

Review of Ofcom's approach to assessing ultrafast market power

An independent report prepared on behalf of BT plc

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1 Introduction

- 1.1 BT has requested that Compass Lexecon comment on Ofcom's approach to assessing whether Openreach has Significant Market Power (SMP) in the supply of ultrafast broadband (UFBB). Ofcom's approach is set out in its consultation, *Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26* (WFTMR).
- 1.2 We have been asked to comment, in particular, on whether the WFTMR presents sufficient reasoning and evidence to support Ofcom's proposed SMP finding and, if not, what further evidence and analysis is likely to be relevant to the SMP assessment.
- 1.3 Ofcom proposes to find:
- a. a single Wholesale Local Access (WLA) product market undifferentiated by speed;
 - b. this product market is differentiated into two geographic markets, i.e., WLA Area 2 ("*where there is already some material commercial deployment by rival networks to BT or where this could be economic*"¹) and WLA Area 3 ("*where there is unlikely to be material commercial deployment by rival networks to BT*"); and
 - c. BT has Significant Market Power (SMP) in relation to both WLA Areas 2 and 3, which amounts to finding nationwide SMP because Ofcom finds no areas to be effectively competitive (i.e. Area 1).
- 1.4 Ofcom's market analysis underpins the setting of regulation for the period from 2021 to 2026; we comment first on the implications of this. In the following sections, we examine the evidence put forward in the WFTMR for Ofcom's proposed findings on the product and geographic markets and SMP. We present our assessment of whether the evidence presented by Ofcom supports its proposed findings or alternative market definition and SMP findings. We also consider whether other evidence and analysis would be important for Ofcom to review to ensure its decision is soundly based. Finally, we assess some implications for regulation of current and future developments in wholesale competition.

¹ WFTMR, Vol.2, para. 7.6.

- 1.5 Our note is intended to assist Ofcom in further developing its market analysis. This note does not provide a full market analysis in itself which is outside the project scope. A full market analysis would also require further information from relevant parties which we understand Ofcom has the powers to obtain.

2 Implications of the forward-looking analysis

- 2.1 The WFTMR is being used to set regulation for the period 2021 to 2026. The end of this period is six years from now. The length of this period (which compares with previous three year review cycles) has significant implications for the analysis for two reasons.
- 2.2 Ofcom's analysis appears to be premised on competitive constraints arising from the physical presence of competing networks. However, there is evidence, which we discuss, that wholesale competition is now taking place via long-term contracts and other arrangements where constraints are being exerted on the prices and other supply conditions being negotiated ahead of build and ahead of customer switching.² Ofcom's approach is liable, therefore, to serious omissions if it is conditioned solely on the constraints from network presence (whether now or prospectively) rather than capturing the wider sources of competitive pressure.
- 2.3 Secondly, and in any case, over the period until 2026, Ofcom expects the significant development of network competition.³ In these circumstances, evidence on historical market conditions such as historical market shares may not provide a reliable basis on which to assess future competitive conditions particularly in a market shifting to new technologies and in which significant new entry is underway.
- 2.4 The regulatory framework provides that ex ante regulation should not be imposed on markets which have a structure which "*tends towards effective competition within a relevant time horizon*".⁴ The development in wholesale competition underway calls for Ofcom to look afresh at whether the market will deliver effectively competitive outcomes in the review period. There is a strong case for Ofcom to refrain from regulation if it considers that a market is subject to potential competition and/or prospectively competitive based on competitors with built networks over the period. This could better support investment and the efficient development of competition to the benefit of end-users in terms of wider fibre availability and lower prices. Where vigorous competition is developing, regulation is not only not needed but risks inefficient market distortion. An approach of "*if in doubt, regulate*" could create unintended long-term costs to consumers.

² This contrasts with our understanding of the initial development of wholesale broadband services in the UK in which CPs tended to acquire wholesale services under relatively standardised contracts and without making long-term volume commitments.

³ WFTMR, Table A7.1, sets out planned network build.

⁴ We understand that the regulatory framework provides that ex ante regulation should not be imposed on markets which have a structure which "*tends towards effective competition within a relevant time horizon*" (Commission recommendation on relevant product and services markets, para. 11).

- 2.5 The Government has recognised the importance for regulation to be limited to only where needed and to the extent needed:

“Regulation only where and to the extent necessary to address competition concerns and ensure the interests of consumers are safeguarded as fibre markets become more competitive. It is the Government’s view that regulatory forbearance, where appropriate, should be considered by Ofcom in developing its regulatory approach to incentivise the roll-out of full fibre networks.”⁵

- 2.6 If Ofcom were to impose regulation, we consider that it should set out when and how it would remove that regulation once competition has sufficiently developed. For example, regulation could be time-limited to expire during the period. Alternatively, Ofcom could identify particular market conditions that once met would trigger a new SMP assessment such as the loss of a major CP from Openreach.

3 Assessment of Ofcom’s proposed product market definition

- 3.1 In this section, we examine the basis for Ofcom’s proposed product market definition. It should be borne in mind that market definition is not an end in itself but a tool which may assist the competitive assessment. It is ultimately the SMP assessment, which we comment on in Section 5, which will determine whether there is likely to be a competition problem warranting regulation.

Ofcom’s proposed product market

- 3.2 Ofcom proposes to find a single product market for Wholesale Local Access (WLA) containing standard broadband (SBB) with download speeds of up to 30Mbit/s, superfast broadband (SFBB) with download speeds from 30Mbit/s to 300Mbit/s, and UFBB with download speeds of 300Mbit/s and above.
- 3.3 Ofcom’s proposed finding is based on the following key propositions.
- a. Ofcom “...propose to define a focal product to be the supply of WLA services by fixed networks to support the delivery of broadband services to residential and business customers. This follows our approach in previous reviews in recognising the economies of scope inherent in supplying multiple downstream broadband services from a single access connection.” (Vol. 2, para. 6.25).
 - b. “Looking forward to the period covered by this review, we consider that supply-side considerations point to a single WLA market that is not differentiated by speed. This is because local access networks are built with properties that make them amenable to delivering a range of broadband speeds. As set out in Annex 7, the Virgin Media and new entrant networks all have the capability to provide a full range of broadband speeds. Openreach’s FTTC network currently covers around 95% of the UK. On this network, it offers a range of speeds from 40/10 to 80/20. There is no difference in the network equipment between these – different speeds are provided simply by applying different

⁵ DCMS, *Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services, Consultation*, 15 February 2019, para. 20.

configurations to each line. Where Openreach has deployed FTTP it has the capability to offer the full range of fibre broadband speeds.” (Vol. 2, para. 6.34).

