CEO of TalkTalk said *"[we] want to see the maximum number of homes and businesses benefitting from full fibre, but it's crucial that's done in a way that protects competition and ensures full fibre is affordable for everyone"*.

27. In its response to Ofcom's consultation on Promoting investment and competition in fibre networks Approach to remedies consultation**,** TalkTalk sets out that:

> *In the short term Ofcom's proposals will mean that consumers will suffer higher retail prices and weaker competition yet will, in most areas, have no additional competition as an alternative to BT. A key weakness with Ofcom's approach is that in many areas prices will rise above cost years before any altnet investment is likely. This will leave*

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[30] Enders notes *"in the extreme case, if all broadband users responded to the notification by 60% switching to a new customer contract, we estimate that industry revenue would dip by around 5%."* UK broadband, telephony and pay TV trends Q4 2019, 4 March 2020

[31] Enders Analysis, BT: Searching for the nadir. 6 February 2020.

[32] https://static1.squarespace.com/static/59ca375d80bd5e1a6eaed324/t/5ea68a54adc9b406ed8bb159/1587972693890/Gigabit-Britain.pdf page 10.

[33] https://www.ofcom.org.uk/__data/assets/pdf_file/0018/168003/broadband-price-differentials.pdf paragraph 3.35

consumers paying higher prices without the ability to move to a rival network. (page 2)

28. It is worth detailing the impact of Ofcom's proposals on the price of MPF plus GEA (40/10) over the duration of the market review period. We illustrate this in the table below assuming an inflation rate of 2%.

	2020/1	**2021/2**	**2022/3**	**2023/4**	**2024/5**	**2025/6**
MPF+GEA (40/10)	£12.06	£12.30	£12.55	£12.80	£13.05	£13.31

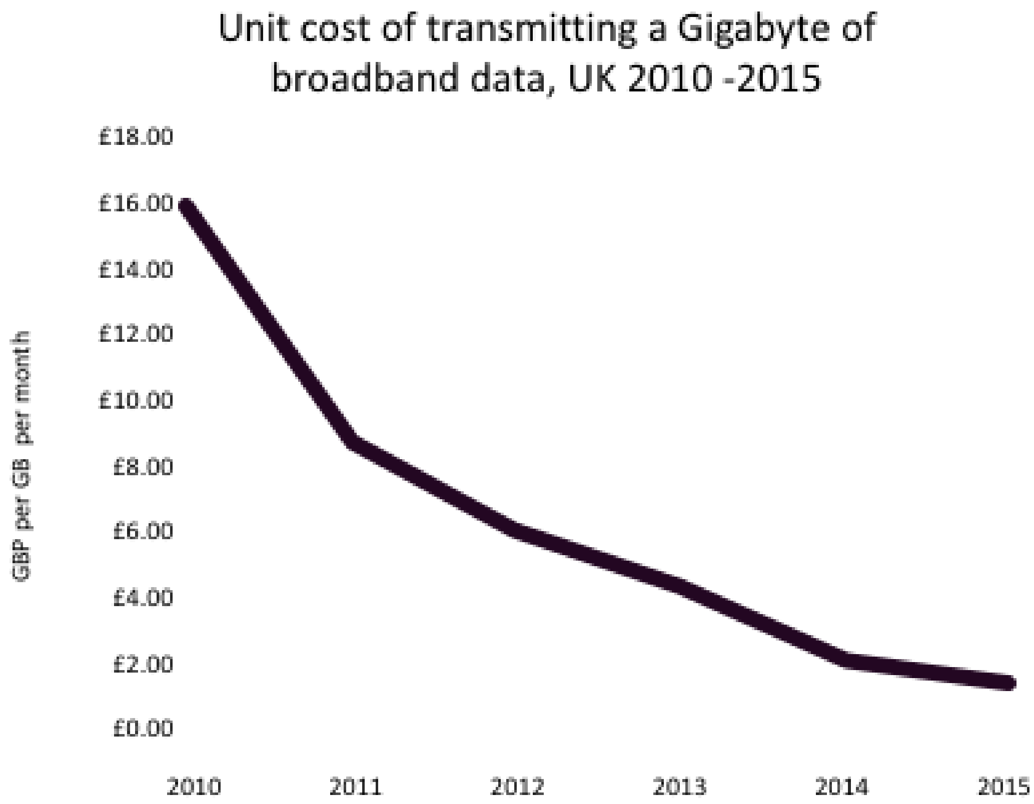
29. Put differently, in Area 2, if there is no fibre build, customers could be paying an extra £1.25 per month in nominal terms–*in five years' time*–if they buy a superfast product following the proposed regulation of Openreach's anchor product. This amount should be higher if their exchange has been upgraded to full fibre, but TalkTalk's concern is that customers will suffer (from higher prices) *before* investment in fibre has materialised: *"[a] key weakness with Ofcom's approach is that in many areas prices will rise above cost years before any altnet investment is likely."*

