Telecoms Access Review 2026

PXC submission on market analysis and remedies

December 2024

NON-CONFIDENTIAL VERSION

1 Introduction and summary

PXC is part of the TalkTalk Group. PXC plays a unique and important role in the UK telecoms market providing broadband and leased line connections to ISPs and resellers based on networks including Openreach, CityFibre and Community Fibre. It is the UK's largest wholesaler to ISPs and supports TalkTalk Consumer as well as [✂ REDACTED ✂][1]. *This market review is crucial to the success of our altnet suppliers, our ISP customers as well as PXC and we look forward to making a useful contribution reflecting the not only the interests of PXC but also those our customers and suppliers.*

1.1 PXC fully supports Ofcom in its approach to "*continue with the same underlying objectives of incentivising investment and promoting network competition*" [2]. FTTP investment particularly by altnets has and will deliver significant benefits to consumers.

1.2 PXC agrees with Ofcom when is says: "*While the previous review set out a 10 year overarching strategy, the market review process requires us to review the relevant markets taking account of recent and prospective market developments*"[3]. In order to support FTTP investment alongside consumer protection Ofcom's market analysis and remedies must take into account the significant changes in the market since 2021 and the large differences in competitive conditions. In particular:

- There will be limited further altnet FTTP investment after 2026 ([✂ REDACTED ✂]). Therefore stimulating further FTTP investment cannot justify continuing the nationwide CPI+0% price indexation approach for broadband and leased lines after 2026. This approach would cost consumers a further £3.5 billion in additon to the £3.3bn in the 2021-26 period (almost twice the £1.7bn Ofcom forecast in WFTMR21)
- Ofcom must reflect the very different competitive conditions in the broadband/WLA market compared to the leased line/LLA market – otherwise there will be too weak or too strong regulation in certain areas. For 2021-26, Ofcom imposed a 'one size fits all' approach to regulation and that would be inappropriate for 2026-31.

1.3 Our initial views on the regulation that Ofcom should impose for 2026-31 reflecting these and other circumstances are outlined below.

[1] [✂ REDACTED ✂]

[2] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | page 1 ("*TAR26 Introduction*")

[3] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | page 1.

1.4 In the broadband/WLA market

- In Area 2 set a price cap for legacy products that allows a high % ROCE (currently about 18%, 2.5 times WACC) to continue but not increase further
- In Area 3 set a price cap for legacy products that starts to align prices to cost
- Move anchor from FTTC40 to FTTC80
- Allow Openreach to offer volume-based deals under similar rules as in WFTMR21
- Only reduce regulation in Area 1 if competition is already demonstrably well established
- Possibly 'skip' the intermediate copper retirement step where Openreach can raise prices
- Legacy product withdrawal should only be permitted if CPs costs are fully compensated and robust migration products are in place
- Introduction of minimum service standards on FTTP

1.5 Cost-based dark fibre access ("DFA") in Area 3 has not been a successful remedy in the LLA market (uptake <1% circuits) and so customers have not been protected from excessive prices. Thus a cost-based charge control should be imposed on Ethernet circuits in Area 3. Cost-based Ethernet charges should also be extended across the majority of the UK given the limited benefit to consumers from additional leased line network investment and the trivial impact of high LLA prices on incentivising further FTTP investments.

1.6 In inter-exchange connectivity ("IEC") Ofcom should immediately adjust DFX prices down to actual cost (supposedly cost-based prices are about 20% above cost). Ofcom should also impose cost-based DFX across more routes (given the limited competition and absence of a material investment benefit for consumers from high IEC prices).

1.7 On those ancillary services where charge controls do not apply, Ofcom should impose a stronger price remedy (such as safeguard caps) to address Openreach's willingness to exploit weak regulation and impose unreasonable price levels.

1.8 We also make a number of more 'technical' points regarding how the market analysis is conducted:

- The market analysis must reflect the reality that the competitive impact (and consumer benefit) from LLA competitors is much less than from WLA competitors
- The market analysis must not be based on uncertain future developments such as prospective build and consolidation
- The remedies should reflect that WLA legacy prices, LLA prices and IEC prices have for differing reasons, limited impact on FTTP investment incentives
- The LLA market analysis should include LLA-only competitors and not just multi-service network competitors who offer both WLA and LLA. It should also be based on competitor network proximity to leased line demand sites (not coverage of residential premises)

