Promoting investment and competition in fibre networks

Pricing wholesale local access services in Geographic Area 3 with a BT Commitment to deploy a fibre network

TalkTalk submission

September 2020

NON-CONFIDENTIAL

1 Summary

1.1 This document is TalkTalk's response to Ofcom's July 2020 consultation titled "*Pricing wholesale local access services in Geographic Area 3 with a BT Commitment to deploy a fibre network*". Area 3 is the 30% of the UK where Virgin and CityFibre are not present and do not currently have a firm plan to build FTTP.

1.2 Ofcom is proposing to raise wholesale MPF/FTTC prices in Area 3 above cost by about £1.2bn over 20 years in order to create a subsidy to Openreach, since Openreach has 'committed' to rolling out FTTP to 3.2m rural premises in Area 3. This means that in the next 5 years, prices will be set at CPI+0% resulting in prices being £313m higher than cost over this period. As we describe below we think that Ofcom appears to have lost sight of the need to protect consumers and its proposal will harm customers in Area 3 – particularly those in lower income households.

1.3 The most significant problem with Ofcom's proposals is that consumers would have to pay Openreach to incentivise 'build' of FTTP to about 920,000 premises in Area 3 that Openreach has, in fact, already built FTTP to. It is very hard to see how paying Openreach can incentivise them to do something they have already done. Given the build plans and policies that existed prior to Ofcom's proposals, Openreach is likely to build to at least another 900,000 Area 3 premises over the next five years without requiring any subsidy to do so. For this build consumers will pay Openreach £680m. Ofcom does not explain how providing £680m of subsidy which will cause no additional FTTP build is of benefit to consumers or is consistent with Ofcom's duties to protect consumers.

1.4 In addition, Ofcom exaggerates the benefit of Openreach's commitment to consumers:

- The majority of the Area 3 FTTP investment will not be in rural areas but in medium and large towns – for instance, the subsidy covers Openreach's proposed build in Horsham which has a population of 140,000.
- Much of the additional build in Area 3 will come from diverting capital and resources from Area 2 – merely reordering and shifting the location of investment from one area to another will not deliver UK consumers any overall benefit.
- The so-called commitment is not really a commitment since there is no obligation on Openreach or penalty if Openreach does not deliver FTTP in Area 3. In fact, the design of the scheme means that Openreach will enjoy a subsidy of £180m even if it built to no premises in Area 3.

1.5 Openreach needs a subsidy of far less than £1.2bn for its proposed rollout – we estimate a subsidy of about £370m will be sufficient to cover Openreach's FTTP losses and incentivise Openreach to roll-out 3.2m premises in Area 3. There are several reasons why Ofcom's estimate of Openreach's losses from rolling out FTTP in Area 3 are considerably overstated:

- No subsidy should be paid to Openreach for premises that Openreach have already built or will anyway build to absent subsidy.
- Ofcom's estimate of the fibre build capex assumes Openreach will build in many high cost exchanges rather than follow its natural commercial incentive to cherry pick the lowest cost exchanges, which are both more profitable and more likely to see altnet entry.

- [✂]
- Ofcom assumes Openreach will charge no connection fee for any FTTP service even though: it charges between £98 and £500 today; has never chosen to permanently charge zero connection on any product; and, has no commercial or economic incentive to materially reduce charges. Ofcom's unconventional assumption has seemingly been solely based on Openreach internal slides – such materials cannot be relied upon as they can be produced for Ofcom consumption.
- Ofcom's additional rental revenue estimate assumes Openreach will only on average earn £2.75 more per customer month on across the period from FTTP than from FTTC. This is inconsistent with Ofcom allowing the entry level FTTP 40/10 to be priced £1.50 more per month than FTTC 40/10 and Openreach's FTTP pricing gradient for different bandwidths, which will result in a much larger difference between average revenue on FTTC and FTTP products.

1.6 Overall, the assumptions Ofcom has used are inconsistent with real world evidence – in particular, Ofcom estimates that Openreach needs a subsidy of £320 per premise to build FTTP even for the lowest cost premises in Area 3. Yet Openreach has already built FTTP to 0.9m premises without subsidy, demonstrating that there are many premises for which no subsidy is required.

1.7 It is alarming that Ofcom has not assessed the impact on consumers of excessive retail prices or the harm from the poor-to-rich cross-subsidy that Ofcom's proposal causes as lower income consumers will pay more for their FTTC services to subsidise lower prices for richer FTTP customers. Ofcom has not considered the harm to poorer consumers that results from trying to encourage investment in this way, or provided any analysis that justifies the detrimental impact on equality and on some protected groups.

1.8 Ofcom's proposals to subsidise Openreach FTTP investment will distort competition and undermine current and future altnet FTTP investment in Area 3. The lack of competition will also undermine the Government's subsidy scheme will relies on competition to ensure tax-payers get value for money.

1.9 It is premature to subsidise Openreach FTTP build in Area 3 until it both becomes clearer where altnets and Openreach will build FTTP without subsidy, and what the impact of the £5bn Government subsidy scheme is. With more evidence, Ofcom can ensure that any cross-subsidy is necessary and in consumers' interests. However, if Ofcom does pursue the RAB scheme at this point it must adjust the assumptions so that, for instance, consumers are not paying Openreach for build it has already completed and that the level of cross-subsidy is no more than is required to incentivise build. Ofcom should also impose the charge control in Area 3 on FTTC 80/20 rather than FTTC 40/10, since with increasing bandwidth demand since the start of the Covid pandemic, FTTC 40/10 is already becoming a legacy product meaning that it will be unable to act as an effective anchor through to 2026.

2 Ofcom's description of its proposal is misleading

2.1 The heart of Ofcom's proposal is that Openreach should be permitted to charge higher wholesale prices for regulated products in Area 3, subsidising Openreach FTTP build, because BT has committed to building FTTP to 3.2m rural premises in Area 3.

> *Ofcom has today published updated proposals to help bring faster, more reliable broadband to rural areas, in light of BT's new commitment to extend its fibre network to a further 3.2 million rural properties*[1]
>
> *In light of [BT's] commitment, we are consulting on adopting a forecast RAB approach in Area 3 …*[2]
>
> *In more sparsely-populated rural areas … we plan to incentivise investment by BT's network arm, Openreach - the only operator with a large-scale rural network.* [3]
>
> *In January, we said that if BT were to provide a firm commitment to build fibre in these parts of the country, we would consider allowing it to include these investment costs in its prices upfront. If not, we would only allow it to recover these costs after it lays new fibre.* [4]

2.2 Ofcom's description of its proposal is misleading in several key respects.

- The so-called 'commitment' is not a commitment in any normal sense of the word. A commitment is "*a promise or firm decision to do something*"[5] yet nothing in BT's letter constitutes any promise or binding obligation. There is nothing in Ofcom's draft Legal Instruments that explains how Ofcom will enforce the build or penalise BT if it does not complete the build.[6] The so-called commitment is wholly voluntary, and BT can withdraw without consequences at any time. Furthermore, BT would receive £180m of subsidy if it built to no premises in Area 3 – see §5.4 below[7]. Calling what BT has offered as a commitment is a substantial exaggeration.
- Many of the premises in Area 3 are not in rural areas (let alone "*sparsely-populated rural areas*"). For example, Area 3 exchanges where BT is planning to roll out FTTP include Horsham which has a population of about 140,000. According to ONS data, at least 43% of Area 3 is in urban areas[8] (i.e. 4m premises). It is likely that the

[1] Ofcom Update email titled: "Connecting rural areas to faster fibre broadband" (29 July 2020)

[2] Consultation: Pricing wholesale local access services in Geographic Area 3 with a BT Commitment to deploy a fibre network (29 July 2020) (referred to as "Area 3 Consultation, July 2020")

[3] Ofcom Update email

[4] Ofcom Update email

[5] Source: Cambridge Dictionary

[6] In fact the draft Legal Instruments only mention the so-called 'commitment' once: "*On 26 June 2020, Openreach confirmed plans to extend BT's fibre network to at least 3.2 million premises in WLA Area 3 by the end of 2025/26. In light of these plans, Ofcom is setting out its further proposals in relation to certain SMP conditions proposed to be set in respect of BT in the market for the supply of wholesale local access at a fixed location in WLA Area 3*".

[7] Ofcom is to some extent able to reduce the subsidy BT receives if it builds to fewer premises but there is no penalty for failure to deliver the 'commitment'.

[8] According to ONS data 17% of population is in rural areas. Given Area 3 is 30% of the UK and conservatively assuming all rural areas are in Area 3 then rural accounts for 57% of Area 3 (=17% /

majority (and possibly as much as 70% or 80%) of the 3.2m build will be in these urban areas since Openreach will focus on the lowest cost areas within Area 3.

- Ofcom implies that the higher prices are necessary for BT to build to occur in Area 3. This is incorrect since BT would build to many of the premises without higher prices – indeed they have already built to over 920,000 (or 10%) of premises in Area 3[9] and are continuing to roll-out more – for instance, BT in January this year announced it would build to another 117 exchanges in Area 3[10].
- Ofcom has underplayed the cost to consumers of its proposal. Ofcom's proposals effectively commit consumers to subsidising Openreach by around £1.2bn over the next 20 years by allowing Openreach to set wholesale prices in excess of its costs – this will drive up retail prices and have detrimental impacts on competition and quality of service. Yet this important figure is not flagged up front or when it is mentioned it is not described as a cost to consumers but rather a 'fibre shortfall'– an issue to be addressed, rather than a significant impost on consumers.
- Some of the build in Area 3 will come as a result of diverting investment and resources from building FTTP in Area 2 (since Openreach will operate under some capacity constraints for the next 2-3 years). Ofcom has ignored this detrimental impact on consumers.

2.3 As a public body, Ofcom rightly has an obligation to act in a transparent and accurate manner. Ofcom's description of this proposal falls short of this standard.

2.4 Equally important, Ofcom's approach gives the impression that it is not concerned about harmful impacts on consumers – for example, they have (at best) underplayed the costs of Ofcom's proposals to consumers, made no assessment of the negative impacts on consumers such as retail price increases and made no attempt to assess whether the level of subsidy is necessary to get 3.2m premises built or whether any additional FTTP build that is genuinely incentivised is sufficient to offset the harm to consumers. It does not appear that Ofcom has been concerned with consumers' interests when developing its proposals.

2.5 Ofcom should be clear that what it is proposing is a cross-subsidy, where consumers taking MPF/ FTTC based broadband products will partly fund the broadband of FTTP consumers. This does not mean that Ofcom's approach is necessarily wrong (although, as set out below, the particular design proposed is flawed), as cross-subsidy schemes can in theory be welfare-

---

30%) and urban 43%. https://www.gov.uk/government/publications/rural-population-and-migration/rural-population-201415

[9] Based on analysis of Openreach's availability checker on 17 September 2002. This shows that there are 922,000 premises passed in Area 3 (as well as 2,329,000 in Area 2). This is similar to Openreach's claim (15/9/2020): "*Openreach has already built Full Fibre technology to more than three million premises across the UK – including over a quarter in the hardest to reach, or final third of the country*" https://www.openreach.com/news/openreach-adds-another-67-locations-to-its--future-proof-broadband-build-plan/

[10] https://www.ispreview.co.uk/index.php/2020/01/openreach-add-227-rural-uk-areas-to-fttp-broadband-rollout.html

enhancing. However, in order for stakeholders to be able to comment effectively on proposals, it is important that the impacts are clearly described and assessed, including in their potential downsides, even when this might not yield the best headlines and media coverage for Ofcom.