30. We make a number of observations:

    a. There is often a loose relationship between wholesale pricing and retail pricing. As Enders reports: *"TalkTalk now has three different types of price rises: increases on legacy tariffs, increases on out-of-contract FLPP tariffs, and increases on its voice/TV 'boosts' which apply to all customers who take the services."*[34] In the appendix to this report Enders details that the price of Simply Broadband (a legacy tariff) has increased by 6% to £32.95 – an increase of £1.87 per month. Note that in the year of this price increase the combined regulated MPF plus GEA (40/10) price *fell* by £1.51 per month (see page 22 of the same Enders report).

    b. TalkTalk's concern for retail pricing ignores the volume effect of higher data consumption on *unit* data prices. In the 2019 version of the Communications Market Report Ofcom observes that *"average data use per fixed broadband connection increased by 50GB per month (26%) to 240GB in 2018, fuelled by a growing use of video streaming services….and average data consumption increased eight-fold in five years to 2018*." This has been the pattern historically too:

[34] UK Telephony, Broadband and pay TV trends Q3 2019.



Oxera analysis of Abdirahman, M., Coyle D., Heys R and Stewart, W. (2017) 'A Comparison of Approaches to Deflating Telecoms Services Output', Economic Statistics Centre of Excellence (ESCoE) Discussion Papers, December.

c. We might expect the average data consumption to increase with the further growth in video streaming services. Using some approximate numbers, if we assume that the average cost of an 'anchor' broadband line is £30 in 2020/1 and that average data consumption for that speed is around 300GB per month,[35] the cost per GB is 10p per month. If consumption increases by 20% in the following year (a likely underestimate), the cost per GB will fall to 8.33p per GB or 8.4p per GB if the increase in wholesale prices shown above is fully passed through – a difference of 0.07p per GB. Put another way, the likely growth in data consumption swamps the proposed increase in wholesale prices for the anchor product. It is therefore not credible for TalkTalk to make the argument that consumers will *"suffer".*

d. Part of the increase in ARPUs will come from the migration to a higher quality service. The uplift reflects the additional consumer benefits of fibre over copper such as speed and reliability. "*In terms of protecting customers, although retail prices may increase slightly, this will reflect the added value of the service.*"[36]

[35] See figure 2.9 which has data for 2018.
[36] 1.84(b) [unclear what we are referring to here?]

e. In any case, we are aware that the larger of Openreach's wholesale partners are benefiting from a discount structure which encourages the latter to migrate their customers away from ADSL and onto higher speed vDSL, G.fast and FTTP products (see the table below). One of the effects of the discounts was to enable participants to achieve the 40/10Mbps 2020 price earlier. Put another way, the discounts can accelerate (in the case of a fall) and mute (in the case of an increase) the impact of changes in regulated prices.

Figure 4: UK wholesale broadband pricing (£pm)

Openreach wholesale rate card (with volume discounts)		
FTTC/VDSL		
- 40/10Mbit/s	£pm	12.14
- 55/10Mbit/s	£pm	13.14
- 80/20Mbit/s	£pm	13.14
FTTP/FTTH		
- 160/30Mbit/s	£pm	17.28
- 330/50Mbit/s	£pm	21.28
- 550/75Mbit/s	£pm	21.28
Cityfibre wholesale pricing		
- 1Gbit/s	£pm	11-13

Source: Openreach, UBS estimates.

f. Even the most bullish analysts only anticipate a relatively modest uplift in retail prices (and certainty far below the anticipated increase in data consumption – meaning that unit prices will continue to decline rapidly):

"Beyond this contract notifications issue, we are optimistic that retail pricing in UK is likely to turn back towards inflation a year or so out. The reason for thinking this is that Openreach's wholesale pricing is likely to have embedded inflation under Ofcom's proposals for the post-Apr. '21 regulatory regime. Ofcom's proposal is to regulate Openreach's base FTTC 40/10 wholesale product (in "Potentially Competitive Area 2" where Virgin mainly operates today) at CPI-0%. Then it will allow a £1.50-1.85 premium for copper replacement by an equivalent FTTP wholesale product, while not regulating higher-speed wholesale offers. This FTTP premium adds perhaps another ~2% p.a. to base 40/10 inflation, while the progressive impact of a shift to higher-speed tiers is less easy to forecast, but would likely add another point or two of inflation, given Openreach's premium wholesale prices for higher speed products. It therefore seems likely

that wholesale pricing could return to around mid-single-digit inflation after Apr. '21, and we find it extremely unlikely that wholesale inflation of this magnitude would not be passed into retail pricing. While the UK broadband market feels ugly today – and may even see more near-term pressure from the contract notification regime – it seems likely to improve in 12-18 months out." Arete note 4 February.