- Ofcom must gather and use market share data to ensure regulation in IEC reflects actual competitive conditions. In WFTMR21 Ofcom seemingly conducted its review with no such data
- Ofcom should assess so-called Openreach non-SMP products where, though purportedly Openreach faces competition, Openreach's average ROCE from 2021-24 has been over 20%. This figure implies either there is inadequate competition to support a no-SMP finding and/or Openreach is diverting costs to SMP products (from non-SMP) and the excess profits in SMP products are understated
- To ensure that the analysis and regulation are sound Ofcom must consider remedy options and conduct cost benefit analysis of these options early in the development process and when the decisions are at a formative stage. This will ensure that Ofcom can be confident it has identified the best approach for consumers and allow stakeholders to engage effectively. This type of approach is also implicitly required by Ofcom's own guidelines

1.9 This submission builds on a number of reports by Frontier Economics that were commissioned for PXC, Sky and Vodafone. Those reports which have been provided to Ofcom form part of PXC's submission.

1.10 This submission does not include submissions on the PIA market.

1.11 Our submission addresses in turn each of the markets that are being reviewed as part of the TAR (WLA, LLA, IEC) and for each provide comments on the market analysis (product, geographic and SMP assessment) and remedies (both price and non-price). We then comment on remedies for ancillary services, quality related remedies, baskets, exchange exit and other issues. Lastly, we provide some brief comments regarding the process that Ofcom should follow for this market review.

2 Wholesale local access (WLA) market

2.1 In this section we comment, in turn, on WLA product markets, geographic markets, SMP assessment and lastly, remedies – both price and other remedies.

2.2 The key points:

- the geographic market definitions should be based on rivals that meet minimum threshold criteria in terms of market share, coverage and existing wholesale agreements. Whether a rival is a multi-service network (i.e. provides LLA) is not a material consideration
- Ofcom should in general not base the geographic market definition on uncertain future changes such as consolidation, wholesaling and future build
- Area 1 should only include areas where competition is currently well established and not be based on uncertain future changes
- The SMP assessments should be based on actual competitive conditions not some pre-judged desire to deregulate part of the UK. Similarly, remedies in all Areas must be based on actual competitive conditions rather than the label for the Area – for instance since it is labelled as having 'material and sustainable competition' assuming that there is in fact 'material and sustainable competition'
- There is clear and compelling evidence that high legacy WLA prices (which cost £2bn from 2021-26 more than two times what Ofcom forecast) will have had, at most, a small positive impact on FTTP investment and may have had a negative impact (given they reduce altnets addressable market and increase Openreach incentive to sweat legacy assets).
- Ofcom must not erroneously assume that the correlation (since 2021) between high legacy prices and increased FTTP investment demonstrates causality. Prior to WFTMR21 there was considerable investment momentum in place that would have continued without a CPI+0 decision and there have been many other factors that have clearly caused some increased FTTP investment such as: PIA improvements and price reductions; wayleave and streetwork changes; increased capital allowances; non-domestic rates holiday; increased demand; more finance availability and other pro-investment regulation and legislation
- In any case, there is now no justification for high legacy WLA prices from 2026-31 (which might cost £1.7bn) to stimulate further FTTP investment since very little altnet expansion is viable. The altnet investment opportunity will have almost fully closed by 2026
- Given the market circumstances have substantially changed since 2021, so Ofcom must adapt its regulation. In particular,
  - In Area 2: prices should be set to allow a high % ROCE[4] to continue but not increase – this will in the absence of further material FTTP investment protect consumers' interests whilst allowing adequate returns for altnets and Openreach

[4] ROCE – return on capital employed. Pre-tax profit divided by mean capital employed (MCE)

  - In Area 3 where there is no material competition prices should move towards being cost-based – this is consistent with Ofcom's statement in 2021 where it said: if "*competition has not emerged and is not expected to*" then "*we may be required to set cost-based prices going forwards*"

- The anchor should be moved upwards from 40Mbps (on FTTC and FTTP) to FTTC80 and FTTP160 since 40Mbps will, through the 2026-31 period, be an inadequate constraint on the price of products most consumers purchase
- Openreach should be allowed to make further volume-based offers in line with the rules set in 2021
- There should be no intermediate copper retirement step where Openreach can raise prices, and legacy product withdrawal should only be permitted if CPs costs are fully covered and robust migration products in place
- FTTP is now a mature product, but certain aspects of quality is poor. Ofcom should impose minimum service standards on FTTP.