- c. “... while there may be some early adopters with a relatively high demand for UFBB, our expectation is that to achieve high volumes of sales attractive prices will need to be offered. While demand for UFBB will certainly grow over time, in this review period we expect lower bandwidths to continue to be good substitutes. Therefore, we propose to define a single focal product including all broadband speeds” (Vol. 2, para. 6.52).

Principles of market definition

3.4 The standard approach to market definition is to start with the product in question and identify whether there are close demand and supply substitutes to the product.

3.5 The OFT set out how the hypothetical monopolist test can be used to determine the relevant market:

“We start by considering a hypothetical monopolist of the focal product (i.e. the product under investigation) which operates in a focal area (i.e. an area under investigation in which the focal product is sold). We then ask whether it would be profitable for the hypothetical monopolist to sustain the price of the focal product a small but significant amount (e.g. 5 to 10 per cent) above competitive levels. If the answer to this question is 'yes', the test is complete...If not, we assume that the hypothetical monopolist also controls the second closest substitute to the focal product and repeat the process once more. We continue expanding the product group in this way (i.e. by adding the next best substitute) until we have found a group of products (or areas) for which it is profitable for the hypothetical monopolist to sustain prices 5 to 10 per cent above competitive levels (by adding the next best substitute).”⁶

3.6 The OFT also notes that while there may not be sufficient information to formally apply the hypothetical monopolist test in every case, *“the conceptual framework of the test is important as it provides a structure within which evidence on market definition can be gathered and analysed.”*⁷ The CAT made a similar point in its BCMR Judgment in referencing a quotation from Bishop and Walker: *“It cannot be stressed enough that defining relevant markets on a basis that is not consistent with the principles of the Hypothetical Monopolist Test will, almost by definition, fail to take properly into account demand-side and supply-side substitution possibilities.”*⁸

3.7 In our review of Ofcom’s approach, we make reference to the hypothetical monopolist test as a framework in which robustly to identify and assess pertinent evidence.

⁶ OFT, *Market definition*, December 2004, para. 2.9 – 2.12.

⁷ *Ibid*, para. 2.6.

⁸ Bishop and Walker, *The Economics of EC Competition Law* (2010), p.123 quoted in CAT, *BCMR Judgment*, 10 November 2017, para. 157.

Our assessment of Ofcom's approach to product market definition

- 3.8 In this section, we provide our assessment of Ofcom's approach to product market definition.
- 3.9 A critical issue that arises for the forthcoming regulatory period is the strength of competition in the supply of UFBB-capable lines. While for convenience we used the phrase UFBB-capable lines in this report, our comments apply to any lines capable of delivering speeds faster than FTTC and thus include lines with speeds faster than 80 Mbit/s.⁹ Ofcom does not formally examine a focal product of such lines but rather considers more generally whether different broadband speeds are supply-side or demand-side substitutes.
- 3.10 Ofcom argues that supply-side conditions support a single market based on an observation that access networks are amenable to delivering a range of broadband speeds.¹⁰
- 3.11 This argument shows the problem with Ofcom not formally considering a focal product of UFBB. In particular, while it is true that faster networks (such as Virgin Media's) can offer slower speeds, copper/FTTC does not offer a consistent end-user experience above 80 Mbps except with the use of G.Fast technology which has limited availability. The lack of supply-side substitution implies that a hypothetical monopolist of UFBB-capable lines would not be effectively constrained by supply-side substitution from a network (like Openreach's copper/FTTC network) that is only capable of supplying SBB and/or SFBB.
- 3.12 SFBB could still effectively constrain a hypothetical monopolist of wholesale UFBB because of demand-side substitutability. The WFTMR presents only limited evidence in support of Ofcom's finding of a single market undifferentiated by speed:

"The result of surveys and other research carried out by [] and other stakeholders provide some evidence that there may be a minority of users who would be prepared to pay a substantial premium for 1Gbit/s broadband services. Research conducted for Sky found that these people are likely to be those who are already subscribing to []Mbit/s speeds" (Vol. 2, para. 6.50);

"There are 1Gbit/s products in the market priced at a premium to SFBB, but the broader evidence suggests it is unlikely that this will be attractive to many customers. Looking forward, indicative forecasts provided by networks and ISPs on the take-up of SFBB and UFBB products, taken together, suggest that, by 2026 the majority of people will still be subscribing to SFBB packages with 20% subscribing to UFBB. However, in order to achieve this level of penetration, it may well be that the prices charged will need to be more attractive" (Vol. 2, para. 6.51); and

"Accordingly, while there may be some early adopters with a relatively high demand for UFBB, our expectation is that to achieve high volumes of sales attractive prices will need to be offered" (Vol. 2, para. 6.52).

⁹ This differs to Ofcom's definition of ultrafast broadband as speeds of at least 300 Mbit/s.

¹⁰ WFTMR, Vol. 2, para. 6.34.

- 3.13 It is difficult to draw strong inferences from this evidence. We assume that Ofcom interprets the evidence as suggesting that current UFBB prices are charged at a premium (with more of an overlap in prices for slower speeds¹¹) and that the premium may be deterring mass-market take-up of UFBB.
- 3.14 If current UFBB prices are above those needed to attract significantly more customers to UFBB, this does not imply a single market. For example, if there is limited current competition in UFBB, then a UFBB supplier may choose to price higher to the minority of users prepared to pay a premium for UFBB. Alternatively, UFBB prices may be high because of the high costs of UFBB supply. Ofcom's evidence does not help in determining which situation applies.
- 3.15 Even were a hypothetical UFBB monopolist to find it more profitable to make low-priced offers to attract new customers to UFBB, such a monopolist might find it profitable to raise prices on customers once they are accustomed to the faster speeds. Virgin Media is currently upgrading many customers automatically to faster speeds.¹² There is evidence that once customers are on ultrafast they are reluctant to switch back to slower speeds.¹³
- 3.16 Ofcom is ultimately seeking to assess competition for a wholesale service. However, Ofcom presents very little analysis of the wholesale market. Substitution at the retail level is relevant to the assessment as a potential indirect constraint but it is the overall constraint on the wholesale supply of UFBB-capable lines that needs to be investigated to determine whether there might exist a separate market for UFBB-capable lines.
- 3.17 We understand that network operators and CPs are currently considering putting in place long-term deals for the acquisition of UFBB-capable lines and JVs for investments in extending network coverage are reportedly under consideration.¹⁴ Long-term deals and co-investment vehicles are more likely to be driven by long-term expected demand than current retail substitution between SFBB and UFBB. Long-term deals may also be impacted by factors specific to wholesale demand such as:

¹¹ It is also difficult to make inferences from services of different speeds being offered at similar prices. Potentially, the services differ in other aspects or in relation to other charges. Potentially, the higher speed services offered at similar prices as lower speeds are only available in some areas suggesting differences in competitive conditions between areas.