31. In summary, increases in ARPUs are likely to be modest over the relevant period and, as Ofcom notes, justified by improvement in quality of service. Higher ARPUs however mask the effect of dramatic increases in year-on-year data consumption and the consequent material reductions in unit prices of data consumed. Concerns about pricing are not a reason for Ofcom to change course.

The Fair Bet

32. The danger of any price regulation is that it discourages investment. However, what is meant by Ofcom regarding the 'fair bet' seems to have changed over time, and could do with more clarity in the Final Statement. In 2006, Ofcom appeared nervous both that the prospect of any future regulation of risky prospective investment would distort investment incentive, and that this would be compounded by regulating at prices that did not reflect the ex-ante risk:

> *"the application of mandated access at regulated prices would limit the returns available to investors, whilst the risk of losses remains unlimited. This asymmetry may distort incentives to invest in next generation access …*
>
> *P]rospective owners of bottleneck next generation access networks need to be confident that they will be allowed to earn risk-reflective returns for much of the life of the asset.*[37] *The problem is that, at some point in the future, it may be hard to recall that deploying these assets was ever risky at all. The temptation therefore will be for future regulators to return to regulating assets using a cost-based approach assuming lower levels of risk and hence a lower cost of capital"*[38]

33. In its 2009 statement establishing pricing flexibility for WLA, Ofcom reiterates this position: the future setting of price should reflect the risk at the outset of the investment.

[37] The average life of BT's network assets is over 24 years. Calculation based on GBV and depreciation charge per BT's accounts. BT Group plc Annual Report 2016, 4 May 2016

[38] ¶3.29 and 4.63, Ofcom, Regulatory challenges posed by next generation access networks, 23 November 2006

*"Although … changes in competitive conditions may require us to revisit our pricing approaches in the future, we believe that it is appropriate that any prices set by the regulator in the future, including potentially for active products, **should reflect the risks present at the time of a particular investment**. Such an approach is necessary to create efficient incentives to invest and to provide clarity for potential investors. This principle would be taken into account, alongside our other principles on cost recovery in any review of our pricing approach in the future."*[39] (emphasis added)

34. However, this is described differently in the current consultation where the fair bet is characterised to be Openreach having been given long enough earning healthy returns to mean that the fair bet bargain had been satisfied:

    *"In the WLA, Ofcom evaluated whether its proposal to introduce a price cap was consistent with Openreach having had a fair bet, by assessing whether Openreach had had a fair opportunity to earn a reasonable return on its original FTTC investment. This recognised that Openreach had needed to benefit from sufficient upside potential in the long run to offset the downside risk of failure at the time of the investment. **The main source of the failure was the possibility that consumer demand for FTTC would fail to materialise**. In that assessment Ofcom found that a conservative estimate of Openreach's actual return o FTTC was around 15%, which was above the level necessary to provide a fair bet given the upfront risk of failure"[40] (our emphasis)*

35. Ofcom is now wedded to this approach saying: *"If circumstances did eventually emerge where we needed to impose price regulation in future, we would take account of the 'fair bet'.[41]*

36. However, there is a complicating factor this time around. Ofcom now believes that its approach of *"supporting Openreach in transitioning consumers from its copper network to its fibre network will significantly reduce the risk that consumers will not migrate to its fibre network"*.[42] This was more fully explained on the call with analysts and we suggest it is worth laying out in the Final Statement:

    "In the past, and with the FTTC investment, Openreach did face significant downside risks on demand and willingness to pay, and in part that was to do with the way that the regulatory construct wrapped around it. Because, we continue to have and regulate the old network, so consumers could have stayed on the old network and

[39] ¶8.50, Ofcom, Delivering super-fast broadband in the UK - Promoting investment and competition, 3 March 2009
[40] 1.88
[41] 1.89
[42] 1.89

not used the new one. And so that was a significant risk. So, therefore, when we did look to regulate that, we obviously factored in those downside risks when we were considering regulation."

"For this fibre investment, we're actually proposing to take a slightly different approach to the fair bet. In that actually we're going to focus quite hard on de-risking the downside risk faced. And you can see that we're doing that in the way that we're supporting the migration from the copper networks. So de-risk things like demand. We're not having cost-oriented prices so in terms of willingness to pay, and indeed having higher prices. So, our approach here is very much one of looking to de-risk the risk sides of the fair bet."