2.3 Our comments below on market analysis and remedies are based on there being three geographic areas that are broadly similar to those defined in WFTMR21: Area 1 BT+2 established; Area 2 BT+1[5], Area 3, BT+0. Depending on further evidence provided by Ofcom we may take the view that these are no longer appropriate or that additional areas need to be defined.

2.1 Product market analysis

2.4 We have no comments at this stage on the product market definition.

2.2 Geographic market analysis

2.5 There are materially different competitive conditions across the UK and therefore it is necessary for Ofcom to classify areas into different groups that have different competitive conditions. This allows remedies to be tailored to different competitive conditions and so and avoid under- and over-regulation. Below we discuss first the overall approach to this geographic market analysis and then three particular issues: taking account of future changes; the geographic unit and threshold used; and approach to Area 1.

2.2.1 *Overall approach*

2.6 In WFTMR21 Ofcom's overall approach to geographic market analysis was as follows:

- To split the UK into 2 geographic areas: Area 2 and Area 3
- Area 2 was described as where "*there is, or there is likely to be potential for, material and sustainable competition to BT*"[6] and "*where there is already some material commercial deployment by rival networks to BT, or where this could be economic*"[7].

[5] If Area 1 is BT+2 established, then Area 2 will in practice would also include where there are 2 rivals but they are not 'established'

[6] WFTMR21 | Statement Mar 2021 | vol 2 §7.7

[7] WFTMR21 | Statement Mar 2021 | vol 2 §7.26

One rival (i.e. BT+1) was considered sufficient for there to be "*material and sustainable competition"*.

- Area 3, by implication, was those areas where these conditions did not apply (i.e. BT+0)
- In practice, Ofcom included only the existing and planned coverage of VirginMedia's ("VMO2") and CityFibre Holding's ("CFH") networks. Ofcom said that the reason to include (only) these two was that they had "*existing coverage, had been able to provide us with roll-out plans, and either already provided both WLA and LLA, or their business plans assumed the provision of both services*" [8]. In respect of other rivals (who offered WLA) Ofcom considered that "*their presence (existing or planned) in any given area would not materially alter the competitive conditions in that area*" [9]

2.7 Ofcom also considered defining an Area 1 (where there were 2 'established' rivals i.e. BT+2 established). They considered that no material areas met this criteria. We discuss how Area 1 might be defined in TAR26 below at §2.41*ff*.

2.8 In TAR26, Ofcom's approach to defining when a rival counts as present needs to evolve to reflect the changed market circumstances. In particular, it needs to go beyond only counting only VMO2 and CFH and consider – at least in the first instance – all rivals who are material providers of WLA services.

2.9 This is reflected in a recent Enders Analysis report:

> *it is unclear that competitive pressure from CityFibre is markedly different from that of other altnets (although it might well have seemed that way back in 2020)* [10]

2.10 Ofcom seemed to recognise the need to consider a wider range of rivals in this review – in its TAR26 Introduction Statement in Mar 2024 it said[11]:

> *In our assessment of competition, we will not only consider the presence of rival networks to Openreach but, importantly, the level of competitive constraint they place on Openreach and their ability to compete sustainably*

2.11 The degree of competitive constraint in WLA that a rival provides is likely to depend on a number of features of each operator:

- actual and expected market share/take-up. We agree with Ofcom that market shares "*provide a useful first indication of competitive conditions*"[12]
- retail-only altnets that do not wholesale (or have limited wholesale agreements) will provide less constraint:
  - they often lack the brand strength needed to be competitive in the retail market against the larger ISPs (BT/EE, VMO2, TalkTalk, Sky)
  - any constraint they provide in the WLA market is indirect (via the retail market) which weakens the constraint

[8] WFTMR21 | Statement Mar 2021 | vol 2 §7.27

[9] WFTMR21 | Statement Mar 2021 | vol 2 §7.28

[10] Enders Analysis | TAR 2026: You can't always get what you want… | page 11

[11] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | §3.8

[12] WFTMR21 | Statement Mar 2021 | vol 2 § 8.15

- the extent of wholesaling agreements will also need to be considered[13]

- smaller operators (i.e. less coverage) will provide less constraint
  - if they do not already wholesale, it is difficult for them to secure wholesale agreements since ISPs tend to only integrate with larger altnets given the high fixed cost involved. See for instance, WFTMR21 Statement vol 4 §7.48
  - they lack the scale needed to be competitive in the retail market against the larger ISPs
- altnets that only target a sub-segment of customers (e.g. those in MDUs, business only[14]) are less likely to provide a strong constraint

2.12 Notably, Ofcom should be able to source data on all these features (market share, coverage, retail-only, wholesale relationships).