3 Over-estimation of losses from FTTP build

3.1 A key element of Ofcom's proposal is its estimation of Openreach's losses from rolling out FTTP to pass 3.2m premises in Area 3 – the RAB scheme allows Openreach to recover these estimated losses through higher prices on wholesale access products. Ofcom refers to these losses as the 'fibre shortfall' – we refer to it as the 'FTTP losses' since Ofcom's description implies it is a measure of the gap in FTTP / FTTC coverage, rather than the loss that an unsubsidised operator will make from building FTTP. In effect therefore, the higher MPF/ FTTC wholesale prices are intended to subsidise Openreach losses on building FTTP in Area 3.

3.2 Ofcom estimates the FTTP losses at £0.9bn to £1.5bn (§3.25) in present value terms – the central estimate is £1.2bn. Ofcom proposes that this should be recovered through setting wholesale prices above cost: CPI+0% price indexation for 2021-26 (which recovers £313m); with the remaining FTTP losses (£0.9bn) being recovered over the following 15 years (see Fig 3.1).

3.3 As far as we understand the £1.2bn FTTP losses has been calculated as follows (see Fig 3.1):

+ FTTP build cost: this is calculated by multiplying the 3.2m commitment figure by Ofcom's estimate of the average FTTP build cost per premise

+ FTTP connection costs

– incremental connection and rental revenue of FTTP over FTTC

– operating cost savings from using FTTP rather than FTTC

3.4 The implicit presumption in Ofcom's approach is that without this £1.2bn subsidy Openreach would not build FTTP to any of the 3.2m premises – if Openreach has already or would have built some or all of the 3.2m premises without the subsidy then the £1.2bn subsidy could not be justified since consumers would be paying higher (excessive) prices for no benefit.

3.5 We consider that the £1.2bn figure is a significant over-estimate of the FTTP losses and will lead to Openreach being substantially over-compensated for rolling out to 3.2m premises in Area 3. There are two main reasons for this, which are explained in the remainder of this section:

- Openreach will build many premises in Area 3 without subsidy – in fact, BT has already passed over 920,000 premises in Area 3 and would continue to pass many more without any subsidy. There is no logical reason why Openreach should be subsidised for network that it has already built;
- due to a number of unfounded assumptions, Ofcom has materially over-estimated the FTTP losses per premise (for those premises that do require a subsidy).

3.6 It is notable that Ofcom stated that "*We considered the main challenge with a forecast approach was confirming that Openreach's investment commitments would be sufficient …* [to warrant higher prices]" (§2.17). Yet despite this claim and the need to protect consumers from excessive prices it appears that Ofcom has done no meaningful assessment of Openreach's plans to ensure that the FTTP losses estimate is robust.

3.1 Openreach have or would build to many of these premises with no subsidy

3.7 Ofcom implicitly assumes that a £1.2bn subsidy is required for Openreach to build to 3.2m premises in Area 3 (including the exchanges announced in the 'BT Commitment'). This is plainly incorrect since many of these premises have already been or will be built absent any subsidy. In effect, Openreach is getting some subsidy for investment it has previously made or would have anyway made. There can be no justification for such an approach and it is inconsistent with Ofcom's duties to protect consumers, in particular, from excessive prices.

3.1.1 *Many premises in Area 3 have already been built*

3.8 Many premises in Area 3 have already been built to by Openreach – as of September 2020, Openreach has built to 920,000 premises[11]. These premises would be counted towards Openreach reaching its 3.2m commitment. This is clear from Openreach's letter:

> *I am writing to confirm that we are planning to build out commercially (i.e. without public subsidy) to at least 3.2m premises in Area 3 cumulatively by the end of 2025/26.*[12] *[emphasis added]*

3.9 Thus, Openreach is confirming that it will build to a *cumulative* total of 3.2m premises, not 3.2m premises more than today. And Ofcom is proposing to subsidise them by on average £370 for all of these premises including the 922,000 already built.

3.10 That these existing premises will be counted in the 3.2m target is corroborated by Openreach's build plans that it announced on 29 July[13] which listed 117 exchanges. Openreach described this list as follows:

> *The above tables contains a list of Openreach's FTTP locations within the first phase of network build in rural market towns and villages up to March 2024 as part of our 3.2m Area 3 commitment*

3.11 Thus, it is clear that Openreach fully intended that premises it has already passed would be included in the 3.2m commitment.

---

[11] Based on analysis of Openreach's availability checker on 17 September 2020. This shows that there are 922,000 premises passed in Area 3 (as well as 2,329,000 in Area 2).

[12] Openreach letter to Ofcom 26 June 2020

[13] [✂] The list of exchanges is also provided in https://www.ispreview.co.uk/index.php/2020/07/ofcom-tweak-uk-market-definitions-to-help-bts-rural-fibre-rollout.html

3.12 Ofcom's proposals are also based on counting premises already built in the 3.2m target. This is clear since, in Ofcom's discussion of which premises in Area 3 the 3.2m premises encompass, it includes the lowest cost premises (which are the ones that have already been built already). Furthermore, nowhere in Ofcom's description of its approach or its model has Ofcom suggested that premises already built would not be counted towards the 3.2m target.

3.13 Thus it is implicit that premises already built to will be included in the 3.2m target. However, Ofcom has neither made this important assumption explicit nor have they explained why it is appropriate.

3.14 Many of these exchanges listed in this first phase already have some existing FTTP coverage confirming that Openreach intended to count premises already built to the 3.2m target. TalkTalk has checked some of the exchanges in Area 3 and most of them[14] have some FTTP availability according to SamKnows. Based on the FTTP availability checker some of them have significant FTTP coverage – for instance the Chester postcodes CH3 and CH4 (those postcodes south of the River Dee) show 5,457 FTTP premises passed[15].

Fig 3.1 Actual / planned FTTP build in exchanges in Area 3[16]

Town/ exchange	Population in town	Premises in town	Premises in named exchange	FTTP passed in town (estimate)
Horsham	142	63.7	24.7	2.4
Stroud	119	53.4	12.0	0.1
Scarborough	109	48.9	23.3	1.0
Gillingham	104	46.7	17.9	0.0
Selby	89	39.9	12.0	2.1
Daventry	84	37.7	12.1	1.0
Chester South	80	35.9	9.4	5.5
Burton-on-Trent	72	32.3	31.5	0.3
Barrow-in-Furness	67	30.1	23.4	0.3
Taunton	60	26.9	29.2	1.7
Hereford	56	25.1	28.5	7.8
Weymouth	53	23.8	20.9	0.1
Congleton	27	11.9	13.3	9.1
Prestatyn	19	8.3	10.2	0.5
Okehampton	6	2.6	3.8	3.7
Kelso	6	2.5	4.0	0.6
Ottery St Mary	5	2.2	3.8	1.9
Buckfastleigh	3	1.5	2.1	0.1

[14] Horsham, Stroud, Scarborough, Gillingham, Selby, Daventry, Chester, Burton-on-Trent, Barrow-in-Furness, Taunton, and Weymouth

[15] Although not all 5,457 may be in Area 3 since the number is based on postcode sectors (used to interrogate the availability checker) which may not match exactly to the coverage of the Chester South exchange.

[16] All these exchanges were also included in the 117 exchanges announced in January 2020. Premises in town calculated assuming 2.4 persons per household and approximately one commercial premises for every 16 domestic premises. Source for household size: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2017. Other sources; Wikipedia (population), SamKnows (premises by exchange), FTTP availability checker (FTTP passed in town)

3.1.2 *Openreach has existing plans to build to more premises in Area 3*

3.15 There is likely to be additional build in Area 3 beyond the 920,000 existing premises as Openreach completes the build in exchange areas that it has already begun. This build, which is about 37,000 premises per month[17] clearly is not contingent on subsidy.

3.16 In addition Openreach announced several months ago that it will roll out to further exchanges in Area 3. On 26 January 2020[18] Openreach announced plans to build FTTP to 117 exchanges across the UK which covered around 250,000 premises[19] [20]. These were all in Area 3. This plan was announced well before any subsidy scheme was put in place (or even proposed) – therefore, this build is evidently not contingent on subsidy.

3.17 Furthermore, BT will also (without subsidy) build FTTP to new build homes in Area 3 since it is commercially more attractive to build FTTP rather than copper to these premises[21]. Under Ofcom's approach these new build homes will count towards the 3.2m 'target'[22], despite the fact that they would have built FTTP without any subsidy from MPF/ FTTC.

3.18 Therefore, Openreach has existing plans that mean it will, absent subsidy, build to many more premises in Area 3 than that 920,000 it has already built to.

3.1.3 *Openreach is likely, absent subsidy, to build to more premises in Area 3 than its current network and previously announced plans*

3.19 It is inconceivable that if Openreach had by the end of 2020 chosen to build past over 1 million premises without subsidy it would not over the next 5 years choose to build past more if there continued to be no subsidy available. Beyond those exchanges in Area 3

[17] Openreach currently building at 34,000 per week, of which about 25% is in Area 3. https://www.ispreview.co.uk/index.php/2020/09/openreach-confirm-67-uk-areas-for-next-fttp-broadband-rollout.html

[18] https://www.ispreview.co.uk/index.php/2020/01/openreach-add-227-rural-uk-areas-to-fttp-broadband-rollout.html

[19] All of the 117 exchanges announced in January 2020 are in the list BT included in its Commitment and covered 250,000 premises.

[20] On 7 July 2020 (i.e. before the BT Commitment was offered to Ofcom and before Ofcom accepted it) Openreach made a subsequent announcement to cover about 94 exchanges in Northern Ireland https://www.ispreview.co.uk/index.php/2020/07/openreach-add-94-rural-villages-and-towns-to-fttp-broadband-plan.html

[21] Openreach offers free fibre installation to developers of new build homes where the development is of over 20 homes. Below this scale of development there is a contribution required from developers for Openreach to build FTTP: "*How much does it cost to connect residential or mixed developments? We'll do this for free for sites with 20 or more premises. If you have 2–19 premises on your site we'll ask you to contribute towards this.*" https://www.openreach.com/fibre-broadband/fibre-for-developers. Given the advantage of FTTP for developers it is likely that Openreach will install FTTP in most cases

[22] Ofcom has not, for example, suggested that new build premises in Area 3 would be excluded in assessing whether BT has met its 3.2m commitment.

where FTTP is already built or planned to be built there are many more exchanges where Openreach would choose to roll-out without subsidy. This is likely to be because either:

- altnet competition is already possible[23];
- the area already has dense enough demand to justify rolling out FTTP even if there is limited threat of altnet entry and loss of customers; and/ or
- FTTP costs fall over time (and additional revenue increases), meaning that areas which were previously unattractive for altnet investment become attractive, or because unprofitable areas become profitable for Openreach even absent altnet threat.

3.20 Altnets are likely to deploy to a wide range of towns and rural areas across Area 3 and therefore Openreach will have an incentive to build in these locations due to the altnet threat:

- In its initial WFTMR consultation on geographic market definition[24], Ofcom suggested that altnets would deploy to clusters of 20,000 premises (which would have populations around 45,000) – where there was a cluster of more than 20,000 premises Ofcom considered that they would have likely been profitable for altnet FTTP construction (and assigned them to Area 2). As shown in Table Figure 3.1 above, there are many towns in Area 3 that have populations in excess of 45,000 where Openreach has already proposed to build FTTP. In addition to these towns there are many others, such as Durham and Clacton-on-Sea, which are in Area 3.
- FibreNation's roll-out plans (now part of CityFibre) include smaller towns: Batley (6,000 premises); Heckmondwike (17,000 population); Knaresborough (15,000 population) and Ripon (17,000 population). Though, apart from Ripon, these are not in Area 3, they demonstrate that altnets will build to smaller towns.
- Gigaclear's FTTP network had passed 129,000 premises (in December 2019) in mostly rural areas (and almost exclusively in Area 3) and Gigaclear has an ambition to reach 500,000 premises by 2025[25]
- Jurassic Fibre[26] has announced plans to build FTTP in Taunton (with a population of 60,000). Taunton is in Area 3, and is also on Openreach's build roadmap.[27]

[23] Ofcom has pointed out that where there is a clear threat that an altnet will build FTTP, then the threat of loss of customers if it does not invest in FTTP will be the predominant factor affecting Openreach's FTTP investment behaviour (WFTMR Jan 2020 v4 §1.24). Ofcom refers (somewhat unclearly) to this as the 'competitive dynamic'. Altnet build need not be certain or actual for Openreach to roll-out – Openreach will have an incentive to build where they consider altnet build is sufficiently likely.