¹² [Virgin Media press release](#), 7 January 2020.

¹³ The Swedish regulator, PTS, found that a 10 percent increase in fibre broadband prices would not yield any significant difference in the number of people choosing xDSL-based broadband (PTS, Utkast till beslut om fastställande av företag med betydande inflytande på marknaden för lokalt tillträde till kopparbaserad nätinfrastuktur (marknad 3a), 18 June 2018, p.45). [X].

¹⁴ CityFibre announced in January 2020 that TalkTalk has made long-term commitments of customers to CityFibre and that CityFibre's existing strategic agreement with Vodafone was being modified to open its network to other providers (CityFibre media release, 21 January 2020). Sky has been reported as competitively tendering for a wholesale UFBB supplier (The Telegraph, "Sky courts Openreach rivals as ultrafast broadband race accelerates", 3 March 2019). Liberty Global has announced it is considering wholesale arrangements (Liberty Global, Investor Call, Full Year 2019, 14 February 2020, p.6) and it has been reported that Liberty Global may enter a potential JV with Sky (<https://www.capacitymedia.com/articles/3824855/sky-and-virgin-media-further-ftth-talks>).

- a. there may be a value to a CP in securing a deal for the supply of UFBB-capable lines which locks in highly competitive prices enabling them to develop attractive retail offers and support their long-term competitive position;¹⁵ and
 - b. there may be value to a CP in moving sooner to 'future-proof' its broadband offers whereas end-users may migrate more gradually depending on their particular usage requirements.
- 3.18 Whether wholesale demand for UFBB-capable lines is such that it would enable a hypothetical monopolist of UFBB-capable lines to charge a premium is something that would require more evidence on CP-demand for UFBB deals, the nature of the deals and the leverage that can be exerted now and in the future. Ofcom should be in a position to seek such evidence, as these deals are being negotiated (or have been struck) now.
- 3.19 There is some evidence from Virgin Media's statements that UFBB-capable lines could be a separate market. It was reported that during a recent meeting between analysts and Virgin Media, Virgin Media was becoming more interested in wholesaling their cable network in response to increased competition from ultrafast-capable networks and potential future overbuild by FTTP.¹⁶ We also understand from discussions with Openreach that retail CPs have been discussing with Virgin Media possible wholesale deals in relation to ultrafast services.
- 3.20 If Virgin Media were already effectively constrained by the presence of SFBB, then competition from FTTH should not make a significant difference to their conduct. The statement that wholesaling would only make sense when they face competition from FTTH instead suggests that Virgin Media is currently able to provide an advantage to its retail arm through exclusively supplying ultrafast services to it and that this advantage would cease when there is competition from FTTH.
- 3.21 Evidence of strong substitution at the retail level could support finding a single wholesale market for all speeds. Whether substitution at the retail level creates an effective indirect constraint so as to prevent a profitable SSNIP by a hypothetical monopolist of UFBB at the wholesale level depends on the following factors.
- a. The gross wholesale margin between the competitive wholesale price and the avoidable wholesale costs.
 - b. The ratio of wholesale prices to retail prices (for instance, the smaller the level of wholesale prices relative to retail prices, the smaller would be the increase in retail prices for a 5%-10% increase in the wholesale price even assuming a wholesale price increase is fully passed through).
 - c. The extent to which a wholesale price increase can be expected to be passed through into higher retail prices. If SFBB and UFBB are close substitutes at the retail level then a SSNIP of UFBB at the wholesale level might not be (fully) passed through because of the indirect constraint from superfast retail products. If there is retail demand for UFBB speeds, CPs

¹⁵ For example, when Apple launched the iPhone in the UK and when only a minority of customers had demand for a smartphone, it reached an exclusive deal with O2 to be the sole UK retailer of the iPhone with O2 paying a reputedly high price for the deal (<https://www.theguardian.com/technology/2007/sep/17/mobilephones.apple>).

¹⁶ New Street Research, *Liberty Global – Feedback from management meeting*, 12 March 2020, p.4.

would be expected to continue to demand UFBB, even after a wholesale price increase, provided it is profitable for them to supply. This depends on whether the retail margins are such that a SSNIP above the competitive wholesale price level would not make them negative.

- d. Whether price elasticity of retail demand for UFBB is sufficiently high as to render the SSNIP at the wholesale level unprofitable.

3.22 Table 1 presents an illustrative example of how these components fit together. The numbers are chosen simply for the purposes of illustration. Given the assumptions made, it can be seen that the total gross wholesale margins increase with the SSNIP. For these assumptions, a SSNIP by a hypothetical monopolist of UFBB would increase wholesale profits as wholesale profit will be total gross wholesale margins less fixed costs – suggesting a separate UFBB market.

Table 1: Illustrative example of factors determining whether a SSNIP by a hypothetical monopolist of UFBB is profitable

Initial volumes	1 million
Avoidable wholesale cost per unit	£5.00
Competitive wholesale price	£20.00
Price change from 5% SSNIP	£1.00
Wholesale price after 5% SSNIP	£21.00
Assumed initial retail price	£40.00
Assumed pass-through rate	80%
New retail price	£40.80
Percentage retail price increase	2%
Assumed price elasticity of retail demand	-2
Percentage volume loss	-4%
Initial total gross wholesale margins	£15.0 m
Total gross wholesale margins after SSNIP	£15.4 m

3.23 Ofcom could collect evidence relevant to these parameters. Ofcom did, for example, commission a survey of whether customers would switch (or not upgrade) in response to relative price changes when it assessed whether SBB and SFBB were part of the same market in the 2018 WLA Statement. Given that wholesale prices for SFBB and UFBB are currently being set as part of long-term agreements, an assessment of how these factors are likely to impact long-term prices would be needed such as by taking a forward-looking view of the elasticity of demand. In this regard, the evidence noted earlier that end-customers are reluctant to switch back to slower speeds is important to take into account. A forward-looking approach is important in any event given that the market review is being used to set regulation in the period to 2026.

3.24 The WFTMR also provides little analysis on whether there might exist a separate product market demarcated at a lower threshold than the 300 Mbit/s threshold of Ofcom’s UFBB definition. On the supply-side, the fact that Openreach’s existing network only has a significant presence in the supply of speeds up to 80 Mbit/s could suggest a separate market. However,

evidence is needed on the price sensitivity of demand to determine whether a SSNIP on, say, speeds of above 80 Mbit/s would be profitable for a hypothetical monopolist of such speeds.