2.13 Contrary to Ofcom's implicit assumption in WFTMR21, we do not consider that offering LLA services (i.e. being a multi-service operator, MSN) is a key factor in determining the likely constraint a rival provides in WLA. Offering LLA does not materially affect the ability to compete in the WLA market. This reflects, in part, that there is limited synergy between providing the two services, for instance, limited network overlap: see §3.52 below. The mere fact that a WLA-only network does not offer LLA cannot be a reason for it to be excluded from the competitor set considered for WLA. Therefore, WLA-only networks should be considered.

2.14 Once Ofcom has considered the features of each operator and the constraint they provide it will then needs to consider how to use this information to select which rivals to count as present.

2.15 One option is to only count a rival if it meets particular criteria set[15] e.g. current market share over 15% *and* current coverage over 500,000 premises *and* existing wholesale agreement with major ISP. Methodologically this is akin to the binary approach that was adopted in 2021 (though is more transparent). However, since it considers more features that affect competitiveness (and ignores offering LLA) it should be more robust.

2.16 Two other slightly more sophisticated (and complex) methods that are potentially more robust are:

- Score the competitive constraint of each rival 1-10 based on factors above (i.e. market share, coverage, wholesaling); set a threshold for a rival to be counted as present, at say 6, and only include those rivals with a score of 6 or above; and ignore the others.
- Score the competitive constraint of each rival 1-10, assess the 'aggregate' competitive constraint to BT in each geographic unit by adding the score of each rival

[13] CFH, for instance, now has relationships with the majority of non-BT, non-Virgin ISPs (PXC, Sky, Vodafone, Zen etc). Other altnets have limited wholesale agreements (e.g. Brsk, Community Fibre with PXC or nexfibre with VMO2). Whereas other altnets have no wholesaling agreements

[14] [✂ REDACTED ✂]

[15] In addition, VMO2 should be included since though it is retail only it has a large enough share to be able to have a material constraint in the WLA market even though that constraint is indirect

present in that geographic unit and then say to be in Area 2 need an aggregate score of at least 8 (say)

2.17 In considering the particular thresholds (the 500,000 premises and 15% share or the 6 score or 8 score above) it is important to recognise that ultimately, there is no 'correct' criteria set. There is no precise level above which a rival will provide a material constraint and below which it will not provide a material constraint – it is a continuum.

2.18 Rather the important step is that when SMP assessment and remedies in each geographic area reflect the actual competitive conditions in each Area (e.g. rival market share). This has two particular implications:

- it would be wrong for Ofcom to label Area 2 as where there is 'material and sustainable competition', set particular criteria (which it thinks reflect material competition) and then apply remedies based on fact that Area 2 was intended to have 'material and sustainable' competition. When Ofcom is assessing SMP and remedies it must set aside its intent and label and genuinely only consider the actual competitive conditions
- It may be sensible for Ofcom (within reason) to iterate the geographic market definition. For instance, Ofcom might select one set of criteria but finds that this results in an Area 2 where the level of competition (e.g. rival market share) is not that distinct from Area 3 in which case it may decide to adapt the criteria.

2.2.2 *Taking account of future changes*

2.19 One of the issues that Ofcom will need to grapple with is how it takes account of possible future changes when assessing competitive constraint. We discuss three of these below:

- prospective/future build
- consolidation
- future wholesaling (particularly VMO2).

2.20 As a general principle, given there are potentially future changes it is clearly beneficial for Ofcom to base the TAR26 analysis and remedies on data as close as possible to April 2026.

Prospective/future build

2.21 In WFTMR21 Ofcom took account of future build plans (of VMO2 and CFH) in its geographic market analysis – so, for instance, it included areas within Area 2 if CFH planned to build its network in that area before 2026. However, the build plan particularly of CFH has proven inaccurate.

2.22 CFH's plan that Ofcom relied on was to build 8m homes by 2026[16]. [✂ REDACTED ✂][17] [18]. Thus there are a material number of postcode sectors where CFH were assumed to be

[16] WFTMR21 | Consultation Jan 2020 | vol 2 §1.18

[17] [✂ REDACTED ✂]

[18] [✂ REDACTED ✂]

present (and so the postcode sectors included in Area 2) but where in practice CFH have no network.