[24] *Promoting investment and competition in fibre networks: Approach to geographic markets*, Dec 2018 e.g. §3.49

[25] https://www.ispreview.co.uk/index.php/2020/09/rural-isp-gigaclear-ends-year-with-129000-full-fibre-uk-premises.html

[26] https://www.ispreview.co.uk/index.php/2020/09/jurassic-fibre-prep-1gbps-broadband-for-honiton-and-taunton.html

[27] The Taunton postcodes are TA1 and TA2 all of which are in Area 3.

- Zzoomm is currently building an FTTP network in Henley, a town with a population of 11,600 – which is in Area 3.[28]
- There are many other altnets including Community Fibre, F&W Networks, HeyBroadband, toob, Voneus, Trooli, Broadway, B4RN and YouFibre which have actual or tentative plans to build FTTP in parts of Area 3
- In the medium term, altnets such as CityFibre, which are currently focussed on premises in Area 2, are likely, to some degree, to branch out to building in Area 3. This will reflect the urbanised nature of a large part of Area 3, along with the gradual reduction in larger towns and cities with no FTTP in Area 2[29]. This is likely to drive altnets to extend their roll-out into smaller towns in Area 3 and also into villages in Area 3 which sit on the fringe of altnet networks in larger towns and cities. CityFibre have begun trials of rolling out in rural areas[30] [✂].

3.21 Therefore, there are likely to be large parts of Area 3 where there is or will be an altnet threat and where, therefore, Openreach will have an incentive to build without any subsidy. Providing Openreach with subsidy for these areas will also result in significant harm to consumers:

- it will deter potential altnet FTTP investment, resulting in a delay in getting a first FTTP network;
- if the altnet does build FTTP and Openreach chooses to overbuild the altnet FTTP network, then consumers will pay excessive prices for little benefit (since the benefit of a second FTTP network is much less than the first).

3.22 There are also some parts of Area 3 where even if there is no altnet threat, Openreach clearly will have an incentive to build FTTP without subsidy. For example, in January 2020 Openreach announced[31] it was rolling out in the Buckfastleigh exchange (which is in Area 3) which has about 2,100 premises covering the small town of Buckfastleigh and surrounding villages even though there was, as far as TalkTalk can tell, no obvious threat of entry by altnets.[32] The January announcement included plans to build in many other rural areas such as Prestatyn, Okehampton, Kelso and Ottery St Mary. Indeed Openreach said in January[33]: "*A large proportion of our new Full Fibre network is already in rural areas and we want to go much further …*". Thus, evidence clearly shows that Openreach has an incentive to build FTTP in parts of Area 3 even where there is no altnet threat.

3.23 Over time, the FTTP losses in each area will fall and so more areas will become viable for Openreach FTTP build (even without the threat of altnet entry) due to a range of factors

[28] The Henley postcode is RG9, and all of RG9's postcode sectors are in Area 3.

[29] [✂]

[30] https://www.ispreview.co.uk/index.php/2020/09/cityfibre-quietly-builds-fttp-broadband-into-first-uk-village.html

[31] https://availability.samknows.com/broadband/exchange/WWBFAS

[32] The Buckfastleigh exchange is located in the TQ110 postcode sector.

[33] https://www.openreach.com/news-and-opinion/articles/rural-communities-joining-the-race-for-better-broadband

including: increased consumer willingness to pay a premium for fibre increasing revenue; innovation and learning-by-doing reducing build and connection costs; and FTTC assets becoming end of life (or experiencing higher fault levels due to increasing age).

3.24 This evidence indicates that Openreach is likely to build FTTP in Area 3 beyond the existing build and current plans for build in response to the growing altnet threat and improving viability.

3.1.4 *Error in Ofcom's approach*

3.25 It appears that Ofcom has presumed that since Area 3 is designated as 'non-competitive' there is no potential altnet build and consequently there will be no Openreach FTTP build (absent subsidy). This is plainly an error.

3.26 Ofcom's error arises because the way it has decided to define Area 3 means that Area 3 includes areas where there is actual or potential competition. Area 3 includes all postcode sectors where Virgin and CFH are not currently present (and pass at least 50% of premises in the postcode sector) or do not have a firm plan to build to at least 50% of premises. Thus Area 3 by definition includes areas where altnets have built or may build due to a number of situations:

- postcode sectors where CFH and Virgin might in time build but there is currently no firm plan in place. [✂];
- postcode sectors where altnets other than CFH and Virgin (e.g. Gigaclear, ZZoomm) are currently present or have plans to build, including in those postcode sectors where Gigaclear already covers over 50% of premises;
- postcode sectors where any altnet is currently present or has plans to cover less than 50% of premises.

3.27 Furthermore, Ofcom has implicitly presumed that if no altnet has a firm plan to build FTTP then neither will Openreach – this is plainly refuted by the evidence since Openreach is building in areas where there is no altnet threat. It also conflicts with economic theory, which indicates that there will be a range of areas where it will be profitable to roll out FTTP as a monopolist, even if it is not profitable for an altnet to build in competition with the Openreach FTTC network.[34] Openreach will, in contrast, face no competition when it is the first FTTP builder in an area since it would not be profitable for an altnet to build in an area where Openreach has already rolled out FTTP.

[34] This reflects that a monopolist will make more than the sum of the profits earned by two duopolists competing with one another; the extent to which profits are greater for the monopolist depends upon the functional form of competition between the two operators. Any entrant will inevitably have to compete with the Openreach FTTC network, which is largely a sunk cost. This will mean that the profits of the entrant will be lower than the profits of Openreach, which can retire the copper network and therefore does not in any sense 'compete' with itself. Assuming that the FTTP investment costs for Openreach are no higher than those for the altnet, this means that it is more profitable for Openreach to invest than for an altnet, even taking into account the opportunity cost from FTTC losses.

3.2 Modelling assumptions used are unsound

3.28 The size of the FTTP losses to be met through subsidy depends on the assumptions used i.e. fibre build cost per premise, connection cost, connection and rental revenue, and operating cost savings.

3.29 The assumptions Ofcom has used substantially over-estimate the FTTP losses and subsidy required. The error in these assumptions is evident from the fact that under Ofcom's assumptions even the lowest cost premises in Area 3 have an FTTP loss of £320[35]. The fact that Openreach has already built to or planned to build to over 1 million premises without any subsidy shows that Ofcom's assumptions are wrong[36]. In effect, Ofcom has failed to calibrate its model against the real world.

3.30 Below we highlight the various areas where there are errors in Ofcom's assumptions. Many of the assumptions Ofcom has used are not transparent so we are limited in our ability to comment – however there are significant errors in those assumptions that we can see.

3.31 It is critical that Ofcom gets these assumptions right since it cannot fully correct errors it makes in its estimates, meaning that errors will lead to over-compensation of Openreach and clear harm to consumers. As we explain below at §5.4, Ofcom can only correct forward-looking estimates used to derive FTTP losses – errors in revenue and operating costs for 2021-26 cannot be corrected and errors in CAPEX in 2021-26 can only be partly corrected.

3.2.1 *Fibre build cost*

3.32 Within Area 3 the fibre build costs per premises vary significantly depending, in particular, on building density – Ofcom estimates that the FTTP build cost for the lowest cost million premises is (central estimate) £270 per premise passed and that the most expensive million premises costs £1,400 each[37]. Thus a key assumption is which of these premises Openreach will pass in its 3.2m build commitment.

3.33 Ofcom has implicitly assumed (§A2.12) that in its 3.2m premises build Openreach will build 460,000 premises in the lowest cost 1 million premises, 460,000 premises in the next lowest cost 1 million premises, 460,000 premises in the next lowest cost 1 million premises and so on up to the 7th million premise[38]. In other words, Ofcom has assumed that the 3.2m build

[35] This is derived from Ofcom's assumptions for build cost, connection cost, additional revenue and opex savings from FTTP.

[36] Ofcom also assumes that the net present value of the additional revenue / opex cost saving (£220) is less than the connection cost (£280). If this were the case then Openreach would not connect any customer since each connection would be incrementally loss making. This is clearly not the case further demonstrating the error in Ofcom's assumptions.

[37] Derived from WFTMR Table A18.3. Table A18.3 includes fibre build and connection costs. The figure quoted above is FTTP build cost only.

[38] Though in the consultation document this is the assumption Ofcom describes, in its Fibre Shortfall model Ofcom made a different assumption. We comment here on the assumption in the document since it appears that this assumption is what Ofcom believes is appropriate. The model we have developed is based on the different assumption.

will be evenly spread across the lowest cost 7m premises and none will be built of the most expensive 1.8m premises. Ofcom explained that they assumed this since "*This is the set of premises that we have assumed will not be subject to public subsidy*" [39]. We consider that Ofcom's assumption is flawed for two reasons.

3.34 First, we agree that the 3.2m should not include premises covered by Government subsidy – the BT commitment must (rightly) exclude premises subsidised under the Government scheme (see §5.14) and BT will naturally wait for Government subsidy to serve the highest cost premises. However, the £5bn Government subsidy scheme will cover many more than 1.8m premises. The 1.8m figure is obviously unfounded:

- The Government itself said it expects it to cover 20% or about 6m premises: "*We are setting out plans to invest £5bn to support the rollout of full-fibre, 5G and other gigabit-capable networks to the hardest-to-reach 20% of the country … This doubles the previous commitment to support rollout to the hardest 10%.*"[40]
- Ofcom's own Fibre Shortfall model shows that the total FTTP loss for all 9m premises is £5.4bn[41]. It makes no sense to suggest that the £5bn scheme can only cover 1.8m premises.

3.35 Ofcom has provided no explanation for why the Government subsidy will only cover 1.8m premises – it may be that Ofcom derived the 1.8m as 20% of the premises in Area 3. This is not correct since the Government said that the subsidy is for the "*hardest-to-reach 20% of the country"* (not 20% of Area 3).

3.36 Second, within premises not covered by Government subsidy, Openreach's commercial incentive will be to cherry pick the lowest cost premises to maximise its profits[42] – for instance, it would naturally focus on building to premises in the 0-1 million band costing £270 on average rather than premises in the 4-5 million band that cost £470. Cherry picking in this way will both be more profitable on a static basis, and will also have the dynamic benefit of being most likely to deter entry since altnets will focus on the relatively lower cost areas[43]. Ofcom has not explained why it thinks that Openreach will not follow their natural commercial incentives to cherry pick the lowest cost build areas.

3.2.2 *Uptake*

3.37 Ofcom explains that it has changed its assumptions on FTTP take up:

> *In the January 2020 Consultation, we assumed that there would be 90% take-up of fibre services after 5 years (with the remaining households being mobile-only). We have since*

[39] See clarifications questions, response to question 14.

[40] https://www.bbc.co.uk/news/technology-49881168

[41] Fibre-shortfall.xls; sheet – fibre shortfall; cell – AU26. This is the central case figure.

[42] Once the subsidy for has been set on the basis of 3.2m premises it is more profitable for Openreach to pick the lowest cost premises.