37. To summarise, we *believe* that Ofcom is saying: Openreach will enjoy some, but not all, of the upside returns if its investment in fibre is successful. The upside is not *"clawed back"* but it is limited by regulation. The level of return that it will be permitted before more extensive price regulation is either not known (or not specified) but will be dependent (as it was in the last review period) on Ofcom's assessment on the level of upfront risk undertaken by Openreach. This time around Ofcom appears to believe that the level of risk is lower because, eventually, consumers will not be able to remain on the 'old network' and therefore the level of return for Openreach should be commensurately lower. In effect, there will be 'forced migration' to the new network at correspondingly higher wholesale charges. By implication, the level of Openreach's returns allowed in excess of its cost of capital will be lower in the future (than it was for FTTC) because, in Ofcom's view, the risk is lower. We make a couple of comments:

    a. Demand risk still exists despite the plans for copper migration. Despite being forced on to the new network, consumers in volume may not demand speeds much in excess of 100Mbit/s and Openreach would have been far better off with partial upgrade to its copper network with G.fast. In its 2017 consultation about fibre deployment Openreach said that, in the cutover model (akin to Ofcom's current proposals), the *"incremental value needed per customer per month to deliver an acceptable payback might be c. £7 per month".*[43] Some of this incremental value is comprised of operating cost savings, however the remainder does imply a significant degree of trading up to higher speeds. Nevertheless, Ofcom says in 2.15 that *"Openreach is forecasting that speeds of 40/10 (55/10) and below will continue to account for the majority of Openreach's sales by 2023/24, notwithstanding Openreach's efforts to move FTTC volumes onto higher speeds"*.[44] Moreover, in Figure 2.9 it is noticeable that the average monthly data volumes by connection speed barely increase for lines of over 300Mbps – this might

[43] Upgrading the Access Network with FTTP Openreach Consultation Published: 17 July 2017. Paragraph E.12

[44] 2.15

indicate little technical demand for such high speeds (because slower speeds are not constraining usage).[45]

b. The danger is that, if the project is successful, Ofcom concludes that the risk was in fact 'low' and that therefore BT is only entitled to earn a small increment above its cost of capital. To avoid this eventuality Ofcom should be clear about what return BT will be allowed to earn on its fibre investments. New Street Research captures this succinctly: *"For BT, the concept of the "fair bet" is still left a bit unclear and it has not been quantified, albeit it seems Ofcom is supportive for BT to make a reasonable return on the project over at least the next 10 years. Ofcom is trying to remove the downside risk by offering a forced migration away from copper towards fibre in exchange areas where fibre is built out."*[46]

38. We note that in its recent results BT might have 'upped the ante' and said that it expects to earn a 'mid-case' pre-tax nominal return from its planned fibre investment of between 10 and 12% with an indication that *"it's never going to be above the 15%"*[47]. We now have BT's view of the anticipated (ex ante) return from its investment and Ofcom's apparent opinion that it has reduced the riskiness of this investment by eventually forcing a migration to the new technology – albeit that it must be riskier for BT than doing nothing. Ofcom should state that it is comfortable with Openreach earning this level of return and these circumstances would not justify a return to cost orientation.

PIA

39. We strongly support the fixed price lead-in charge changes developed by Openreach following consultation with industry. This modification simplifies the process of evaluating the use of PIA in a given area; it reduces the impact of Openreach's data quality shortcomings (see also below) and reduces administration costs for Openreach and for the users of PIA. This change should be used as a blueprint for improving the PIA product. It will reduce the administrative burden on Openreach and PIA Communication Providers (CPs), bring the product into better alignment with Openreach's own fibre build and will help to streamline planning, recording and billing as PIA usage scales.

40. More broadly, we continue to support Ofcom's decision to place PIA at the core of its long-term regulatory strategy; it has the potential to unlock further infrastructure competition. Since PIA was reinvigorated in the last WLA and unrestricted in the PIMR, the product has seen many improvements; more CPs continue to register to use it and deployment has grown incrementally. However, as we have made clear in

[45] Demand risk is not the only kind of risk faced by FTTP investment. There is also (for example) the risk of overbuild by other networks, and the regulatory risk (that Ofcom changes its mind – or neuters the benefit of higher wholesale prices through more intrusive consumer regulation) highlighted above.
[46] Note 9 January: BT/Liberty Global
[47] Preliminary transcript from BT's Full Year 2020 Earnings Call.

our previous consultation responses, the product still needs to be made fit for scale deployment if Government's ambitions are to be met.

41. Our concerns are urgent. If competitors to Openreach are not able to build quickly and at scale to acquire footholds in areas of the UK ahead of Openreach's nationwide ultrafast deployment, the loss of that first mover advantage is likely to be a significant dent in their business cases.

42. Below we set out some of the main factors that we believe are limiting the long-term potential of PIA. When these topics are discussed with Openreach it points to the limits of its regulatory obligations. As a consequence, its customers will not make progress without a clear change in Ofcom's guiding commentary and/or the obligations that Openreach must implement.

'Planned' infrastructure that has been built

43. Openreach is currently obligated to provide details of, and access to, its existing infrastructure. However, a significant proportion of Openreach's physical infrastructure is marked on BT's internal records as 'planned infrastructure' despite it being in use by Openreach, often for decades.