2.23 Ofcom can and should compare the build plan CFH provided to Ofcom for WFTMR21 and the actual outturn and provide summary information in its consultation. The fact that altnet coverage in Area 3 (where no VMO2/CFH build was projected) is almost as high as in Area 2 (38% vs 31%) may be in part an indication of the inaccuracy in projections.

2.24 In TAR26, we consider Ofcom should only include future build plans where they have a high degree of certainty – for instance, network planning has been completed; finance is in place; operator has track record of following through with build plans; and they are in near-term (e.g. ready for service planned within next 12 months[19]).

Future consolidation

2.25 Future consolidation is likely and it could affect the market analysis. If, for example, CFH acquires a smaller retail-only altnet, that altnet (or their coverage) will effectively become 'larger' and will have wholesale relationships and so their constraint will increase. However, predicting the shape of consolidation (e.g. who acquires who and when) is very difficult and in any case will take some time.

2.26 Thus we suggest that whilst Ofcom should base its market definition on mergers/acquisitions that have occurred (or where finalised agreements are in place) it should not include uncertain consolidation. Including uncertain consolidation risks harmful under-regulation.

2.27 A similar effect to consolidation could come from partnerships between altnets or the use of network aggregators, both of which could give ISPs access to the footprint of multiple altnets within one wholesale agreement and possibly one system build. [✂ REDACTED ✂].

Wholesaling

2.28 Another future change that could affect the level of competitive constraint is whether an altnet wholesales. It is generally in rivals' (such as VMO2) interests to exaggerate the likelihood of it wholesaling in future. Therefore Ofcom should be very cautious about any claims that are made. We consider that any claims about future wholesale agreements should be discounted unless a signed agreement is in place.

2.29 This principle is particularly important in relation to VMO2. The approach Ofcom took in WFTMR 2021 was premised on the possibility that VMO2 would wholesale to other ISPs[20]. As Ofcom pointed out, in economic terms this would have led to a direct constraint in the WLA market rather than an indirect (and weaker) one and so more competitive constraint to Openreach. Obviously, VMO2 has not in fact wholesaled which has led to less constraint on Openreach than anticipated and may have allowed higher prices than otherwise.

2.30 [✂ REDACTED ✂].

[19] Plans beyond 12 months will typically be less certain and more subject to being changed/withdrawn

[20] WFTMR21 | Statement Mar 2021 | vol 2 §8.83. Though Ofcom considered it a possibility it did not consider that this would result in a no SMP finding in WLA or LLA

2.31 [✂ REDACTED ✂].

2.32 [✂ REDACTED ✂].

2.2.3 *Geographic unit and coverage threshold*

2.33 In WFTMR21, Ofcom used postcode sectors ("PCS") to conduct the geographic market analysis. There are about 10,000 of these in the UK and on average include 3,000 premises. Ofcom also decided that for a rival to be considered to be present they needed to cover 50% of premises within the PCS (this is referred to as the 'coverage threshold').

2.34 We consider that PCS are too large and competitive conditions are not sufficiently homogeneous within each postcode sector for the same SMP assessment and remedies to be appropriate, especially in rural areas and on the boundaries of towns.

2.35 In WFTMR21, Ofcom said of concerns about using PCSs was that smaller units were not practical

> *We accept that when premises are aggregated into larger units there is a risk that the competitive conditions within the unit become less homogeneous. However, it is not practical to carry out the analysis at a premises level. Some level of aggregation will therefore be necessary. The level of aggregation used is a matter of judgment and trades off precision with practicality.* (§7.78)

2.36 Ofcom has not explained the practical difficulties with using smaller units

- we understand that altnet build plans are often at a UPRN level (unique property reference number) so the source data can be provided at a very granular level.
- computer processing is unlikely to be challenging.

2.37 We remain of the view that smaller units (such as postcodes) should be used unless a clear justification is provided.

2.38 We recognise that there is no precise correct overage threshold – however we consider that the 50% threshold is too low. In WFTMR21 TalkTalk repeatedly asked Ofcom for an evidence-based justification for the 50% threshold yet was given vague evidence-free responses that the 50% was a more "balanced" or more "reasonable" threshold than 65%. Ofcom should reconsider the appropriate threshold and provide a justification for its proposal.

2.39 Particularly if Ofcom persist on using a low threshold then it is critical that the SMP assessment and remedies reflect the actual competitive conditions (e.g. market share) in (say) Area 2 rather than the label of Area 2 which was 'material and sustainable competition'.