[43] We accept that Openreach might not be able to perfectly cherry pick only the lowest cost premises but they will be able to do so far better than the implicit 'scatter gun' approach Ofcom has assumed.

updated this assumption to align with our latest volume forecasts for WLA services (set out below), leading to a more gradual profile of 90% take-up after 8 years (§A2.15)

3.38 It also says, regarding the volume forecasts:

Volumes: Since the January 2020 Consultation, there have been several public announcements regarding FTTP deployment in the UK, including Openreach's ambition to reach 20 million premises by mid to late 2020s. In light of these announcements, we have adjusted our modelling assumptions to increase the migration from FTTC to FTTP on Openreach's network. Furthermore, we have obtained updated WLA service volume information (2019/20 actuals and 2020/21 forecasts) which we have captured within our models to better reflect current product and bandwidth mixes. (§A2.27)

3.39 We have three concerns with Ofcom's assumptions

3.40 First, there appears to be a potential contradiction between these two paragraphs. While §A2.27 states that Ofcom has increased its forecasts of migration from FTTC to FTTP, §A2.15 states that take-up is now expected to be slower than previously forecast.

3.41 Second, there is no supporting analysis or evidence underlying Ofcom's assumption of 90% after eight years – it seems like a number plucked out of the air.

3.42 Third, and in any case, we think that the 90% within 8 years is unrealistic [✂].

3.43 [✂]:

- [✂][44]
- [✂][45] – [✂]
- [✂][46][✂]
- [✂].

3.44 [✂][47]. [✂]:

- [✂].
- [✂].
- [✂].

3.45 [✂].

Fig 3.2: [✂]

3.46 [✂][48]. This is not realistic since [✂].

[44] [✂]
[45] [✂]
[46] [✂]
[47] [✂]

3.2.3 *Connection cost*

3.47 Ofcom has assumed a connection cost of £280 per premise connected (Table A2.1).

3.48 Ofcom has provided no evidence for its assumption or even an explanation of how it was reached. Based on our experience with FibreNation this figure appears high, particularly for the towns that are the initial focus for Openreach build in Area 3[49]. We also note that Ofcom should not rely on data provided by Openreach since they have a strong incentive to exaggerate the costs.

3.49 FibreNation's operating model estimated a connection cost which varied depending upon how the customer was connected:

- [✂] per customer connected using a trench for the final drop;
- [✂] per customer connected using a pole for the final drop;
- [✂] per customer for those premises located in MDUs.

3.50 Ofcom's assumptions are inconsistent with this evidence – Ofcom should not rely on such a high figure for the cost of connections unless it has some strong evidence that efficient Openreach connection costs in Area 3 are considerably higher than altnets rolling out in smaller towns and cities.

3.2.4 *Connection revenue*

3.51 Ofcom assumes that no connection charges are levied for any FTTP customers:

> *Consistent with the approach in our January 2020 Consultation, we have assumed that Openreach recovers £0 revenue from connection charges. This is based on [✂].* (§A2.19)

3.52 It appears that Ofcom has relied upon internal "Openreach slides" for this assumption (see footnote 24).

3.53 In its January 2020 consultation, Ofcom proposed setting a price cap of £0 for connections, but only for the FTTP 40/10 product and only when the MPF/FTTC charge control has been removed:

> *In Area 3, where charge controls on copper services have not been removed, we propose that FTTP connection charges are set to zero. This is consistent with our RAB calculations that assume that Openreach does not charge for FTTP connections. From the point in time where the charge control on copper rentals has been removed, we propose that the connection charge for FTTP 40/10 service is set to zero* (WFTMR Jan 2020 volume 4 §6.47).

---

[48] See spreadsheet dcr-area-3-model: sheet – fibre shortfall inputs: cell – A22

[49] [✂].

3.54 Ofcom does not appear to have any sound justification for assuming zero connection charge for all FTTP bandwidths and for the entire period.

- For FTTP connections, Openreach currently charges[50] £98 for upload speeds up to 110Mbps and £500 for upload speeds over 110Mbps. Openreach also offers a premium connection product priced at £40 more than the standard product (i.e. £138 and £540). Ofcom has provided no explanation of why, absent a regulatory obligation, Openreach would reduce these charges to zero.
- [✂].
- Openreach has, as far as we are aware, never charged zero connection charge for any key access product except as part of temporary offers or where it had a regulatory obligation to do so.
- Temporary offers provide no relevant benchmark for the level of connection charge across the entire period since they are: temporary; sometimes limited to certain ISPs; and, come with volume commitments (the impacts of which are not reflected in Ofcom's model).
- There is no commercial reason for Openreach to set a zero connection charge (except if Openreach obtains a volume commitment as compensation, for example) given it holds market power in Area 3, each connection incurs a substantial incremental cost, and CPs will be compelled to take FTTP by Ofcom's copper switch-off proposals.
- If Ofcom's justification is that Openreach's internal slides indicated that they might set zero connection charge this is an inadequate reason. It is clearly in Openreach's interests to persuade Ofcom that it will not charge any connection fee since it will increase the required subsidy and (when Openreach charges a connection fee) Openreach's profits. It is easy for Openreach to game the process since it would have known that Ofcom is likely to request access to its slides.

3.55 Assuming no connection charges for all products across the entire period is a clear error. If Ofcom wishes to assume that there will be zero revenue from FTTP connection charges in Area 3, there is a simple route for Ofcom to do so: set a zero price cap on FTTP connection charges for all bandwidths of FTTP service across Area 3, irrespective of whether the charge control on copper services has been removed in that area. If Ofcom is correct that Openreach will in fact not charge for FTTP connections, this price cap will have no effect. On the other hand, if Ofcom is incorrect, then by setting such a charge control, Ofcom will prevent BT from being over-compensated, leading to consumers paying excess prices for no benefit.

3.56 Ofcom should therefore either:

- set a price cap on FTTP connections, across the whole of Area 3, at zero for all years in the next control period; or,

50 https://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=M80QNeH46o4g6JKGD604vTypQOKfNn%2Beo6vmoVhAOBZZ6rNZujnCs99NbIKJZPD9hXYmiijxH6wrCQm97GZMyQ%3D%3D

- assume a connection charge on all non-FTTP 40/10 (and FTTP 40/10 before removal of the MPF/FTTC charge control) of £98 or more to align with the current pricing

3.2.5 *Rental revenue*

3.57 Ofcom has (rightly) assumed that FTTP services will result in higher rental revenue than MPF/FTTC services. The level of the additional revenue is based on (§A2.16):

- The bottom end of the range of £1.50 to £1.85 per month is based on the regulated 'fibre premium' for FTTP40/10 – in effect this bottom end assumes that Openreach will charge no premium for bandwidths above FTTP 40/10.
- The top end of the range assumes that Openreach will charge a little more for bandwidths above FTTP 40/10. Ofcom have assumed an average of £4 per month for years 1-10 and £1.50 and £1.85 for year 11 onwards reflecting that "*For modelling purposes we assume that FTTP services will be charge controlled at that level from 2031*"

3.58 We have a number of comments on this assumption:

- On average over the 2021-26 period, Openreach will be able to sustain higher additional revenue (compared to FTTC) than a mid-case of £2.75 and a high case of £4 given that the FTTP 40/10 product will have a premium versus FTTC 40/10 of £1.50-£1.85. Even assuming modest uptake of higher speeds [✂][51].
- Absent regulation the rental revenue increase from FTTP is likely to increase over time as willingness to pay for higher speeds increases.

3.2.6 *Operating cost savings*

3.59 The majority of the assumptions used to derive the operating cost savings (for Openreach) are not transparent. However, the assumptions Ofcom has used for efficiency gains are partly transparent, although TalkTalk considers them unreliable.

3.60 The efficiency improvement assumptions for FTTC and FTTH opex are as follows:

- FTTP:
  - Repair, maintenance, power and overhead: 1.5% or less[52] – see WFTMR §A17.80
  - Other opex: 2.5%
- FTTC: 4.8% – WFTMR §A17.79

[51] Cablelinks are circuits required to handover FTTC and FTTP traffic to wholesale customers. Given FTTP will have higher capacity than FTTC more Cablelinks will be required

[52] For opex categories forecast as a % of GRC Ofcom does not apply a separate efficiency assumption since an efficiency assumption (of 1.5% on non-equipment and 0% on equipment) is applied. Thus the effective efficiency gain on these categories of opex is less than 1.5%, with the precise number depending upon the mix of non-equipment and equipment spending.

3.61 The implication of these assumptions is that FTTC opex costs fall faster than those of FTTP for the following 20 years.

3.62 Ofcom says that the reason the efficiency improvement for FTTC is higher is that the initial FTTC costs are actual Openreach costs – and so efficiency gains reflect both improvements in the efficiency frontier and catch-up efficiency (WFTMR A17.79) – whereas the initial FTTP cost is the efficient cost (i.e. sits on the efficiency frontier) and so there is no (or little) catch-up efficiency.

3.63 We think this assumption is unreliable for a number of reasons:

- The assumptions for FTTH costs are, we understand, primarily based on input from Openreach and may well not represent efficient cost levels. Indeed some of the cost assumptions we have seen (e.g. connection cost of £280) appear high (see section 3.2.3 above).
- There is likely to be materially more improvement in the efficiency frontier for FTTH than for FTTC since (a) FTTP is a less mature product (meaning cost saving innovations are more likely) and (b) FTTC equipment is nearing end of life which will result in more faults and higher opex in repairs and maintenance.
- Ofcom's assumption that FTTC opex efficiency will be higher than FTTP opex efficiency due to FTTC opex efficiency including catch-up implicitly assumes that the catch-up efficiency gains for FTTC continue forever.
- The specific modelling approach that Ofcom has used to estimate a particular operating cost (e.g. estimating opex as a % of GRC) should not affect the efficiency gain assumption for that cost. Ofcom can and should model and apply an opex efficiency gain for repair and power costs (of 5%) and not rely on the efficiency effect that comes from these costs being forecast as a percentage of GRC – thus the efficiency gain assumption should be same for components that are estimated based on GRC and those that are not.

3.64 Given these factors, we consider that a sensible and coherent set of opex efficiency assumptions would be as follows. Ofcom will have data to improve the accuracy of this illustrative example:

FTTC:

- Assume current costs 10% behind efficiency frontier and catch-up in 10 years (i.e. 1% per year).
- If total efficiency gain is 4.8% this implies that the frontier efficiency gain is 3.8% (=4.8% less 1%).
- This implies 4.8% efficiency gain for first 10 years and then 3.8% thereafter.

FTTP:

- Assume initial costs are on the efficiency frontier
- Efficiency frontier gain for FTTP is materially higher than efficiency frontier gain for FTTC (of 3.8%) – assume 5%

- This assumption (5% efficiency gain) should apply to all operating costs including power and repair (which are currently linked to GRC).

3.65 The impact of these assumptions is that the opex cost saving of FTTP over FTTC will be slightly higher than projected by Ofcom (and will grow as a percentage of the FTTC cost), although it will fall in absolute terms due to the higher initial cost of FTTC opex.

3.3 Other

3.66 There are several other factors that have led Ofcom to overestimate the FTTP losses and so result in the estimate of FTTP losses and required subsidy being too high:

- In its modelling, Ofcom seems to have assumed both that the build will occur uniformly across the period from 2021 to 2026 and that it all occurs in 2021[53]. Neither of these assumptions are appropriate. Openreach has an incentive to delay the build until the end of the period. This will be profitable because the delay will reduce the present value of the FTTP losses[54].
- Ofcom has assumed that all FTTP investment in the period 2021-26 is fully recovered by 2041. This means that for investments made in 2026 the recovery period is only 15 years. We think that this is too short a period for this type of investment in a network with such a long asset life, and consequently Ofcom should extend its modelling period to allow all investments to be recovered over no less than 20 years.
- Because many of the assumptions are inherently unpredictable (such as efficiency gains and additional revenue) there is a high chance of a material difference between forecast and outturn.
  - In the case where outturn costs are lower than forecast this will lead to over-recovery (which is likely to occur in roughly 50% of cases).
  - However, if outturn costs are higher than forecast, Openreach will reduce build (at no penalty) to avoid under-recovery.