44. This apparently planned–but in fact built–infrastructure is not shown on Openreach's PIA map tool and is not revealed through its Web Services platform. We also anticipate that Openreach is not planning to display correctly this class of infrastructure via the APIs that are being developed. In contrast, Openreach's fibre build planners have sight of this information. As an issue that has persisted since early 2018, Openreach has often stated that it has a piece of work planned to review and correct these erroneous records. Yet despite regular requests, no details have been provided on the status of this activity and we have not perceived any improvement of the incidence of these blackspots arising.

45. We illustrate this issue in the snapshot pictures below. The first is taken from Openreach's Infrastructure Discovery tool for Ethernet services; the red dots designate 'planned' infrastructure – although we know from a simple survey of house sales in this neighbourhood (since 2006) this infrastructure has been built and in use for many years. The second is from the Openreach PIA portal which is used for Notices of Intent to build. The latter is obviously deficient because the locality has far more infrastructure that could be shared for build.

Confidential

Confidential

46. These gaps in data matter. Virgin Media typically undertakes a high-level opportunity assessment process to identify areas that are commercially attractive to build to for Project Lightning. This is not dissimilar to Ofcom's desktop 'cluster analysis' it has previously presented in its preliminary consultations. Over time, we

have incorporated PIA into this evaluation process i.e., we estimate the cost to build for Virgin Media versus the cost of using PIA by collating a UK-wide view of PIA infrastructure availability.

47. From our experience, we have found that the misclassification of 'planned' and 'actual' infrastructure appears to be particularly acute for ducting laid in the last thirty years. Confidential.

48. Where this information is missing from Openreach's systems we need to default to speculative on-site surveys, Google Maps or alternative manual Openreach information processes, all of which undermine our ability to assess opportunities that include PIA efficiently and at scale.

49. Where we do persist and find a suitable PIA-based build opportunity, we are required to collate significant in-person evidence, such as submitting photos of all visible assets as well as manually drawing the relevant infrastructure and submitting this through the PIA processes for a review of 'missing inventory'. There is no SLA for Openreach to correct its records. Meanwhile, Openreach already has accurate records that we could have cross-referenced and confirmed, if we had visibility of them.

50. In contrast, Openreach has visibility of this information from 'day-0' as well as the ability to use copper asset data such as copper cable routes and copper distribution point data to infer network existence and progress design and build. Therefore, other CPs have a materially different (and unjustified) experience in terms of cost, time and complexity associated with using Openreach's infrastructure in this 'missing data' scenario.

51. We believe that two actions required of Openreach:

    a. In short order, Openreach should be required to show planned infrastructure in the PIA tool (even if there are some inaccuracies in the data) i.e., making use of the information it already holds; this will enable CPs to plan better their build. If Openreach has concerns that this requirement could expose commercially confidential details of its future network build, it could be permitted to remove recently planned infrastructure.

    b. Openreach should be subject to strict obligations to 'clean up' the above information to distinguish accurately between built and planned infrastructure and regularly report back to Ofcom/industry on progress.

52. In our view both of these improvements are required to help make PIA suitable for scale deployment.

Cumbersome processes

53. Users of PIA have often noted the disparity between Openreach's ability to progress build through reusing its infrastructure while we are required to endure convoluted processes which delay build. Since 2018 we have asked that a process be agreed to claim retrospectively for Network Adjustment reimbursements to avoid these delays. The existing 'Path to Collaboration' will not deliver a process fit for scaled network build.

54. In our view, it is vital that Openreach is compelled to engage properly with industry on how to ensure trustworthy CPs[48] can progress their build without administrative encumbrance. Openreach often notes that Ofcom's three-part ruleset on Network Adjustments mandate the approach it has adopted (alongside its fiduciary responsibility to shareholders and its regulatory cost accounting obligations). We do not believe Ofcom's guidance on this has been intended to stymie the efficacy of the Network Adjustment mechanism; this may require clarification to ensure Openreach is able to engage with industry effectively to bring PIA processes into better alignment with Openreach's arrangements for its own build programme.

55. Openreach requires that PIA CPs provide notification 24 hours in advance that they intend to work on a particular part of the network, in part for audit purposes but also as a record in the event of damage. Currently this notification requirement applies in all circumstances, whether provisioning an individual customer on a previously built network or deploying entirely new network. Overtime, as CPs increasingly acquire new customers on PIA that need an installation visit, this will create a vast volume of transactional data to log. This large volume of daily information flow seems of limited value. CPs already have an obligation to fix damage they may cause and/or report it to Openreach. Openreach will receive a record of activity undertaken and network deployed through the 'as-built' process. In our view this notification process is excessive and inefficient. System and process development resource for Openreach and CPs has, and will continue, to be diverted to streamline and scale this unnecessary process which could otherwise be spent improving the product. Furthermore, we believe Openreach should work with CPs to develop an alternative framework[49] for ensuring that where rare incidents of damage do occur, evidence is collected retrospectively and in a targeted way, rather than a blanket obligation to provide pre-notification of any and all activity.