- 3.25 In summary, we consider that Ofcom has not presented sufficient evidence to substantiate that there is a single broadband market undifferentiated by speed. Evidence from Virgin Media suggests that SBB and SFBB may not have been effectively constraining UFBB. Evidence on supply-side substitution points to a clear asymmetry in the ability of SFBB and UFBB to expand into each other's segments. Ofcom's evidence on demand-side substitution is inconclusive and the analysis of the constraints arising from demand side switching at retail and wholesale levels has not been done.

4 Assessment of Ofcom's proposed geographic market definition

Ofcom's proposed geographic market

- 4.1 Ofcom proposes to define two geographic WLA markets:
- a. WLA Area 2 (*"where there is already some material commercial deployment by rival networks to BT or where this could be economic"*); and
 - b. WLA Area 3 (*"where there is unlikely to be material commercial deployment by rival networks to BT"*).¹⁷
- 4.2 Ofcom's proposed finding is based on the following key propositions.
- a. *"The key consideration in defining geographic markets is whether competitive conditions in different areas are significantly different from each other... We focus not only on existing competitive conditions but also, importantly, on how we expect the competitive environment to evolve over the review period based on new network build"* (Vol. 2, para. 7.11-7.12).
 - b. *"We acknowledge that, within Area 2, rival build is more certain in some areas than others... However, market definition is a forward-looking exercise and, for this review, we are looking ahead to the period April 2021 to March 2026. Our assessment is that there are genuine prospects of future rival network rollout in areas where there are plans for rival build"* (Vol. 2, para. 7.43-7.44).
 - c. *"There are 15 postcode sectors that have already seen investment by two rival MSNs to BT [multi-service networks]. However, based on a wider assessment of competitive conditions, we do not find any postcode sectors where competition from both networks [in addition to BT] is well established. Our view is that, absent wholesale access regulation, competitive conditions in the postcode sectors would not be sufficiently distinct from those in other postcode sectors in Area 2. In particular, there is clearly potential for material competition, but it remains uncertain how effective this will prove to be, due to: (a) the nascent and currently small scale of build, and that this build remains on-going; and (b) the overall levels of penetration operators have been able to achieve given their overall coverage"* (Vol. 2, para. 7.47-7.48).
 - d. Ofcom's estimates that the percentage of premises in areas with 3 or more networks (including Virgin Media in its footprint) will grow from 0.2% currently to 21% by 2026 (see

¹⁷ WFTMR, Vol.2, para. 7.6.

Table 2). Ofcom forecasts that the percentage of premises in areas where there is a single network (expected to be BT) will fall from 44.8% to 30% by 2026.

Table 2 – Existing and expected extent of network competition

Number of multi-service networks including BT	Existing (% of UK premises)	Expected by 2026 based on planned network presence (% of UK premises)
3 or more	0.2%	21%
2	55.1%	48%
BT only	44.8%	30%

Source: Based on WFTMR, Tables 7.2 and 7.3.

Principles of geographic market definition

- 4.3 Demand and supply side substitutability should imply highly localised fixed broadband markets:
- a. a customer needing a fixed broadband connection to their house will not regard connections to other locations as a close substitute; and
 - b. networks present in one part of the UK will not be able to readily supply a different part of the country.
- 4.4 In practice, telecom regulators have aggregated fixed telecoms markets for the purpose of regulation but on the assumption that the areas have sufficiently similar competitive conditions or are under a common price constraint.
- 4.5 The European Regulators Group’s Common Position on Geographic Aspects of Market Analysis (October 2008) states that an assessment of significant differences in competitive conditions across geographic areas should include analysis of:
- a. differences in barriers to entry;
 - b. differences in the number of suppliers;
 - c. differences in market shares; and
 - d. differences in prices albeit that uniform prices might not indicate a national market if they are “*induced by regulation*”.¹⁸
- 4.6 The question of whether two areas have sufficiently similar competitive conditions inevitably brings in evidence that is also relevant to assessing market power. However, for the purposes of assessing the geographic market definition, we focus on differences in competitive conditions and leave the specific question of whether Openreach is likely to have SMP until the next section.

¹⁸ *ERG Common Position on Geographic Aspects of Market Analysis*, October 2008, p.3.

Our assessment of Ofcom's approach to geographic market definition

- 4.7 Ofcom proposes to divide the UK into a contestable area (Area 2) and a non-contestable area (Area 3). Ofcom proposes to find that no part of the UK falls under Area 1 (i.e. where there are two established rival networks to BT) despite forecasting that 21% of premises will be in areas with three or more networks by 2026. Ofcom does so on the grounds that "*it remains uncertain how effective this [competition] will prove to be, due to: (a) nascent and currently small scale of build, and that this build remains on-going; and (b) the overall levels of penetration operators have been able to achieve given their overall coverage*".
- 4.8 We have two main comments on Ofcom's approach to geographic market definition:
- a. Ofcom's approach insufficiently reflects the forward-looking wholesale competition in the market; and
 - b. Forward-looking competitive conditions are likely to warrant a further distinction between areas where Virgin Media has an established network presence and other areas where no operator currently has an UFBB-capable network.

The implications of forward-looking wholesale competition for geographic market definition

- 4.9 A forward-looking approach requires an assessment of the likely development of competition over the review period. The impact of entry should not be dismissed simply on the grounds that it is currently small with the build ongoing which simply describes current circumstances. To the extent that a factor is likely to significantly affect competition it should be taken into account even if there is uncertainty over the precise magnitude of its impact. If Ofcom considers that some areas are likely to be effectively competitive on a forward-looking basis, this could warrant those areas already being found to be in a separate market for the purposes of assessing whether regulation is warranted (or, if regulation is to be imposed, whether obligations should be lighter than in areas with less prospect of effective competition).
- 4.10 Further, it is competitive conditions in the wholesale market that are directly relevant. As noted earlier, CPs are currently considering (or have struck) long-term deals. A network provider such as Openreach would need to determine its wholesale offers taking into account the risk of competition for a CPs' volumes from actual and potential wholesale competitors. In this context, entrants or even potential entrants can constrain prices even in advance of extensive network build. For example, we understand that Openreach offered all of its customers discounts on its FTTC prices in 2018 [X].
- 4.11 In wholesale tenders for a large CP's volumes (or a significant portion of them), the risk of competition may be sufficient to constrain prices. For example, with respect to wholesale tenders in the mobile industry, the CMA and the European Commission found that:
- a. "*We [the CMA] found that the wholesale bidding market was not transparent. In any given negotiation, the MNOs involved in the process would not always be aware of which other MNOs were bidding. For example, the perception of an MNO's involvement has been referred to by some MVNOs as important in obtaining competitive outcomes*";¹⁹ and
 - b. The EC states: "*The Commission notes that MNOs are not aware of which MNOs participate in the tender negotiations. MNOs submit that the non-MNOs inviting tenders*

¹⁹ CMA, BT/EE: *Final Findings Report*, para. 13.35.

either do not indicate who are the rival bidders or that they indicate that all MNOs are bidding. Often MNOs assume wrongly that one MNO is participating in the tender, when in fact, that MNO was not involved. [...]. Non-MNOs often misdirect their MNO bidders as to the extent of competition. An example is provided in the Commission's file. This indicates that non-MNOs believe that even only alluding to having more participants in the tender would bring about a more competitive process and result in lower rates and better overall terms.”²⁰

- 4.12 The nature of wholesale competition could result in effective competitive constraints based on rivalry between potential entrants even before networks are rolled out. Further, a bidding-type market may not require an area to support three networks to be effectively competitive. CPs may even be able to obtain competitive prices under long-term contracts from rival operators seeking to secure sufficient volumes to be the single network provider in an area.²¹ We discuss this further in Section 5.