2.40 if Ofcom continue to use PCSs or a 50% threshold then there will be a material number of premises in Area 2 with no rival present. In this case, the remedies imposed must adequately protect all consumers i.e. those with no rival as well as those with one rival.

2.2.4 *Defining Area 1*

2.41 In WFTMR21 Ofcom considered defining an Area 1 (where there were 2 established rivals i.e. BT+2 established) that would warrant much weaker regulation and possibly a no SMP designation. Ofcom considered though that no material areas met this criteria. However, given the development of rivals since 2021 it is possible that an Area 1 exists. Below we provide some comments on how this is defined.

2.42 In general, in Area 1 there is a high risk of inappropriately light regulation. This means that Ofcom must be more confident that the level of competitive constraint is adequate. This may require that the geographic market definition is adapted (from that used for the Area 2/ Area 3 boundary)

- The current aggregate rival market share level is at least 50%
- Both rivals have material coverage
- At least one rival wholesales
- The threshold for counting a rival as present in a PCS is increased above 50% (perhaps 80%)
- The assessment does not include any prospective impacts e.g. future build, consolidation, wholesaling

2.43 The test that Ofcom uses must be clear, measurable and clearly justified.

2.44 We discuss below §2.117 how remedies in Area 1 should reflect the risk of under-regulation.

2.3 SMP assessment

2.45 The SMP findings should depend on the competitive conditions in each geographic market (which depend on the criteria used to define geographic markets). Thus at this stage it is not possible to comment on SMP findings particularly in Area 1.

2.46 However, assuming that Area 2 is defined in similar way to last time – BT+1 rival who covers 50% of PCSs – then BT will likely have SMP. As Ofcom said in 2021[21]: "*Two players is not sufficient to deliver effective competition in this market*". Further, the use of PCS and the 50% threshold means that there will be material parts of Area 2 where there is no rival.

2.47 BT will almost certainly have SMP in Area 3.

2.48 The SMP assessment (and remedies) must reflect that some of constraint is indirect (e.g. VMO2).

2.4 Remedies

2.49 In this section we discuss Ofcom's overall approach to setting remedies (in particularly charge controls).

[21] WFTMR21 | Consultation Jan 2020 | vol 4 §8.54

2.50 First: we look at Ofcom's stated objectives and remedies in WFTMR21; the significant harm from high legacy WLA Openreach prices has had on consumers; and explain why the evidence indicates that high prices have probably had little positive impact on FTTP investment.

2.51 We then consider the appropriate approach in TAR26: because (unlike 2021) there is little potential altnet FTTP investment after 2026, there can be minimal investment benefit of maintaining higher prices. Therefore, Ofcom's priority must be on protecting consumers by limiting high prices (whilst sustaining investments already made).

2.4.1 *Approach in WFTMR21*

2.52 In a significant change to previous market reviews where prices had been cost-based, in WFTMR21 Ofcom set a charge control that allowed Openreach to increase average legacy (copper/FTTC40) prices by CPI each year – FTTC80 prices were not regulated. This allowed legacy prices to be substantially above costs – Ofcom forecast the cost at £0.7bn[22] and consumer harm through high retail prices was a similar amount. The reasoning Ofcom gave was[23]:

> *We consider that this will promote competition and investment in bitbit-capable networks by Openreach and other operators. It will also protect consumers and existing models of downstream competition in the short term.*
>
> *• It will promote competition through: making it attractive for telecoms providers to build new, competing networks themselves and/or enter into commercial arrangements with other network operators as opposed to relying on buying regulated wholesale services from Openreach; allowing sufficient margins for competing network operators; and providing a stable and consistent regulatory environment.*
>
> *• It will promote Openreach's investment: as Openreach will have a strong incentive to invest in gigabit-capable networks given the threat posed by competing networks. We also expect Openreach to use its profits on copper services to invest in new networks.*
>
> *• It will protect consumers and downstream competition because: for WLA services where we have charge controls, wholesale prices will not be able to increase in real terms; for WLA services where we do not have charge controls, prices will be constrained by the option of purchasing the charge controlled anchor products; for LL Access services, charge controls will apply to all speeds; and prices of both WLA and LL Access services will also be increasingly constrained by competition over time.*

2.53 This approach was founded in large part on a single premise "*we believe that there is a significant positive relationship between the level of wholesale prices and competitive network investment*"[24].