56. BT has recently announced its intention to build fibre to 20m homes and it expects to double its ~30k premises per week build rate in short order.[50] At the same time Openreach noted that *"[…] we have confidence we can achieve an average build cost across the entire 20 million premises of between GBP 300 to GBP 400. This really is*

[48] For example, CPs that have acquired 'Path to Collaboration' and have a demonstrable and sustained track record of accurately identifying the need for civils work that cannot be reasonably/efficiently avoided.
[49] For CPs with a demonstrable 'trustworthy' track record of accurate recording and record keeping, for example, those with 'Path to Collaboration' status.
[50] BT Q4 2020 investor call

market-leading and will be difficult for others to replicate."[51]. When making choices about how PIA is designed and operated, Openreach has little incentive beyond formal regulatory compliance to make PIA as easy, cost efficient or scalable for its competitors as it is for itself. As long as Openreach believes it is fulfilling its obligations we do not anticipate it will change course on the wide range of existing and long-standing issues with PIA that we provide examples of above. As a result, if PIA is to be effective and truly enable quick deployment at scale, we believe Ofcom should provide further clarity and direction to Openreach on how it is expected to balance the needs of industry against its desired approach to implementing PIA.

Geographic boundary definition

57. As noted in our responses to Ofcom's preliminary consultations, we believe there is a risk that Ofcom has underestimated the potential for competitive build. As a result, Ofcom may have incorrectly classified postcode sectors into Area 3 that may nevertheless attract competitive build during the market review period.

58. As part of its preliminary consultation process Ofcom incorporated the findings of its desktop cluster analysis into its methodology for establishing geographic boundaries. In the current consultation Ofcom notes it has reconsidered this approach and instead relied on existing network presence as well as build plans collected from operators.

59. As Virgin Media confirmed as part of its response to Ofcom's data collection process, even as an established operator with a longstanding and largescale programme of network build, we have a relatively short time horizon for detailed geographic network planning compared with the five-year market review cycle. As a result, it is possible that build opportunities are identified in Area 3 in the future, that Virgin Media would intend to fulfil. At the same time, new entrants regularly announce intentions to invest and build network, new Code powers applications are published and new CPs become established to use PIA. All of these are indicative of a growing pool of infrastructure builders.

60. As a result, we believe Ofcom may have set the bar too low by defining the Area 2-3 boundary based on existing coverage and known, geographically-defined, build plans at the time of consultation. As a recent example, Virgin Media recently deployed network to the Test and Dun Valley through an innovative partnership with local residents.[52]

61. While this might imply it could be desirable to reassess the boundaries, for example at a mid-point during the five-year cycle, on balance we would not support this approach. The incremental benefit of quickly reclassifying geographies from Area 3 to Area 2 in response to new investment may be limited. Moreover, these benefits

[51] BT Q4 2020 investor call

[52] https://www.virginmedia.com/corporate/media-centre/press-releases/innovative-virgin-media-scheme-gives-forgotten-rural-villagers-an-ultrafast-broadband-boost

are likely to be trivial in comparison to the certainty associated with a longer-term stable approach for regulating these markets.

62. In particular, we place weight on comments from Ofcom (also quoted above) about the intended longevity of the proposals in this consultation:[53]

> *"Yes, we did mention that but I'm happy to reiterate that our intention* would be that we wouldn't return to cost orientation in a second cycle, so for the period for the next market review after this one. So ten years of stability and certainty.
>
> *"Now, if my general counsel was here, she would point out that I can't* actually be bound by that because we will have to look at the facts at the end of this current five-year period. But, certainly our intention would be to provide that kind of ten-year certainty."

63. We support Ofcom's view that *"[…] it may be appropriate to revisit this approach and consider whether our cluster analysis may provide a more stable view of likely MSN presence on a forward-looking basis."*[54] i.e., prior to the Final Statement.

64. In our view, regardless of whether Ofcom refines its analysis before its Final Statement or reviews and reclassification at some point in the future, it seems likely that Ofcom will need to reclassify some postcode sectors from Area 3 to Area 2, even if this is only by exception. We would welcome clarity from Ofcom about how it might approach this exercise in future market reviews and the principles it would adopt.

65. For example, Ofcom proposes that a Dark Fibre Access remedy be available to CPs in Area 3, as it anticipates PIA will not be sufficient to enable network build in these geographies. Virgin Media has commented on the merits on this during the preliminary consultations, however it remains unclear how to resolve the reclassification of a geographic area with regard to remedies like DFA.