Differences in competition as a result of the presence of Virgin Media

- 4.13 Ofcom rejects dividing Area 2 between areas where there is existing rival network coverage and areas where rivals may build in the future on the grounds that “*market definition is a forward-looking exercise*”.²²
- 4.14 Even today Virgin Media’s presence significantly impacts retail competition in its areas including in terms of the much more limited share of CPs using Openreach including BT. The SMP Guidelines require regulators to first determine whether the underlying retail markets would be prospectively competitive in the absence of wholesale regulation.
- 4.15 Further, on a forward-looking basis, there are reasons as to why competitive conditions at the wholesale level are likely to differ significantly between areas where Virgin Media has an established UFBB-capable network and other areas.
- a. Other operators would need to determine wholesale prices taking into account potential competition from a player with a largely sunk network and relatively low incremental costs.²³ Virgin Media also faces no restrictions on their pricing and thus would be able to have geographic discounts and other targeted pricing that would make it difficult for

²⁰ EC, *H3G/O2 merger decision* (2016), paragraphs 2035-2036.

²¹ Future market reviews would be able to assess the future level of competition including the impact of any new wireless or other technologies that may arise.

²² WFTMR, Vol.2, para. 7.44.

²³ We understand from BT’s response that UBS estimates that Virgin Media would incur around £100m of upfront capex relating to IT costs to set up the wholesale platform and incremental OPEX costs described as modest. There is also a potential cannibalisation risk to Virgin Media’s retail revenues. However, UBS expects that this risk would be substantially moderated by the DOCSIS 3.1 software upgrade currently being implemented which would enable Virgin Media to offer 1Gbps services to its customers while offering speeds of up to 350 Mbps to CPs. UBS estimates that cable wholesale would have an NPV benefit for Virgin Media of £2.4 billion. This NPV calculation is based on a scenario where just under a quarter of Sky’s subscriber base utilises cable wholesale (UBS, *UK Telecoms - UK communications market at a crossroads*, February 2020, p. 28).

Openreach to build FTTP particularly if Ofcom does not give Openreach the same pricing flexibility.

- b. Other operators may need to price to compensate for the fact that Virgin Media's existing network (should it decide to wholesale) could be more attractive to a CP than reaching an agreement with a new entrant whose timing and extent of network deployment is uncertain.
- c. Virgin Media's retail presence in an area could make it more difficult for new UFBB entrants such as Openreach to build a customer base with demand for UFBB (e.g. high value early adopters are likely to already be with Virgin Media).

4.16 These factors could warrant current Virgin Media areas being in a separate market to areas where Virgin Media is not present.²⁴ This would be strongly the case if UFBB-capable lines were in a separate product market or if lines capable of delivering speeds faster than FTTC were in a separate market. However, given the nature of wholesale competition (including the focus of CPs in securing wholesale access to an ultrafast capable network to ensure their future competitiveness and the use of long-term agreements), a separate market for Virgin Media areas may also be warranted even if all broadband speeds are found to be in the same market.

4.17 In summary, we consider that Ofcom should further investigate whether there are reasonable grounds to distinguish separate geographic markets between contestable areas in which Virgin Media is already present and other areas particularly if there were found to be a separate market for UFBB-capable lines (or for lines capable of delivering speeds faster than 80 Mbit/s). Ofcom should also investigate whether further distinctions are warranted noting that the current competition for CPs' volumes extends to the provision of services from networks still to be built. In particular, while competition based on long-term contracts implies prospective entry can create a constraint, further analysis would be needed to determine whether competitive conditions would vary between areas based on the number of networks that could be sustainably supported in each area. For example, competitive conditions might differ depending on whether operators are competing to be one of three operators in an area or whether they are competing to be the sole viable network in an area. This might lead to a difference between areas as to whether SMP is found or a difference in the regulations imposed.

5 Assessment of Ofcom's proposed finding that Openreach has SMP

Ofcom's proposed SMP finding

5.1 Ofcom proposes to find that BT has SMP in relation the supply of all broadband speeds and in both WLA Areas 2 and 3. Ofcom's proposed finding is based on the following key propositions:

- a. BT has 70% of overall broadband connections to end-customers in Area 2 and close to 100% in Area 3 (Vol. 2, Table 8.1).

²⁴ A distinction based on Virgin Media's presence could be in addition to any further separation based on other differences in expected competitive conditions.

- b. "...BT's ubiquitous network also gives it a competitive advantage over other networks because it can supply a large part of retail providers' contracts. We understand from stakeholders that there is a cost to buying from multiple networks" (para. 8.29);
- c. Even in the part of Area 2 where Virgin Media is present, "BT's share is still above 50% and, therefore, consistent with the presumption of dominance" (para. 8.52).
 - i. Further, "In areas where both BT and Virgin Media are present, BT also still has an advantage from having passed a greater proportion of premises. Whereas BT's network is ubiquitous, Virgin Media has passed approximately 80% of premises in these areas." (para. 8.53).
 - ii. "Two players is not sufficient to deliver effective competition in this market. We provisionally conclude, therefore, that if we considered Virgin Media areas and non-Virgin Media areas separately, we would find BT to have SMP in both" (para. 8.54);
- d. "We also note that there has been recent speculation that Virgin Media is considering providing downstream wholesale access services (either on its own, or through a new wholesale company), and Sky is considering which networks it will use in future to deliver broadband. However, to date there is no track record of Virgin Media competing in this way and, therefore, no evidence on how effective it might prove to be in practice. Moreover, even if Virgin Media were to supply downstream products, Virgin Media would be unable to supply all of a customer's requirements (for example, due to expected partial coverage, Sky or TalkTalk would still be reliant on BT to supply some of their customers). Other network operators which represent an opportunity for countervailing buyer power are currently much smaller in scale" (para. 8.64).
- e. "We propose to conclude that BT has SMP in Area 2 due to BT's high market share and the existence of barriers to entry and expansion, even in the presence of PIA [Physical Infrastructure Access]" (para. 8.69).