2.54 However, this premise was not only a mere assertion with no evidence to support it, it is also false. The positive impact of high legacy prices on FTTP investments was not significant. In addition there were two well-understood negative impacts from high legacy prices on FTTP

[22] See Annex 1: Excess profit and consumer harm data

[23] WFTMR21 | Statement Mar 2021 |vol 4 §1.2

[24] WFTMR21 | Statement Mar 2021 | vol 4 §1.65

investment (impacts that Ofcom ignored at first and then chose to give very little weight to). The three impacts were

- Small positive impact on altnets returns
- Negative impact on altnet market share
- Negative impact on Openreach's FTTP investment incentives

2.55 We discuss each of these below.

Impact of higher legacy Openreach prices on altnet returns

2.56 The 'positive' impact of higher legacy Openreach prices on altnet revenue and profitability is very small. In WFTMR21 TalkTalk provided an analysis that estimated that only 1% of 'excess profits' (i.e. prices above cost) flow into altnet revenue and this would raise FTTP investment returns (IRR) by 0.03%. There are a number of factors that cause this low impact:

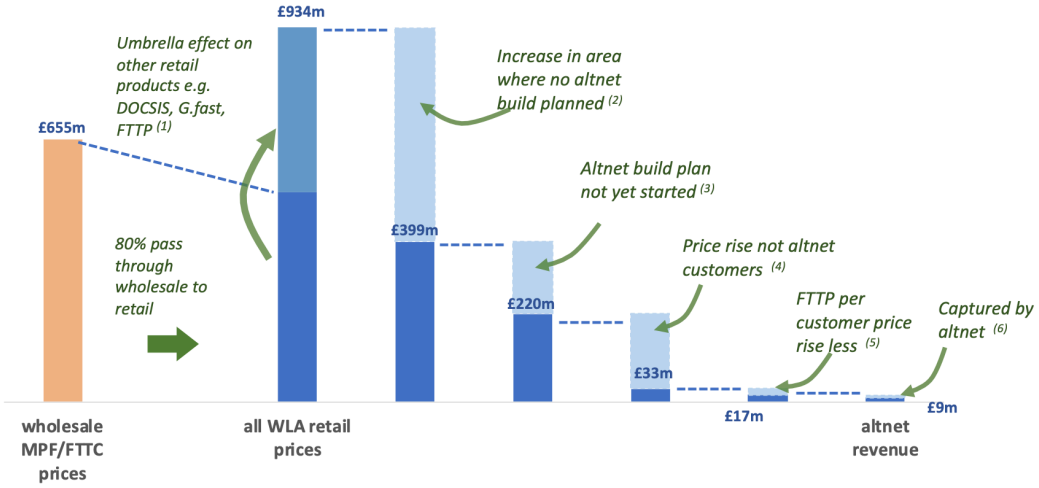
- Higher legacy Openreach prices can only impact on altnets in areas where an altnet has built (which on average across the 2021-26 period was about 25% of the UK[25]). Also, high prices from 2021-26 could obviously not affect investment incentive on FTTP built prior to 2021
- Even in areas where an altnet has built FTTP, higher legacy Openreach prices can only impact altnet revenue for customers of the altnet (which on average across 2021-26 was about 15% of the UK)
- Openreach MPF/FTTC prices have an indirect impact on altnet FTTP prices because of imperfect substitution between MPF/FTTC and FTTP. We estimated that about 50% of the legacy price change would feed into FTTP prices
- The altnet providing WLA will only capture a portion of the additional revenue/margin (with about 50% being captured by the ISP/retailer)

2.57 The combined impact of these were that 1% of excess revenue flowed to altnets: 1% = 25% x 15% x 50% x 50%.

2.58 These effects are shown the waterfall chart we provided as part of our WFTMR21 submission. These factors are relevant in considering the impact of high legacy WLA prices on FTTP investment after 2026 though, of course, the actual figures will be different – for example: % areas where there will be future altnet build will be much lower, but uptake might be higher.

[25] This assumption and the others in §2.56 are based on various data (e.g. Ofcom altnet build estimates, Ofcom altnet uptake estimates) and is documented in the model that was provided to Ofcom as part of TalkTalk's WFTMR Consultation Response May 2020. We can provide that model to Ofcom on request.

Fig 5.1: Waterfall chart showing flow of retail price rises (FY22-FY26) into altnet revenue



Notes:

(1) umbrella effect is the effect on the retail prices of non-MPF/FTTC retail products (e.g. DOCSIS, G.fast based) from the increase in MPF/FTTC retail products.