66. Based on previous Reference Offers, Openreach is (quite reasonably) likely to insist on a contractual clause to withdraw the availability of such a product if its regulatory obligation to provide it falls away. For a CP intending to make use of this new product, adoption of it may be risky if there is uncertainty regarding its long-term availability. As an example, an MNO may forego partnering with a PIA-based CP to provision rural mobile backhaul with the expectation it can utilise DFA itself instead. Were network build to occur in those areas through PIA, the MNO would have not only foregone partnering with a network builder, it would presumably soon find it could no longer retain its DFA-based backhaul. We assume the MNO in this example would need to rapidly find an alternative means to support its rural mobile services across the impacted geographies. This jeopardy, which in our view is likely, does not

[53] While of course acknowledging that Ofcom has not fettered its future discretion through these comments.
[54] Condoc, Vol 2, para 7.35

seem consistent with Ofcom's objectives of establishing long-term regulatory certainty nor for encouraging network competition.

67. Equally, if Virgin Media were to consider utilising DFA in the future to expand further into Area 3 and as a result bring about a reclassification of Area 3 geographies to Area 2, would this remove the obligation on Openreach to provide DFA?

Wholesale discounts

68. Ofcom proposes to prohibit geographic discounting of rental charges for FTTC[55] and G.fast in Areas 2 and 3 and to prohibit FTTP rental discounts in Area 2. We support this restriction, but there are other aspects to Openreach's existing and likely future discounting practices that should cause Ofcom concern. Furthermore, we consider there is a strong rationale to ensure that geographic discounting for FTTP rentals is prohibited in Area 3.

69. To date Openreach has introduced various volume-based discount offers (not tied to geography) to encourage speed upgrades and FTTP/G.fast uptake. These schemes have allowed participants to take supply from altnets, provided the latter's scale is relatively small: 25% of UK premises (excluding Hull). It is likely (based on public comments) that Openreach intends to build on this approach in relation to future volume and term-based discounts for FTTP.

70. Altnets have made progress in building out their networks and in some cases have signalled ambition to go further than initially planned which may make the 25% carve out for the altnet scale ceiling too low (especially if there is consolidation in the future). Confidential.

71. Ofcom recognises that *"wholesale deals potentially offer a particularly good avenue for new entrant networks to grow penetration quickly"* but *"there are only a small number of wholesale partners"*.[56] Ofcom also notes in the same paragraph that the benefits from acquiring one of the few large wholesale customers is greatest if the arrangement is long-term in nature – although *"[t]hese wholesale customers are dependent on continued wholesale access to BT's network".*

72. These same benefits of having wholesale customers are clearly acknowledged by BT and Openreach:[57]

> *"It's absolutely crucial. Having BT Retail as an anchor tenant underpins our business case and gives us the ability and confidence to build at scale and pace we've talked about today."*

[55] Except in exchanges where charge control obligations have fallen away.
[56] Volume 2, para 8.59
[57] BT Q4 2020 investor call

73. In prepared remarks, BT identified long-term contracting arrangements had been added as a new 'enabler' for its fibre build programme:[58]

> *"And finally, a new issue that has emerged is on long-term contracts. As we have said from the outset, to underpin this investment, we need rapid takeup of the platform. As mentioned by Openreach at its business briefing last month, they are in – deep in discussions with major CPs, including Sky, TalkTalk, Vodafone and BT, for long-term volume commitments to Openreach FTTP network. These are key to underpin our investment and are also really important for the CPs' business plans. So we have willing buyers and a willing seller but constraints on our ability to enter into long-term contracts, a constraint that is not applied to any alt net builder of what are brand-new networks."*

74. In response to David Wright (Bank of America) on whether Openreach was seeking to agree five-year long-term agreements with potential wholesale customers:[59]

> *"No, longer than that. I mean I think you've got to – I mean again you'll know this. If you look at just the cash flow profile of this, this is massive upfront investment. It takes a long term – long time before we see any cash back. Now obviously the benefits of having an infrastructure will go on for, hopefully, decades, so no, we are looking for much longer term than five years."*

75. Furthermore, more recently, in response to Polo Tang (UBS) on the status of discussions with wholesale customers on volume FTTP deals, Openreach noted its desire to reengage with its customers on FTTP deals in short order:[60]

> *"Look, in the period before lockdown, we were in almost daily discussions with one or other of the CPs. So we're talking, as Philip alluded, to all the big CPs and, in fact, to a whole bunch of the smaller CPs who've got an interest in the FTTP platform. Unfortunately, through the lockdown, we've had to put it on hold.*
>
> *The good news though is as we come out of lockdown, we will be in a very strong position on those negotiations with our CPs because of the announcement that Philip has made today. So what he's done, he's given real certainty about the scale and the tremendous pace of the build that the BT Group will now back for Openreach to execute on. And so I'm really looking forward in the short term to a relaxation in lockdown for our engineers to go back in the home to do FTTP provisions and for us to get back around the table with all of our CPs and also with Ofcom. Because our*

[58] Q3 2020 BT results call

[59] Q3 2020 BT results call, https://seekingalpha.com/article/4320397-bt-group-plc-bt-ceo-philip-jansen-on-q3-2020-results-earnings-call-transcript?part=single

[60] Q4 2020 BT results call

intention is to build a very large-scale network and then to fill it up."