Principles in assessing SMP

- 5.2 Under the Framework Directive, an undertaking is deemed to have SMP "if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and consumers".²⁵ The European Commission has also noted that it considers that "an undertaking which is capable of profitably increasing prices above the competitive level for a significant period of time does not face sufficiently effective competitive constraints and can thus generally be regarded as dominant."²⁶
- 5.3 The European Commission's SMP Guidelines set out a range of factors relevant to assessing SMP including market shares, barriers to entry and expansion, the absolute and relative size of the undertaking, control of infrastructure not easily duplicated, technological and commercial advantages, buying power, services diversification, economies of scale and scope, network

²⁵ European Commission, *SMP Guidelines*, para. 52.

²⁶ *Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*, para. 11.

effects, vertical integration, a highly developed sales network, access agreements, agreements that could lead to market foreclosure and the absence of potential competition.

- 5.4 The relevance of particular factors needs to be assessed in the context of the overall market circumstances. For example, the SMP Guidelines state that “*large market share can function as an accurate indicator only on the assumption that competitors are unable to expand their output by sufficient volume to meet the shifting demand resulting from a rival’s price increase.*”²⁷ The CAT’s TalkTalk judgment makes a similar point:

*“We regard this approach to what is in essence an economic analysis as preferable to an attempt to put the analysis of market power into a form of presumptive straitjacket which does not aid the analysis. It is not in our view helpful to categorise the range of factors that need to be considered, such as barriers to expansion, technological advantage and economies of scale or scope as “exceptional” and in some way less important than market shares. They are all clearly relevant and need to be given appropriate weight.”*²⁸

- 5.5 It should be noted that the concept of dominance has a parallel with the hypothetical monopolist test. In particular, with sufficient information it would be possible to test whether a firm has the power to profitably maintain prices above the competitive level directly by comparing whether the increased margins on the customers it retains outweighs the margins on customers it loses. Where a firm supplies multiple differentiated products into a market, it may also be that a firm could find it profitable to raise prices for some products above the competitive level while it would be constrained to pricing products in other market segments at the competitive level. This could arise where margins on products differ and/or the price elasticities of demand for the products differ such as where one product has closer competing substitutes than others.²⁹

Our assessment of Ofcom’s proposed SMP finding

- 5.6 We consider that there are two key issues in the assessment of market power in the WFTMR which warrant further investigation by Ofcom:
- a. Whether Openreach can be expected to have SMP in Virgin Media areas in relation to supply of any broadband service; and
 - b. Whether Openreach can be expected to have SMP on a forward-looking basis in any areas in the supply of UFBB.

²⁷ European Commission, *Guidelines on market analysis and the assessment of significant market power under the regulatory framework for electronic communications networks and services*, 2018, footnote 50.

²⁸ CAT judgment, *TalkTalk and Vodafone v Ofcom*, January 2020, para. 171.

²⁹ While a firm that is dominant in some products may earn a different margin on those products than other products, the existence of different margins is not evidence of dominance. Even non-dominant firms in industries with large fixed costs may efficiently recover those costs through difference contribution margins reflecting differences in elasticities.

- 5.7 We discuss why further investigation is needed in relation to each of these issues in the remainder of this section.

Assessment of SMP in areas where Virgin Media is already present

- 5.8 Ofcom's finding that Openreach has SMP is based on three types of evidence: a high market share; widespread coverage; and the advantage of a sunk network.³⁰
- 5.9 Ofcom reports that in Virgin Media areas, "*BT's share is still above 50%*."³¹ However, even a relatively high historical market share in an area need not imply that a firm has SMP if there is a credible risk of losing significant volumes to competitors. In Virgin Media areas in particular, Openreach's forward-looking volumes are at significant risk (and the footprint is likely to expand). Liberty Global has sought the requisite approvals to build new network in the UK and advised Ofcom that it is "*willing to provide wholesale access to its electronic communications network to other telecoms providers on commercial terms*."³² Liberty Global stated in February this year that it is "*considering wholesale arrangements to drive network utilization and valuation*"³³ and that Virgin Media is "*only utilising about 40% of our network*."³⁴ Given its sunk network with significant spare capacity, Virgin Media can be expected to have relatively low costs in supplying wholesale volumes from its DOCSIS network.
- 5.10 The risk to Openreach's volumes is heightened by the fact that large CPs are seeking long-term agreements and partnerships with network suppliers.³⁵ Openreach would need to price taking into account the risk of losing a CP to Virgin Media (or a prospective entrant). Indeed, it has already done this for its FTTC products where it is pricing below its regulatory cap [X]. This not only suggests Openreach may not have SMP but also shows how contestability in the wholesale market can lead to competitive pricing even if that pricing enables Openreach to retain its market share.
- 5.11 Ofcom states "*In areas where both BT and Virgin Media are present, BT also still has an advantage from having passed a greater proportion of premises. Whereas BT's network is ubiquitous, Virgin Media has passed approximately 80% of premises in these areas*."³⁶ However, Virgin Media has a UFBB-capable network whereas Openreach's network is not UFBB-capable and Openreach's UFBB rollout will take time and is risky. Virgin Media's Project Lightning also includes significant coverage infill.³⁷
- 5.12 Ofcom states "*Two players is not sufficient to deliver effective competition in this market*" (8.54). However, the relevant market is a wholesale market in which CPs use competitive

³⁰ WFTMR, para. 8.25 to 8.32.

³¹ WFTMR, para. 8.52.

³² Ofcom, *Proposal to apply code powers to Liberty Networks Limited*, 21 January 2020.

³³ Liberty Global Q4 2019 Investor Call Presentation.

³⁴ <https://www.digitaltveurope.com/2020/02/17/liberty-global-mulls-uk-fibre-jv-and-wholesale-options-to-crystallise-value-of-network/>

³⁵ See footnote 14.

³⁶ WFTMR, Vol. 2, para. 8.53.