  This effect means that on average there will be additional over-recovery, and a one way bet (rather than a 'fair bet') for Openreach.
- The level of subsidy may be higher than Ofcom estimates if MPF/FTTC costs are lower than it estimates. This is because lower costs will create a greater gap between cost based prices and price caps based on CPI+0% indexation.

[53] See clarification questions regarding build out profile. Question 3 states: "*In fibre shortfall model, there is a simplification that all build occurs immediately, whilst the DCF model spreads the build over 5 years*". Question 12 states: "*For modelling purposes, we assume a uniform roll-out across the five-year period*"

[54] Delay will (all else equal) push back the capex, revenue and opex cash flows and so the present value will be lower. In practice, delay is likely to increase the additional incremental revenue (since willingness to pay will be higher) so the present value will be reduced further

3.4 Summary

3.67 In summary, even for premises where subsidy is required, Ofcom has significantly over-estimated the FTTP losses and subsidy required. We are unable to precisely model the correct FTTP loss since much of the data and evidence required has not been published by Ofcom. However, we have modelled the impact of correcting some of the assumptions underlying the FTTP loss[55] that illustrate that the subsidy required is substantially less than Ofcom has estimated. The assumptions we have used are listed below:

- No subsidy required for the first 1.8m premises in Area 3 which includes[56]:
  - 0.92m premises already built by September 2020
  - 0.20m additional premises built between September 2020 and March 2021[57]
  - 0.1m premises built to complete coverage of exchange areas where FTTP rollout has already started
  - 0.25m premises in 117 exchanges announced in January 2020
  - 0.24m new build premises[58]

[55] To analyse the impact of changed assumptions we developed a simple model that assessed the impact of different assumptions on the FTTP loss. We were not able to use Ofcom's model since it was unclear and some of the equations were hard coded. We are happy to share this model with Ofcom. However, Ofcom should be able to test the impact of different assumptions using its own model.

We calibrated the model so that if Ofcom's assumptions (e.g. premises built, build cost per premise, connection cost, connection revenue) were used (as documented in the consultation) the FTTP loss was £1.2bn (as per Ofcom's central case). The one exception to this is that the model assumes that the premises built were the 3.2m lowest cost premises (whereas in the document Ofcom says they were spread across the lowest cost 7m premises). The reason for this is that Ofcom said: "*We have identified an error in the model whereby the capex used in the fibre shortfall calculation relates to the lowest cost 3.2m premises, as opposed to the capex relating to 7m premises that is then averaged and pro-rated to 3.2m premises*". Thus we assume that Ofcom's calculation of the FTTP losses assumed build to the lowest cost premises.

Another correction we made was the disparity between the number premises (8.8m) listed in the cost banding (WFTMR Jan 2020 Table A18.3) and the actual number of premises in Area 3 (9.2m). To do this we assumed that the bandings were 0m - 1.05m, 1.05m - 2.10m etc so they went up to 9.2m premises. Ofcom told us that this was the appropriate approach to correct the disparity (call with [✂] and others 9 September 2020).

[56] We reduce the number by 0.1m for possible overlap between the categories.

[57] Since Openreach cannot be sure it will get any subsidy until the regulation is finalised in March 2021 so any FTTP built up that point would, by definition, be built absent subsidy. In fact given the time to put plans in place it is likely that the decision on whether to build FTTP in late 2021 is likely to have been made before Openreach knew about whether the subsidy would be permitted. Thus, arguably, all build which takes place up to late 2021 should be considered to have been viable without subsidy

Openreach is currently building at 34,000 premises per week, of which about 25% are in Area 3. Thus about 200,000 additional premises will be passed in Area 3 by March 2021 (= 34,000 x 25% x 26 weeks) https://www.ispreview.co.uk/index.php/2020/09/openreach-confirm-67-uk-areas-for-next-fttp-broadband-rollout.html

[58] In 2019, 170,000 new homes were built. Assuming 30% are in Area 3 and 90% are built with FTTP then over the 5 year build period this is 230,000 homes. In addition there will be commercial

  - 0.2m premises where in the period 2021-26 Openreach would anyway build to either respond to the threat of altnet entry or where it becomes viable for Openreach to build absent altnet threat. We consider this very conservative given the level of build already undertaken by Openreach.

- None of Openreach's 3.2m build is in most expensive 4m premises (since covered by Government subsidy) and build is focussed on the lower cost of the remaining 5m premises.
- [✂].
- [✂].[59]
- Additional rental revenue of [✂] per month up to 2031 (from which time Ofcom assumes price regulation will apply). This figure obviously needs to reflect *future* willingness to pay for higher speeds not the current level.

3.68 TalkTalk's suggested assumptions are, overall, conservative since they imply a FTTP loss for the lowest cost Area 3 premises of around £150 per premise passed – yet Openreach has already proven willing to build to these premises absent any subsidy implying that the FTTP loss is zero or negative (i.e. they are profitable without subsidy). This clearly indicates that the costs we assume are too high and/or the revenues too low.

3.69 This results in a required subsidy of around £370m versus Ofcom £1,190m estimate – this is shown in Fig 3.3 below. Thus, we estimate that under Ofcom's assumptions Openreach would be over-compensated by around £800m.

Fig 3.3: [✂]

3.70 Ofcom should reduce its estimate of the FTTP losses and adjust charge controls in 2021-26 accordingly. Alternatively, Ofcom could obtain a commitment from BT to roll out to more than 3.2m Area 3 premises that genuinely results in £1.2bn of FTTP losses in Area 3[60].

---

premises (which typically are about 4% of residential premises) implying a total of about 240,000 Source: https://www.gov.uk/government/news/number-of-new-homes-built-soars-to-an-11-year-high

[59] £98 for products with upload speeds up to 110Mpbs, £500 for products with upload speeds over 110Mbps, zero connection charge for FTTP40/10 only once MPF/FTTC charge control removed (which is when 'complete' coverage is achieved in an exchange area and 2 years after a stop-sell). Most connections to FTTP40/10 will occur before the MPF/FTTC charge control is removed and the FTTP40/10 connection charge is reduced to zero.

[60] However, once the Government subsidy scheme has been implemented there may not be enough premises remaining requiring subsidy to reach an aggregate FTTP loss of £1.2bn.

4 Excessive prices and cross-subsidy

4.1 Ofcom claims that its proposals protect customers from excessive pricing (which it rightly agrees is detrimental to consumers):

> *We consider that absent regulation, Openreach would have the incentive and ability to fix and maintain prices for WLA in Area 3 at an excessively high level and/or impose a price squeeze so as to have adverse consequences for end-users (including through a weakening of retail competition)* (§3.3)
>
> *We considered a Regulatory Asset Base (RAB) approach would help us ensure consumers are protected from excessively high prices* (§2.6)
>
> *The draft conditions also protect end-users from excessive pricing* (§3.62)

4.2 Ofcom has failed to protect consumers from excessive prices and the harm they cause through reducing consumer welfare and creating allocative inefficiencies:

- Contrary to Ofcom's claim at §2.6 and §3.62, its regulation does not "*protect end-users from excessive pricing*". Rather the opposite is true: Ofcom's overall approach inherently leads to excessive prices (across customers in aggregate) since MPF/FTTC prices are higher than they would be if they were at the competitive level or based on efficient costs.
- The level of excessive price and detriment to consumers is exacerbated by Ofcom's assumptions which significantly over-estimate the FTTP losses and so the required increase in wholesale MPF/FTTC prices above cost
- Ofcom's approach creates a cross-subsidy from those customers who use MPF/FTTC (either because FTTP is not available in their locality or because it is available but they cannot afford or do not want FTTP) to customers taking FTTP. Thus unequivocally some customers pay an excessive price and receive no offsetting benefit from improved products.

4.3 It is alarming that the regulator responsible for (and with a duty to) protecting consumers' interests has neither considered the impacts of the excessive prices and cross-subsidy nor conducted an equality impact assessment. We consider that the harm from excessive prices and cross-subsidy is significant

- The margin of prices above cost is substantial (Ofcom estimates it at £1.2bn in present value terms).
- The majority of this is over-compensation so would have no offsetting benefit from increasing FTTP build.
- The cross-subsidy will tend to flow from lower income to higher income consumers for a number of reasons:
  - Openreach will focus its FTTP build in the upcoming regulatory period in more urban areas because these areas are lower cost to build, and because by doing

so Openreach is more likely to deter altnet entry which might otherwise occur. Urban areas on average have higher income levels than rural areas[61].

- Within Area 3 Openreach will tend to focus on those localities with higher income levels since consumers living there are likely to have a higher willingness to pay for high bandwidth services, increasing revenue.
- Where FTTP is built lower income customers are more likely to remain on FTTC thereby bearing the excessive prices but not enjoying any benefit. This is both because FTTP is likely to be more expensive than FTTC, and because higher income consumers will tend to consume more bandwidth than lower income groups, meaning that they will benefit more from consuming FTTP.

4.4 Ofcom seems to assert that the substantial harm from excessive prices and cross-subsidy are more than offset by the benefit from additional build. However, there is no analysis to demonstrate this. Rather Ofcom seems to think that because it is of the view that FTTP investment is a good thing, any level of harm in the form of higher prices is acceptable – that static losses will always be outweighed by dynamic gains as a point of principle, and that distributional effects are irrelevant.

4.5 Ofcom should properly assess the benefits of the cross-subsidy scheme which it has proposed, and should compare these to the costs of the scheme. Such a cost benefit analysis should:

- estimate the incremental Area 3 build which will be generated as a result of its proposed scheme. As set out at section 3.1 above, not all of the build in Area 3 will be incremental to Ofcom's proposal, in particular build already undertaken, build already announced or build in exchanges where Openreach was anyway likely to build because of the costs at that exchange are similar to those at Area 2 exchanges. Such build should be disregarded when considering the benefits of Ofcom's proposals.
- determine an appropriate value, in terms of consumer and externality benefits, from the availability of FTTP, primarily based on consumers' valuations of higher speeds and lower fault rates.
- compare the value of the incremental FTTP roll-out with the harm to consumers from higher prices, which as Ofcom sets out (§3.25) is £1.2bn.

4.6 In the likely event that the costs of Ofcom's proposed regulation are greater than its benefits, Ofcom should revise its proposed scheme so that its benefits exceed its costs, as set out in section 8 below.

61 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/868755/Earnings_February_2020.pdf, at page 2.

5 Ofcom's proposal does not provide Openreach with incentives to build to 3.2m premises in Area 3

5.1 The primary purpose of the RAB approach with wholesale prices set above cost is to create a subsidy to provide incentives for Openreach to invest in FTTP in Area 3 – for example, see Consultation §3.4: "*[the] proposed approach to remedies in Area 3 is to promote competition through access to Openreach's wholesale services while also supporting BT's deployment of a fibre network*"[62]. However, it is not clear that Ofcom's proposal will create a strong incentive for FTTP construction, and, in some circumstances, the proposal might act as a disincentive to build FTTP.

5.2 Ofcom's approach can only act as an efficient incentive if, at the margin, BT receives a sufficient subsidy if they build FTTP to a premise but do not receive a subsidy if they do not build – i.e. the subsidy is *contingent* on the build so that it is marginally more profitable to build than not build.

5.3 Below we explain our understanding of how the subsidy changes in response to different levels of build and/or other changes in revenues and costs. This is based on the consultation, responses to clarification questions and a discussion with Ofcom (since the consultation document and legal instruments were not clear).