76. Wholesale partners are critical for *both* challengers and Openreach, but these desires are unlikely to be complementary. We suspect most altnets will prioritise relatively dense areas with attractive CPPs as well as areas where Openreach's existing network performance is below its national average i.e., where FTTC technology is struggling to cope with customer demand. These factors are likely to be important considerations for Openreach's own prioritisation, alongside targeting areas of Virgin Media coverage to improve competitiveness. As a result, rather than complementing one and other, altnet build locations and Openreach fibre rollout are likely to materially overlap and so directly compete. In these scenarios volume- and term-based discounts can have the effect of foreclosing competition.

77. If a larger retailer negotiates a deeply discounted and long-term deal it is unlikely to focus on committing to a partnership with an alternative infrastructure provider if such a deal should jeopardise the discounts received from Openreach. If Openreach were successful in securing the large majority of its wholesale customer base on long-term arrangements, it is difficult to see how competition from altnets would not be adversely impacted.

78. Ofcom is alive to the need to monitor the behaviour of Openreach in its desire to retain its wholesale customers:[61]

> *"This is not just about Openreach. We're committed to seeing investment from a number of different players, notably Virgin, but also new entrants like CityFibre. We are also acutely aware that they are at the early stages of building their networks. Their business cases are fragile and we are very alert, and monitoring very carefully the behaviour of Openreach."*

79. However, although Ofcom recognises the potential problem (Openreach might structure its contracts in ways that could deter entry) it is rather opaque in how it would decide whether to act and what any remedy might be; particularly when it appears that this would need to be done quickly in a 90-day notice period.

80. Assuming the effect on competitors is material, Ofcom will evaluate this against how important (presumably retaining) the wholesale partner is to Openreach's business case and whether there would be 'efficient' prices. This does not leave us much further forward. At the extreme, if the custom of the wholesale partner means a build/no build decision for both Openreach and the challenger, why should the needs of former prevail – especially when the latter can also offer 'efficient' prices and would meet Ofcom's main aims of driving network competition within the UK?

[61] https://www.ofcom.org.uk/__data/assets/pdf_file/0020/116705/Approach-to-future-regulation-call-24-July-2018.pdf

81. We request that Ofcom provides much more detail on how Ofcom would resolve this conundrum, not least because it could effectively constrain Openreach's potentially anti-competitive behaviour and avoid disputes and complaints.

82. We are also concerned that a new regime of discounts could 'slip under the wire' of the current regime i.e., before the 1 April 2021. It would seem odd if Openreach were permitted to conclude agreements in the near term that could be damaging to competition for years to come unless Ofcom is able to look at them again with fresh eyes after 2021. Again, we request more clarity on this point.

Discounts in Area 3

83. As we note in our comments on Ofcom's definition of Area 2 and Area 3 boundaries, there is an inherent risk, acknowledged by many stakeholders, that Ofcom's forward-looking estimates of the geographic market boundaries are not accurate (i.e. that material competitive build emerges in Area 3 locations). As a result, we believe the same prohibition on geographically-targeted FTTP business cases should apply in Area 3 (as Ofcom proposes for Area 2).

84. Without this safeguard, Openreach would be able to pursue the same foreclosure strategies that Ofcom is concerned about in Area 2. In our view this would not be an onerous restriction to put on Openreach to safeguard competitive build but it may be pivotal in enabling a new entrant to establish a foothold in areas that, by their nature, are more commercially challenging.

85. Furthermore, it is conceivable that flexibility to geographic discount FTTP in Area 3 could be leveraged as part of a broader volume- or term-based commercial arrangement with large wholesale customer, circumventing the prohibition on Area 2 geographic discount arrangements (for example, simplistically, tying or bundling geographic discounts in Area 3 to volume commitments in Area 2).

86. Ofcom notes that it would assess the need to consult on whether to grant consent for geographic- as well as loyalty-based discounts on a case by case basis and if it considered it necessary. In our view it is vital that Ofcom consults in each case.

87. Particularly given the transition to five-year market review cycles, Ofcom will not necessarily have gathered recent evidence on network build plans or of new entrant business strategies. Ofcom may only become aware of this evidence at the time it reviews a proposed commercial arrangement. Equally, as the market dynamics of telecommunications are likely to continue to be influx over the market review period, this may also be true of established market participants, such as Virgin Media.

88. In our view it is vital that Ofcom elicit views from market participants before derogating from prohibitions put in place to safeguard emerging competition.

Virgin Media
May 2020