³⁷ Referred to in BT's main response (based on Enders Analysis: "Winners and losers as the UK fibres up", page 26 and Table 21, 28 January 2020).

tendering to reach long-term agreements and Virgin Media's network offers superior speeds to Openreach's even if it passes somewhat fewer premises in Virgin Media areas. While Professor Paul Klemperer cautions against making a simplistic assumption that competition must necessarily be strong in bidding markets, he notes the type of conditions under which competition can be expected to be strong in bidding markets. In particular, where competition is 'winner takes all' (i.e. each supplier either wins all or none of the CP's specific order for the area), competition is 'lumpy' (i.e. the order accounts for a significant share of the supplier's total sales in that area so that there is an element of 'bet your company'³⁸) and competition begins afresh for each contract (i.e. customers are not locked in to their supplier), then "*It is straightforward that the existence of two identical firms is indeed sufficient for perfect competition (assuming constant marginal costs and no capacity constraints), and that historic market shares imply neither future success nor market power.*"³⁹

- 5.13 Professor Klemperer's paper is part of a wider academic literature on competition in markets which have bidding characteristics. While actual markets may not meet all the conditions required for perfect competition, the literature is nonetheless useful to understand how particular features can lead to strong competition and thus allow for an assessment of the likely level of competition in an actual market. The literature also shows that in markets with bidding characteristics, market shares may not provide a reliable indicator of market power.
- 5.14 Further, Openreach would also need to price taking into account the risk that a CP could seek an offer from a prospective new entrant. Thus, there might be more than two players competing or at least the risk of more than two players competing. As noted above, the CMA and European Commission have found that the risk of another supplier participating in a tender may be sufficient to achieve a competitive outcome.
- 5.15 Ofcom suggests that Openreach may have an advantage in that "*Virgin Media would be unable to supply all of a customer's requirements (for example, due to expected partial coverage, Sky or TalkTalk would still be reliant on BT to supply some of their customers)*"⁴⁰ and that "*there is a cost to buying from multiple networks*".⁴¹ However, to determine whether this is a material advantage, Ofcom would need to determine:
- a. The extent and relevance of national coverage differences going forward, noting that while Openreach currently has greater coverage, its network is not UFBB-capable and that Virgin Media is expected to continue to have a significantly larger UFBB network footprint over the review period particularly when taking into account the announced expansion;⁴²
 - b. Whether Openreach's current widespread network coverage will be less significant in the future given that Virgin Media and other altnets now have access to Openreach's physical infrastructure in expanding their networks; and

³⁸ In the context of fibre rollout, we interpret this condition as equivalent to being important to the viability of rollout in that area.

³⁹ P. Klemperer, *Bidding markets*, June 2005, p.7.

⁴⁰ WFTMR, Vol. 2, para 8.64

⁴¹ WFTMR, Vol. 2, para. 8.29

⁴² WFTMR, Vol.2, para. 8.51.

- c. whether the cost for a CP to retail broadband connections from multiple networks is so significant that it would allow for Openreach to price significantly above the competitive level. We note that the use of multiple suppliers is common in telecoms markets.⁴³
- 5.16 We note that TalkTalk and Vodafone have both entered into supply agreements with CityFibre despite CityFibre having a much smaller actual and planned network footprint than either Openreach or Virgin Media. This suggests that CPs do not find the cost of using multiple networks prohibitive.
- 5.17 CPs also have an interest in maintaining network competition because it provides them with leverage in negotiations with network suppliers. This can provide an incentive for multiple sourcing.
- 5.18 Ofcom has also not shown that there is a real risk of Openreach having the ability or incentive to seek to use pricing to leverage market power from less competitive areas to Virgin Media areas. Any market power in non-Virgin Media areas would relate to SBB and SFBB given that the constraints on Openreach's supply of UFBB (see also the discussion in the next section). SBB and the SFBB anchor product are regulated at cost and other SFBB prices are constrained by the anchor product. Because CPs can access these services at cost or at competitive prices this limits Openreach's ability to try to use its position in the supply of these services to build a position in Virgin Media area. In particular, to do so would effectively require Openreach to offer a bundle with an effective price for these services which is below cost. This would be costly in itself and would be even more costly given that to foreclose Virgin Media would require pricing below Virgin Media's low incremental costs.
- 5.19 A price squeeze in this context would only be rational if by incurring losses today, Openreach could drive rivals out of the market and recoup the losses with high prices in the future. However, Virgin Media's network assets are sunk. It would not make commercial sense for its existing network assets to be removed in response to temporary low prices. Virgin Media would be able to supply services in the future as soon as Openreach increased its prices (or its effective price) above Virgin Media's incremental costs. Such predatory conduct would be irrational for Openreach and carry no risk of harm to end-customers given that there would be low prices in the short-term and no risk of excessive prices in the future.
- 5.20 Similar reasoning also implies that other potential types of margin squeeze are highly unlikely in Virgin Media areas and do not risk consumer harm. Any attempted margin squeeze between wholesale prices or wholesale and retail prices would be unsuccessful because Virgin Media would prevent excessive prices being charged in the future. Further, to the extent that Openreach sought to leverage any SMP in relation to other areas or services such leveraging could be prevented by regulation on those other areas and services such as cost-based price regulation, ex ante margin squeeze tests and competition law.
- 5.21 In summary, market conditions suggest Openreach will be unable to profitably set excessive prices in Virgin Media areas given the risk that CPs would go to Virgin Media or to another

⁴³ We understand from BT that: CPs, such as MNOs, Sky and TalkTalk, will typically issue tenders or negotiate bespoke deals for services or dark fibre to meet their Very High Bandwidth needs; retail CPs buy business leased lines services at all bandwidths from multiple wholesalers and altnets where available; aggregators also source from multiple sources; and retail CPs commonly have pricing tools to select the optimal wholesale or altnet input (for example, Vodafone, has a web-based tool to obtain quotes from multiple leased lines providers).

altnet (potentially with the CP using a long-term agreement to help sponsor new entry). Openreach also needs to ensure its wholesale prices will enable CPs to price competitively with Virgin Media's retail services. There is also no reason to find SMP in Virgin Media areas on the basis of leveraging concerns relating to other areas or services. Pricing below Virgin Media's incremental costs would be loss-making for Openreach and Openreach would not have the prospect of recouping these losses. Further, even if Ofcom has concerns regarding leveraging from other areas or services, these can be addressed by ex ante regulatory obligations in those other areas or services and by competition law.