Ofcom approach to setting subsidy

- Ofcom calculates the FTTP losses based on its initial estimates: e.g. 3.2m premises passed, £673 fibre build cost per premises passed, 90% uptake. This results in FTTP losses of £1.2bn in present value terms. The numbers in this description are based on the central assumptions that Ofcom has provided in the consultation document.
- Ofcom sets a CPI+0% index for 2021-26 (which recovers £0.3bn). The remaining £0.9bn would be recovered in 2026-2041 which would require a price cap of about CPI-CPI[63]
- In 2026, Ofcom recalculates the FTTP losses by adjusting only the following assumptions:
  - Future revenue based on revised uptake and revenue per customer estimates
  - Future cost savings based on revised uptake and cost saving estimates
  - Future depreciation of the FTTP build based on actual capex incurred up to 2026

  The revenue, cost and depreciation estimates made in 2021 for the period 2021-26 used to calculate the FTTP losses remain unchanged.
- The price caps for 2026-2031 are set based on the revised FTTP losses minus the amount already recovered in 2021-26.
- Ofcom has also proposed to accelerate £130m of depreciation into 2021-26 (§4.17). If

[62] Plainly, the higher Openreach prices do not support competition based on using Openreach services so they must be to support Openreach FTTP build.

[63] We presume that what Ofcom describes as "Flat from 2026 onwards" in Fig A2.2 is CPI-CPI or constant nominal prices. This results in a total of £1.15bn recovery

> Openreach builds to fewer than 3.2m premises then Ofcom will not allow Openreach to recover some or all of this £130m in future charge controls. If Openreach does build to at least 3.2m premises then Openreach will be permitted to recover this cost in future charge controls.

5.4 There are a number of implications of this approach:

- Any difference between the initial estimate of FTTP losses made in 2021 for the period 2021-26 and actuals is not corrected;
- The exception to this is the accelerated depreciation mechanism where a portion (£130m) of the £313m can be recouped but only in the case that the number of premises passed is less than 3.2m;
- The effect of this is, for instance:
  - If Openreach pass no premises (and therefore incur no FTTP losses) it will receive £183m[64] (i.e. £183m of over-recovery)
  - The subsidy per premise passed is therefore effectively £280 for the first 1.9m lines and £370 for lines 1.9m to 3.2m
  - If Openreach builds to 1.8m premises – the number TalkTalk estimates require no subsidy – it will receive £680m[65] in subsidy over a 20 year period. This will all be over-recovery since there are no FTTP losses for building to these premises
  - If there are forecast errors in revenue and opex assumptions in 2021-26 such as connection and rental revenue and efficiency gains they cannot be corrected. Forecast errors in capex/depreciation can be partly corrected.

5.5 Thus the scheme Ofcom has designed does provide some contingency and consequent incentive for build but it is not fully effective:

- There is no penalty for not meeting the commitment;
- Some of the subsidy (£183m) is received even if Openreach completes no FTTP build in Area 3;
- The subsidy received per premise built does not match the FTTP loss for each premises; if Openreach does not build to 3.2m premises they will cherry pick the lowest cost premises, exacerbating over-compensation;
- There is inadequate clarity and lack of commitment to Ofcom's proposed approach of adjusting the subsidy and prices in response to different build levels – for instance, Ofcom describes the "*ability to adjust pricing trajectories in future charge controls" (§3.30), and "we can set lower prices*". Furthermore, nowhere in Ofcom's consultation nor Legal Instruments does it clearly explain how the FTTP losses are recalculated or explain under what circumstances it will adjust future charge controls.

[64] £183m = £313m minus £130m

[65] £680m = £183m for zero premises plus £270 per premise for 1.8m premises. These figures are based on Ofcom estimates of FTTP loss per premise.

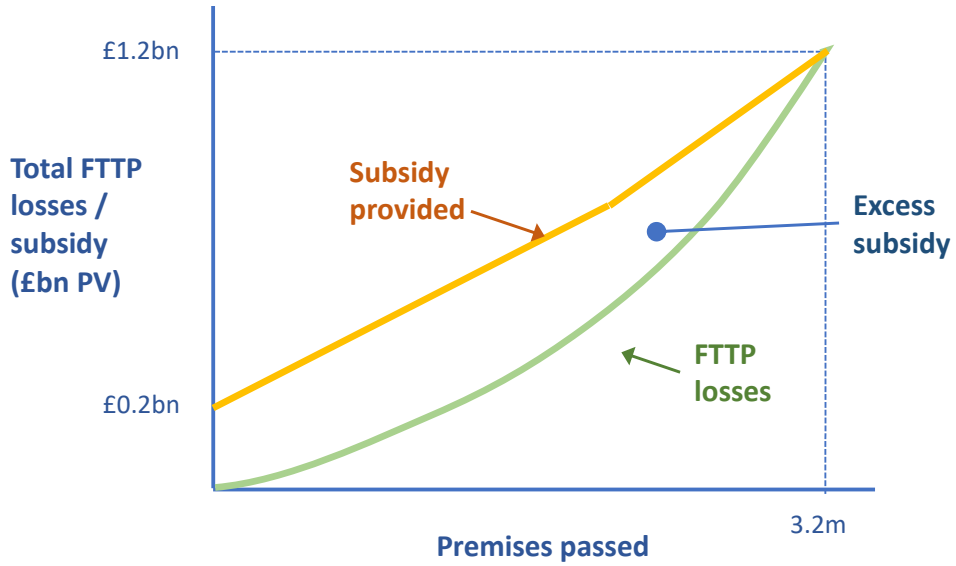
This uncertainty will increase risk and reduce investment by both Openreach and altnets;

- Because the mechanism mostly corrects recovery for actual capex per line it reduces the cost minimisation incentives and can lead to gold plating.

5.6 The graph below shows how the total FTTP losses and subsidy provided change as Openreach build more premises.

- The graph is based on Ofcom's assumptions so that if 3.2m premises are passed the FTTP loss is £1.2bn. It also assumes that Ofcom implements its accelerated depreciation method.
- If Openreach builds 3.2m premises the FTTP loss and subsidy are both £1.2bn.
- The subsidy if Openreach passed no premises is £0.2bn (since the subsidy in 2021-26 cannot be fully recouped) and then rises – initially at £280 per premise and then at £370 per premise.
- The FTTP loss per premises passed starts low (reflecting that Openreach will cherry pick premises with lower losses) but rises for later premises passed.

Fig 5.1: FTTP losses and subsidy (based on Ofcom FTTP loss estimates)



5.7 What this graph makes clear is that the subsidy to Openreach will be excessive and Openreach will make supernormal profits if they build less than 3.2m premises. Using Ofcom's assumptions it would be most profitable for Openreach to build to no premises since the marginal subsidy per premise is lower than the FTTP loss per premise. For instance, the additional subsidy for the first 1m is £275 per premise but the FTTP loss (making the assumption that Openreach builds only to the lowest cost premises) is £320.

5.8 This means that Openreach's commercial incentive is to build to less than 3.2m premises. This arises because though the FTTP loss and subsidy are the same at 3.2m premises they differ at fewer premises. Ofcom should design the shape of the subsidy curve so that it matches the FTTP loss.

5.9 In addition to the incentive effects described above, Ofcom's proposals unambiguously create some disincentive for Openreach to roll out FTTP in Area 3[66]. This is because higher MPF/FTTC wholesale prices reduce the incremental return from investing in FTTP, so increasing Openreach's potential profits from sweating its legacy assets.

5.10 We explained the reason for this in full in our response to the January 2020 WFTMR consultation at §§5.41-5.49. In summary, the logic is as follows:

- construction of an FTTP network in a locality (where there is no altnet threat[67]) will cannibalise Openreach's MPF/FTTC margins where prices are set in excess of costs as customers migrate from FTTC to FTTP;
- this will mean that higher wholesale FTTC prices will have opposing impacts on the incremental margins derived from FTTP investment:
  - wholesale FTTC prices will be higher, increasing FTTC margins and so reducing the incremental profitability of FTTP investment; and,
  - retail FTTP prices will be higher thus increasing the incremental profitability of FTTP investment.
- However, since FTTP prices will rise less than wholesale FTTC prices due to pass-through/dilution effects, the net impact of these two opposing impacts will be that higher wholesale FTTC prices will reduce the incremental profitability of investing in FTTP and so will tend to reduce FTTP investment incentives.
- In our previous response, we provided evidence that a £1 increase in wholesale FTTC prices will lead to an increase of about £0.30[68] in FTTP prices. This means that a £1 increase in wholesale FTTC prices will reduce BT's incremental revenues and profits from moving a customer from FTTC to FTTP by £0.70.

5.11 This analysis applies just as much to the Ofcom Area 3 proposals as it did to the Area 2 proposals previously advanced by Ofcom. The first order effect of increasing FTTC prices will be to reduce the incentives for FTTP investment.

[66] As we highlighted in our previous response, the idea suggested by Ofcom (WFTMR Consultation January 2020 v4 §1.24 and v4 §1.66) that the extra profits generated by higher FTTC prices will help fund FTTP investment, and thereby will increase FTTP investment by Openreach is not supported by economic literature, as BT will not be subject to binding credit constraints. The mere existence of spare or extra cash will not increase Openreach's incentive to invest in FTTP.

[67] Where there is an altnet threat the threat of loss of customers if it does not invest in FTTP will be the predominant factor affecting Openreach's FTTP investment behaviour (WFTMR Consultation Jan 2020 v4 §1.24)

[68] 80% pass through from wholesale FTTC to retail FTTC; and pass through from retail FTTC to retail FTTP of 50% at the start of the period, declining to 30% at the end of the period; BT will capture 100% of the increase in FTTP retail prices - see Annex 2 §2.5 TalkTalk's April 2020 submission

6 Reducing network competition

6.1 Though Area 3 is theoretically designed to not include potentially competitive areas and include postcode sectors where there are no existing or planned altnets, in practice there are existing altnet FTTP networks in Area 3, and others are likely to be built. There are a number of reasons why actual or potential competition is not taken into account in Ofcom's analysis:

- the altnet is a broadband only FTTP network (e.g. Gigaclear) so is ignored in Ofcom's assessment of competitors;
- the altnet is a multi-service network or MSN (e.g. CityFibre) but it does not cover or have plans to cover 50% of the postcode sector in question;
- the altnet plan to build is not yet firm enough to be counted by Ofcom but the build may occur in future[69]

6.2 Therefore, the reality is that there is potential for some competitive altnet investment in Area 3.

6.3 However, because Ofcom's proposals provide a subsidy to Openreach to roll out FTTP in Area 3, then they will distort competition between FTTP builders in Area 3. Openreach will receive a substantial subsidy, of between £280 and £370 per premises passed[70], which covers the majority of the build cost.[71] This subsidy is only available to Openreach and not to altnets. This situation will distort competition and make it economically unviable for rivals to build even in areas where Openreach has not yet built its FTTP network. This is because with the subsidy it will be profitable for Openreach to overbuild the altnets and if an altnet is overbuilt by Openreach their investment is likely to be unviable.[72]

6.4 Despite this significant detrimental impact on competitive investment, Ofcom claims that its approach aids altnet investment: "*We consider that one of the advantages of our revised proposal for a forecast RAB and alignment of our pricing approach in Areas 2 and 3 is that this will provide the same support to rival network investors regardless of where they plan to build*" (§3.51): see also §3.27. This is an absurd suggestion since it ignores that the unavoidable corollary of aligning prices by raising prices in Area 3 is a significant subsidy to

[69] [✂].

[70] £280 for the first 1.9m premises passed and £370 for the last 1.3m premises

[71] In the lowest cost 3m premises of Area 3 the fibre build cost per premise passed will, according to Ofcom data, range from £270 to £370. As such, the proposed subsidy will cover most or all of build costs.

[72] If an altnet finds it viable to construct FTTP in a locality, that indicates that the total roll-out cost in that area is in line with commercially viable locations, and is therefore at or below £500 per premise passed. Openreach is being offered a subsidy of £370 per premise passed through Ofcom's proposed subsidy scheme. If it is profitable to roll out as a monopolist at a cost of below £500 per premise passed, it is highly likely to be profitable to roll out as a duopolist at an effective cost of below £130 per premise passed, as the cost will be at or below half that at which a monopolist is profitable, and Openreach has at least half the customer base in Area 3 locations locked in through its vertical integration with BT Consumer. This will only change if there is a sufficient gap between altnet entry and Openreach build that BT Consumer has lost market share to CPs on the altnet FTTP network.

Openreach which distorts competition and makes it profitable for Openreach to overbuild in areas which would otherwise not be commercially viable. There might indeed be a small positive impact on altnet FTTP investment from higher prices (of about £30 per premise passed[73]) but that positive impact is offset many times over by the negative impact of the subsidy to Openreach (on average £370). For Ofcom to only consider the small positive impact shows clear bias in its assessment.

6.5 Another harmful effect of Ofcom's approach is that it may undermine the Government's £5bn subsidy scheme which is intended to start in 2021. This scheme is designed to encourage FTTP roll-out in the more costly areas of the UK and there is a large overlap with Area 3. The Government scheme is targeted at 6m premises, which is about two-thirds of Area 3. The Government's intention is that this subsidy can be competed for by different providers which will help ensure value for money (this is reflected in the design e.g. small lots).

6.6 Ofcom's proposal will undermine this since Openreach (and only Openreach) will have access to the subsidy that other operators do not, providing it with a near-insuperable advantage in bidding for government contracts.[74]

6.7 This risk may be mitigated if premises that are built using Government subsidy are not counted towards the 3.2m premise target – this would effectively prevent Openreach using the RAB subsidy in areas where Government subsidy is available[75]. However, even if this mitigation were imposed, Ofcom's RAB scheme will undermine the Government subsidy scheme. This is because altnets will be prevented from building the scale and experience from rolling out elsewhere in Area 3 making them less competitive in areas where there is Government subsidy.

[73] The impact of Ofcom's proposals is that wholesale prices rise by £1.2bn in present value terms or £130 per premise in Area 3. The pass through of this to altnets will be about 20%: 80% pass through wholesale MPF/FTTC to retail FTTC; average (over the period) 40% pass through from retail FTTC to retail FTTP and 70% of retail FTTP price rise captured by the altnet. This equates to a price rise for altnets of about £30. This is less than a tenth of the average subsidy of £370.

[74] There is a significant economic literature on how even small known bidding advantages for one firm in a common values (or mainly common values) auction can lead to that firm winning a very disproportionate number of contracts, as other bidders shade their bids to avoid an exacerbated winner's curse. TalkTalk will be happy to submit supplementary evidence on this topic to Ofcom if it would find it helpful.

[75] The BT Commitment does seem to imply that premises covered using the Government scheme would not be counted e.g. §3.15. Ofcom should make any such implication explicit in its final decision regarding Area 3.

7 Other issues

7.0 Imposition of a CPI+0% index

7.1 Under Ofcom's assumptions the FTTP loss is £1.2bn and if a CPI+0% charge control is imposed in 2021-26 (which recovers £0.3bn of subsidy) then CPI-CPI (or flat prices) will be required from 2026 to 2041 in order to recover the remaining £0.9bn.

7.2 However, we consider the FTTP loss is significantly over-estimated and the correct figure is about £0.37bn.

7.3 In order to ensure that the subsidy equals the FTTP loss Ofcom would have to significantly reduce prices in the period 2026-31 – we estimate, if the loss was £0.37bn in order to recover the additional £0.1bn, Ofcom would have to set an index of about CPI-4% for 2026-31 and CPI-CPI for 2031 to 2041[76]. This would result in some harm since in effect prices will be inflated in the period 2021-26 and reduced afterwards. This will result in further cross-subsidies between customers (in different time periods) as well as potentially harmful hysteresis effects – for example, retail competition will diminish in the period 2021-26 and may not return when prices reduce.

7.4 It is possible that with different assumptions the FTTP loss would be less than £313m – in this case, Ofcom would have no means of recouping the over-compensation to Openreach leading to unequivocal consumer harm.

7.1 Benefits of alignment with Area 2 regulation

7.5 Ofcom highlights that one of the impacts of its approach is to align regulation between Area 2 and Area 3: "*We recognised that there could be added advantages of a consistent pricing approach across Area 2 and Area 3*"[77]. Ofcom has not specified what these advantages are. From the perspective of a wholesale customer we do not see any particular benefit from price consistency since ISPs are able to manage different wholesale prices.

7.6 We also note that it appears that Ofcom has tried to 'force' the same approach in Area 2 and Area 3 (i.e. CPI+0% on 40/10 only). This is evident from the unjustifiable assumptions it has used to justify the £1.2bn FTTP losses (and so the CPI+0% index) as well as proposing to shift from imposing a charge control on both 40/10 and 80/20 to only imposing a control on 40/10 with no discernible justification.

[76] This is estimated from Fig A2.2. Imposing CPI-CPI 2026-31 (yellow line) rather than CPI+0 2026-31 (orange line) reduces subsidy in 2026 onwards from about £1.4bn to £0.8bn. This would imply that CPI-4% 2026-31 followed by CPI-CPI would provide a subsidy of £0.1bn.

[77] Area 3 Consultation July 2020 page 1

7.2 Legal concerns – sections 87 and 88

7.7 The RAB approach is a novelty in the telecoms sector. Though it has been used in other sectors this was under very different legal frameworks to that which applies in telecoms. Ofcom has provided no legal analysis to demonstrate that it has the powers to impose a RAB scheme.

7.8 In fact, based on the Communications Act and Ofcom's own comments it appears that Ofcom lacks the powers to impose a RAB scheme. There are two clear illustrations of this.

7.9 In the January 2020 WFTMR consultation Ofcom stated that it only has the power to impose a price control if it addresses the risk of a price distortion arising from excessive prices or a price squeeze[78]. However, the charge control under the RAB scheme prevents neither excessive prices nor a price squeeze – rather it is designed to create a subsidy to BT and in doing so expressly allows excessive prices (rather than preventing them).

7.10 Ofcom also considered that it did not have the powers to implement the Copper Wedge proposal (V4 §4.170) which would create a subsidy that could be accessed by multiple operators. Ofcom said: "*We remain doubtful that an obligation on BT to ringfence a portion of the access price it receives and deploy these funds as Ofcom directs could be properly construed as a price control or a rule about the recovery of costs and cost orientation*". These exact same concerns arise with the RAB scheme since it creates in effect "*an obligation on BT to ringfence a portion of the access price it receives and deploy these funds as Ofcom directs*".

7.11 Thus, on Ofcom's own analysis it appears 'doubtful' that it has the powers to impose a RAB scheme. The underlying problem is that Ofcom is using an SMP Condition that has been designed to prevent anti-competitive behaviour to create cross-subsidy – it is simply not fit for purpose.

7.3 Legal concerns – section 47 duties

7.12 At §3.68 of its consultation, Ofcom sets out its assessment of whether its proposals discriminate unduly within the meaning of section 47 of the Communications Act. Ofcom states that:

[78] Answer to clarification regarding power to set a price floor

Our power to set a price control as a SMP condition derives from section 87(9) of the Communications Act 2003, and is subject to section 88.

Section 88(1)(a) provides that we may only set such a condition where (among other things) it appears to us that there is a relevant risk of adverse effects arising from price distortion.

Section 88(3) provides that there is such a relevant risk if the dominant provider might (a) fix and maintain some or all of his prices at an excessively high level, or (b) impose a price squeeze, so as to have adverse consequences for end-users of public electronic communications services.

To exercise our power to impose a price control as a SMP condition, we would therefore need to be satisfied that the floor is necessary to address one of these risks.

We consider that each of the draft conditions does not discriminate unduly against BT. We are proposing that it is the only telecoms provider to hold SMP in the markets that we have identified and the draft conditions seek to address that market position.

7.13 This is an attempt to satisfy the following legislative framework:

(1) OFCOM must not, in exercise or performance of any power or duty under this Chapter—

(a) set a condition under section 45, or

(b) modify such a condition,

unless they are satisfied that the condition or (as the case may be) the modification satisfies the test in subsection (2).

(2) That test is that the condition or modification is—

...

(b) not such as to discriminate unduly against particular persons or against a particular description of persons;

...

7.14 Ofcom does not appear to have fulfilled the requirements of section 47. Section 47 does not state that Ofcom should assess whether there is undue discrimination only on the regulated entity or entities, but against a '*particular description of persons*', irrespective of whether those legal persons are themselves regulated entities.

7.15 As such, Ofcom should have assessed whether the provision of a cross-subsidy from SMP assets, in the form of an uplift to MPF and FTTC pricing to fund FTTP rollout, unduly discriminates against *inter alia* altnets which either already have assets in Area 3, or wish to build FTTP networks in Area 3. Had it done so, Ofcom would have found that there is such discrimination, by its proposed regulation providing BT/ Openreach with an unmatchable advantage based on its ownership of SMP assets in Area 3.

7.4 Ofcom should impose a charge control on 80/20 rather than 40/10

7.16 In its earlier January proposals, Ofcom proposed a basket charge control in Area 3, with 40/10, 55/10 and 80/20 FTTC products all being subject to charge control. As Ofcom sets out at §3.34, it no longer proposes to charge control products with speeds in excess of 40/10. It explains (§§3.35-3.37) that this is for the same reasons which it set out in the January consultation for Area 2.

7.17 This 'reason' for change does not make sense. The justification in January WFTMR for imposing a charge control on FTTC 80/20 was that there was less existing competition from Virgin Media and also because there was less potential competition from altnets (meaning that, unlike Area 2, there was little benefit from higher prices to encourage altnet FTTP investment). However, neither of these key justifications for regulating FTTP 80/20 has changed and therefore Ofcom effectively provides no justification for the change in regulation. In the absence of any changed circumstances or new evidence, Ofcom should retain its previous proposal to regulate FTTC 80/20 (and should regulate FTTP 80/20 in exchanges where copper services are no longer offered).

7.18 TalkTalk does not agree that the 40/10 FTTC product will be an effective anchor on the price of 80/20 and faster speed variants over the course of the next charge control, or even that it is an effective constraint on 80/20 pricing at present. Customers' behaviour has changed significantly over the last year, particularly since the covid-related lockdown and increase in home working, and this has led to an increase in bandwidth used by customers for video streaming and video calls. Consequently, fewer customers will demand the FTTC 40/10 product than previously expected, customers will be less willing to trade down from 80/20 to 40/10, and thus FTTC 40/10 will be a much weaker constraint on higher bandwidths.

7.19 TalkTalk has recently seen a significant shift away from the FTTC 40/10 product. For the April-June 2020 quarter, TalkTalk's residential customer acquisitions were: 50% taking the 80/20 FTTC product, 34% the 40/10 FTTC product, and only 16% ADSL.[79] The proportion taking 80/20 increased from 27% for the corresponding quarter a year earlier. We imagine that the share of FTTC 40/10 in the product mix of Sky and BT is even lower given their customer base.

7.20 Effectively, ADSL is now an end of life product purchased by few customers, and 40/10 is also now moving towards becoming a legacy product.