Assessment of SMP in the supply of UFBB

- 5.22 Ofcom has not undertaken a specific assessment of whether Openreach is likely to have SMP in UFBB. Rather Ofcom considers certain factors which largely reflect Openreach's position in SBB and SFBB and then implicitly assumes that SMP in relation to the slower speeds would carry across into SMP in UFBB.
- 5.23 Even if there were found to be a single market for all broadband speeds, it cannot be presumed that a firm having SMP in relation to some speeds implies it will have SMP in relation to others. As noted above, a firm may find it profitable to set supra-competitive prices for some products in a market but not others. This would be particularly the case if the other products have a much higher price elasticity of demand because of the existence of close substitutes.
- 5.24 We also note that in merger decisions, it is common for authorities to find that competitive conditions differ between different segments of a market such that the merging parties' position in some segments raises concerns but do not raise concerns in other segments.⁴⁴
- 5.25 There are reasons as to why Openreach is likely to face relatively strong constraints in the supply of UFBB:
- a. CPs are currently tendering for the supply of UFBB services;
 - b. There are reasons to doubt that Openreach enjoys any significant advantage in the supply of UFBB services – it has a much more limited UFBB network than Virgin Media and regulated Physical Infrastructure Access (PIA) makes UFBB contestable more generally by placing Openreach on a more level footing with other providers in rolling out a new network⁴⁵;
 - c. As noted earlier, Virgin Media has low incremental costs to supply additional volumes from its existing network;
 - d. Openreach would need to compete for CP volumes taking into the account the risk that Virgin Media or new entrants may also be competing (Openreach will not necessarily know which other operators are competing for a particular CP tender); and

⁴⁴ For example, in *Case No COMP/M.6497–Hutchison 3G Austria/Orange Austria*, the European Commission found a single mobile services market but that the parties' combined shares in the post-paid and data-only segments raised concerns whereas the parties' lower combined shares in the pre-paid and business segments did not raise concerns (para. 144-147).

⁴⁵ WFTMR, para. A7.18.

- e. Openreach needs to win significant business from independent CPs for investment in an extensive FTTP network to be commercially viable (i.e. BT Consumer's volumes are not sufficient).⁴⁶
- 5.26 Further, for regulation to be proportionate, the assessment of SMP should take into account any other regulation that will be in place as this other regulation may be sufficient to prevent SMP. In this regard, whether there is SMP in UFBB should take into account not only regulation of PIA but also regulation of SBB and SFBB. If SFBB is in the same market as UFBB, then regulated wholesale access to SFBB may effectively constrain the supply of UFBB. This appears to be Ofcom's view: "*The prices of better quality services are constrained by the price cap on 40/10 services, because consumers view those as reasonable substitutes*" (para. 8.42).
- 5.27 Ofcom's proposed regulatory obligations in relation to UFBB set out in Annex 15 of the WFTMR suggest a concern with low prices rather than high prices. However, regulation would only be warranted where there is SMP. It is difficult to see how Openreach has SMP in relation to UFBB given the reasons listed above. On the contrary, Openreach can be expected to need pricing flexibility to compete particularly with Virgin Media given its established position and low incremental costs. Further, as set out in the previous section, leveraging is unlikely to be rational for Openreach in the presence of Virgin Media and can, in any event, be prevented through regulation applying to any services or areas where Openreach does have SMP.
- 5.28 Openreach is effectively an entrant in UFBB and, because of PIA, enjoys no significant advantages of other operators in rolling out an UFBB-capable network. Virgin Media's existing UFBB network is much larger than Openreach's and Virgin Media has concrete plans to extend its network to 80% of premises by 2025 (i.e. wider than Openreach's planned coverage).⁴⁷ Accordingly, there is no reason as to why Openreach should not be allowed the same flexibility to offer volume discounts for pure UFBB offers as other operators. Volume discounts should be a concern only where competitors cannot compete on equal terms to supply a customer's demand.
- 5.29 In summary, we have not seen any compelling evidence that Openreach has SMP in the supply of UFBB on a forward-looking basis. Ofcom's limited discussion of UFBB suggests that Openreach might be able to leverage a position from SBB/SFBB into UFBB or from non-competitive to competitive areas. We consider that there is evidence that these concerns are misplaced. For example, CPs are willing to enter into deals for UFBB with geographically-limited players such as CityFibre which are separate from their current use of SBB/SFBB. Moreover, if there were evidence of a real risk of a leveraging problem, it could be addressed by regulation of SBB/SFBB in non-competitive areas as well as competition law.

6 Concluding comments on implications for regulation

- 6.1 In this report, we have shown that the evidence presented in the WFTMR does not imply:
- a. a single WLA market undifferentiated by speed; or

⁴⁶ The WFTMR notes that a network may need at least 40% and potentially in excess of 50% penetration of ultrafast customers to be viable (WFTMR, para. 8.56).

⁴⁷ *Liberty Global Q4 2019 Investor Call Presentation*, p.6.

- b. that Openreach has SMP for any broadband speed in Virgin Media areas or for UFBB in any area.
- 6.2 Further, there is significant evidence to show that Openreach is likely to face significant competitive constraints:
 - a. in the supply of UFBB which could support a separate product market for UFBB-capable speeds; and
 - b. in Virgin Media areas which could support a separate geographic market defined by reference to Virgin Media's current network footprint.
- 6.3 This evidence in particular relates to the nature of wholesale competition which reflects the need for retail CPs to get in place long-term agreements for UFBB-capable lines to remain competitive in the long run: this gives Virgin Media a competitive advantage, because it has a widespread network already deployed while Openreach is an entrant in UFBB.
- 6.4 Further evidence could help substantiate the likely effectiveness of the forward-looking competitive constraints on Openreach. This evidence could potentially show:
 - a. a separate market in Virgin Media areas and/or for the supply of UFBB-capable lines and that Openreach does not have SMP in relation to these markets; or
 - b. a single market undifferentiated by speed but that Openreach does not have SMP in relation to the supply of UFBB-capable lines within this market; or
 - c. a single market undifferentiated by speed in which Openreach has SMP but that competitive conditions differ significantly between the supply of SBB and SFBB and UFBB.
- 6.5 Given the strong likelihood of increased competition in the review period, and the three criteria test in the regulatory framework, regulation should only be imposed where there is clear evidence of an enduring competition problem.
- 6.6 The evidence which is already available shows that wholesale competition is developing very differently than in the initial stages of the broadband market. While Ofcom may have concerns about any remaining market power of Openreach in relation to SBB and SFBB, the evidence suggests that there should not be competition concerns specifically with Openreach's supply of UFBB.
- 6.7 As such, any regulation to address a competition concern with Openreach's supply of UFBB should be limited to that designed to prevent any leveraging of market power from Openreach's position in SBB and SFBB. As noted earlier, it is unlikely to be rational for Openreach to seek to use low prices to foreclose competition in Virgin Media areas given that it would be both costly and unsuccessful. Further, any such leveraging concerns can be addressed by competition law supplemented if needed by an SMP finding of SBB and SFBB in non-competitive areas which would enable price regulation and/or margin squeeze regulation for any bundled offers.
- 6.8 What would be perverse is if Ofcom were to impose regulation more generally on Openreach's supply of UFBB including by restricting its flexibility in making commercial offers which are specific to UFBB. In UFBB, Openreach is the entrant and Virgin Media is the established operator. To restrict Openreach's commercial flexibility in the supply of UFBB is not only unnecessary given Openreach's nascent position but risks harming the development of

competition in UFBB including putting at risk the potential for network competition in Virgin Media areas which account for around half of all UK premises (and growing).