7.21 Ofcom's original proposal not to regulate 80/20 in Area 2, as set out in its January consultation, was taken on the basis of limited and rather outdated evidence. At §2.13, Ofcom set out that in the year ending March 2019, around two thirds of Openreach lines were at or below 40 Mbps download speeds, while the proportion of customers on 80 Mbps download speeds had declined by an undisclosed amount. However, even the trend that Ofcom presented in January was inconsistent with the 40 Mbps product remaining a viable constraint on 80 Mbps being an effective constraint throughout the period. Ofcom noted that speeds of 40/10 and below had fallen from 75% to 66% of Openreach's base in a single year. This would point towards less than half of Openreach's base being on 40/10 or slower even in the first year of the five year control period. However, as pointed out above, half of TalkTalk's new customer acquisitions are now 80/20 speeds, and we expect this to be maintained, leading to rapid growth on customer numbers on faster speed variants.

7.22 TalkTalk considers that the increased demand for higher bandwidth is driven to a large degree by the impact of covid-19, which has dramatically changed working patterns and led to a massive increase in the use of bandwidth-hungry videoconferencing services, along with continued growth in HD video streaming. This has driven a permanent increase in consumers' bandwidth demands, by driving home the need for sufficient capacity to engage in multiple video streams simultaneously.

7.23 It is also important to note that spindown is unusual in the broadband market. Higher speed internet services are an experience good– consumers' preferences for them are driven by having previously consumed them, after which lower speed services feel unacceptably outdated. [✂].

[79] https://irpages2.equitystory.com/websites/rns_news/English/1100/news-tool---rns---eqs-group.html?article=30944308&company=talktalk

7.24 Beyond current customer numbers, Ofcom has considered companies' forecasts. However, these are rather outdated already, due to the impact of Covid on demand for broadband. Ofcom should actively seek new forecasts from stakeholders, which TalkTalk expects would show much greater demand for speeds above 40 Mbps.

7.25 Furthermore, even the forecasts which Ofcom did see only went as far as 2023/4, and in that year 63% of demand was expected to be for speeds in excess of 40 Mbps. There is consequently limited evidence that there will be an effective constraint even by the middle of the control period, particularly in light of consumers' reluctance to switch down in speeds. For it to remain a constraint on pricing of speeds above 40/10, a significant proportion of customers on higher speeds would have to be willing to switch down to lower speeds in the event of a 10% wholesale price increase. There is no evidence that this would be the case, because:

- the wholesale price increase will not be passed on in full to retail customers;[80]
- a 10% wholesale price increases will result in a retail price increase of much less than 10%;
- many customers will be locked in via long-term contracts;
- the 63% of customers whose demand is more than 40 Mbps download will experience serious reductions in perceived quality of their broadband connection if switched to lower speeds.

7.26 This can be seen via a numerical example, using BT Consumer and Openreach current pricing. Consider a consumer taking BT Full Fibre 100, based on Openreach's 115/20 FTTP product:

- the initial price of 115/20 FTTP is £17.28 per month. A 10% price increase is therefore £1.73 per month;[81]
- BT Consumer passes 75% of this increase on to its customers, meaning that the retail price goes up by £1.30 per month ex-VAT, £1.55 including VAT;
- the current price of BT Full Fibre 100 is £29.99 per month, meaning that the consumer sees a price increase of 5.2%;
- at a 90% margin for Openreach FTTP, the critical loss is 10%;
- it is assumed that all customers who require speeds above 40 Mbps take higher speed products, and 50% of customers who do not need speeds above 40 Mbps take higher speed products. 77% of customers on BT Full Fibre 100 therefore specifically require speeds higher than the 40/10 FTTP product can offer, and will not trade down in the face of a 5% retail price increase.
- Of the remaining 23%, 44% would need to trade down to FTTP 40/10 in the face of a 5.3% price increase, implying a required elasticity of demand of 8.3. This is an

[80] [✂]

[81] Note that this assumes the current Openreach FTTP pricing is competitive, which is unlikely to be the case, and therefore this analysis is biased towards finding that there is a constraint.

implausibly high elasticity of demand in a consumer market with long-term contracts and substantial customer inertia.

7.27 [✂]:

- [✂].
- [✂].

7.28 [✂], which aligns with the evidence presented by TalkTalk in this section.

7.29 Overall, the evidence that Ofcom relies on to make the case that it is appropriate to regulate only the 40/10 FTTC product is now outdated, and was in any case weak evidence in support of Ofcom's position – too few customers will be able to obtain an acceptable quality of service using FTTC 40/10 for it to be an effective anchor or constraint on higher bandwidths. Ofcom should reassess the evidence in this area, which will lead it to conclude that it is appropriate to apply the charge control to 80/20 FTTC, rather than to 40/10 FTTC.

8 What should Ofcom do instead

8.1 The previous sections of this response have set out the many flaws and problems with Ofcom's approach. Many of these are fundamental problems with the approach that Ofcom has proposed, and as such cannot be remedied by tweaks to the assumptions or slight amendments in the boundaries of Area 3. Rather, they stem from the core objective of subsidising FTTP roll-out across some urban and rural areas through increasing the bills of all MPF/FTTC consumers in Area 3 and introducing a subsidy scheme before it is apparent which locations require subsidy.

8.2 In light of this, Ofcom should fundamentally revise its proposals. There are two better approaches which could be adopted by Ofcom (at least initially), rather than the currently proposed structure. Both will significantly reduce the subsidy that Openreach is provided yet should deliver a similar level of FTTP build.

8.3 *Option 1: cost reflective prices*. By setting cost reflective prices, Ofcom would avoid the consumer harm which comes from setting FTTC prices above cost in Area 3. As pointed out at section 3.1 above, there would still likely be a considerable amount of FTTP investment in Area 3, including: investments already made; new build premises; investments planned before the cross-subsidy scheme was formally proposed; investments by altnets in parts of Area 3; investments by Openreach in parts of Area 3 to respond to the threat of altnet entry; and FTTP investments funded by Government subsidy. It is likely that these developments will encompass a significant proportion of the 3.2m 'commitment' by BT.

8.4 Given that these areas would anyway be built first by Openreach, it is likely that for the next 2-3 years the level of FTTP build under cost-reflective prices and the proposed cross-subsidy scheme will be similar. As well as reducing excessive price burdens on customers, cost reflective prices will also:

- result in a more competitive downstream market, increasing consumer welfare through lower retail margins, increased quality, and increased choice.

- increase the incentive for altnets to build since altnets will not face a subsided Openreach.

8.5 *Option 2: adaptive regulation*. Under adaptive regulation wholesale FTTC prices are initially cost reflective but are increased if altnet investment occurs in an area. Compared to cost-reflective prices adaptive regulation improves incentives for altnets to invest since the price they can charge for FTTP is higher. Thus adaptive regulation is preferable to cost reflective prices (and also to Ofcom's cross-subsidy scheme).

8.6 Both these approaches overcome a key problem with the cross-subsidy scheme which is that it is premature – it is being imposed before it is clear either where subsidy is required or how much subsidy is required. There is only need for a subsidy in the 'gap' between low cost premises that need no subsidy (over 1 million premises and growing) and higher cost premises that will be subsidised by the Government scheme. In practice, there may be very little gap or no gap to fill with a cross-subsidy scheme.

8.7 The scope of the £5bn Government subsidy scheme is likely to be significant – it might cover more than the two thirds of Area 3 that is currently envisioned, meaning there is no need for cross-subsidy from MPF/ FTTC products in Area 3. Ofcom itself estimates that Openreach's FTTP losses resulting from passing 9m premises in Area 3 would be £5.4bn[82]. This implies that the Government £5bn subsidy would cover the vast majority of Area 3 particularly since 1m premises have already been built to and possibly another 1m will need no subsidy.

8.8 Thus the Government scheme is likely to be sufficient to achieve almost full coverage of Area 3 without any need for an Ofcom cross-subsidy scheme. Ofcom should wait to get more clarity of how far the scheme will go before committing consumers to subsidise Openreach. It is important to recognise that subsidy from a Government scheme is superior to cross-subsidy from a Ofcom's proposals for a number of reasons:

- The burden is more progressive and less harmful to low-income groups since the charge is levied on all tax-payers rather than just on customers on legacy products in Area 3;
- The Government subsidy can be awarded through a competitive process which reduces risk of paying excessive subsidy;
- it avoids deterring competitive investment by altnets;
- Government is able to impose genuine build obligations with penalties on network builders receiving subsidy.

8.9 Delaying any introduction of the cross-subsidy scheme provides other significant benefits:

- It will be clearer where Openreach (absent subsidy) and altnets will build FTTP in Area 3 ensuring that subsidy is not paid in areas where it is unnecessary;
- it will help provide clarity over the efficient costs of rolling out FTTP in Area 3 and so ensure that the subsidy is not excessive.

[82] Fibre-shortfall.xls; sheet – fibre shortfall; cell – AU26. This is the central case figure

8.10 This makes it clear that there is no need for, or benefit from, Ofcom's cross-subsidy proposals at this point.

8.11 However, if Ofcom (mistakenly) chooses to continue to pursue its premature, ill-conceived and mis-designed RAB cross-subsidy scheme, there are a number of changes which it should make which will partly ameliorate some of the harmful effects of its proposals, in particular paying subsidy when none is required and distorting competition:

- Ofcom should only provide subsidy for 'qualifying' premises in Area 3 which do not meet any of the following criteria[83]:
  - Premises where FTTP is already built prior to the regulation being finalised in March 2020;
  - New build premises where Openreach will build FTTP;
  - Premises in Area 3 that Openreach announced to be built prior to the regulation being imposed;
  - Premises where an altnet has already built FTTP or, in the future, an altnet builds FTTP before Openreach builds FTTP. Allowing a subsidy in cases where an altnet network is built is very harmful to consumers – it not only leads to excessive prices (for the small benefit of a second FTTP network) but it also distorts competition and deters competitive investment;[84]
  - Premises funded in any way by subsidy e.g. BDUK Gigabit programme, Local Enterprise Partnership, Community Fibre Partnership
  - Premises that are in Area 2 (for instance when an exchange covers postcode sectors in Area 2 and Area 3)
- Ofcom should strengthen the commitment from Openreach by:
  - setting a build target for each year of the 2021-26 control period;
  - making clear that it will reduce the calculation of the FTTP loss and reduce price caps in the 2021-26 period in the event that Openreach falls below these targets so that all unwarranted subsidy is fully recouped;[85] and,
  - imposing penalties for missing the build targets by a material amount.
- Ofcom should adjust the estimates used to calculate the FTTP loss including: fibre build subsidy per premise, FTTP uptake, connection revenue, rental revenue and opex saving in line with the comments above in section 3.4 above. These changes may mean that it is inappropriate to set a CPI+0% index for the 2021-26 charge control unless Openreach meaningfully increases its proposed Area 3 build;

[83] In other words the premise should not count to the 3.2m 'target' for Openreach Area 3 build.

[84] This would not prevent Openreach from building FTTP in areas where altnets have built FTTP but rather that they cannot receive a cross-subsidy for it.

[85] This can easily be done via a RAB adjustment, an approach which has previously been used by regulators in cases where excessive pre-funding has been provided.

- Legal analysis should be undertaken and published demonstrating that Ofcom have the powers to impose a RAB scheme with a contingent cross-subsidy within it;
- a balanced analysis of the effects on consumers – both positive and negative – of the proposals should be conducted.
- Impose a charge control on FTTC 80/20 (and FTTP 80/20 in the case where the charge control on FTTC 80/20 is removed) rather than on 40/10 products.
- Design a clear process for ensuring that data on which are 'qualifying' premises is reliable and can be monitored and verified. Similarly, Ofcom needs to ensure that the data used to derive the FTTP loss (e.g. fibre build cost, connection costs, additional revenue) are reliable since Openreach will have a strong incentive to attribute excessive costs into Area 3 (from Area 2)