(2) this reflects that price rises in areas where no altnet has plans to build will have no effect on altnet revenue

(3) this reflects that price rises in areas where altnets have plans but have yet to build will have no effect on altnet revenue

(4) this reflects that where price rises are in areas where altnets have built, altnet revenue will only increase for altnet customers and not for customers on other networks in the area

(5) this reflects that the retail price rise (per customer) for FTTP customers will be lower than for MPF/FTTC and other WLA customers since the substitution effect from FTTC to FTTP will be weak

(6) this reflects the altnet will only appropriate some of the FTTP retail price increase, with some remaining as increased retailer margins

2.59 In practice, raising legacy prices is a highly ineffective, inefficient and wasteful means of improving returns on altnet FTTP investment since so little of the price increases reaches altnets' cashflows. Most is captured by BT shareholders through extra dividends.

2.60 Ofcom did not address these impacts in its consultation. Rather it merely asserted that there was a "*significant relationship*". The first time it engaged in a meaningful way with these important effects was in the WFTMR21 Statement, long after it had come to its conclusions. This was in conflict with the Sedley principles that a consultation should be conducted when decisions are at a formative stage (see footnote 158).

2.61 In the WFTMR21 Statement[26] Ofcom laid out for the first time why it, in effect, chose to ignore these effects. We provide this reasoning below and explain why they are, in some cases plainly wrong and in any case, do not come close to changing the conclusion that the impact is small and certainly does not have a 'positive and significant' impact on altnet investment.

Ofcom argument	comment
It focuses on the impact that pricing continuity will have on expected revenues on each premises served. It ignores the impact pricing	Ofcom is trying to double count the impact on altnet revenue. In response to higher legacy prices an altnet can either increase its FTTP

[26] WFTMR21 | Statement Mar 2021 | Annexes §A12.17, §A12.19

continuity will have on the take-up altnets can expect to achieve, by making it more attractive for ISPs to buy from competing network operators than from Openreach	prices (which is what the TalkTalk model assumed) or it can hold prices the same and get higher share. You cannot have both impacts as Ofcom suggested
It does not take into account that pricing continuity signals our approach to regulation in future review periods, which will also impact expected profitability.	In WFTMR21[27] Ofcom made clear that it could not legally pre-commit itself in WFTMR2021 to certain regulation in the period 2026-31. Thus rationale investors would not have assumed that it would adopt the same high price approach in 2026-31. In any case, if it was appropriate to include increased investment after 2026 as a result of higher legacy prices after 2026, it would also be appropriate to include the increased cost to consumers of higher prices after 2026. However, Ofcom has not mentioned this – its approach is very partial and incoherent
a return to cost-based price caps would be likely to signal a departure from our strategy to promote competition[28]	This falsely suggests that Ofcom's strategy hinges on only the price level. It does not. Rather it rests on the multitude of pro-competition/investment actions it planned to take and did take (e.g. PIA, copper retirement, restrictions on certain offers, anchor pricing approach).

[27] "*We cannot prejudge what actions we will take in the future, as any pricing decisions in future reviews will be made in light of the circumstances and legal framework applicable at that time*". WFTMR Statement 18 March 2021 volume 4 §1.111

[28] WFTMR21 | Statement Mar 2021 | vol 4 §1.72

Ofcom argument	comment
The earliest build start in TalkTalk's model scenarios is the beginning of FY22, however build has already started	This point relies on the concept that the WFTMR21 decision regarding prices in the period 2021-26 affected investment before 2021. These prices were not determined until March 2021 – the consultation in Jan 2020 were 'proposals' which should have been at a 'formative stage'. Ofcom has not explained how, without a time machine, it is possible for a decision made in Mar 2021 affected investment before 2021[29].
It assumes weak substitutability between FTTC and FTTP products, that grows weaker overtime, which means higher FTTC prices would only have a partial impact on altnet FTTP returns. However, the evidence set out in Volume 2 Section 2 indicates that most consumers are not willing to pay significantly more for higher speeds. This suggests FTTC prices will have a large impact on FTTP prices charged by altnets and will continue to do so over this review period	The TalkTalk model estimated a 50% pass through declining to 30% - this reflected the partial substitution due to the product differences[30]. We considered that this was a reasonable assumption. It is possible that the pass through is higher, but it will certainly fall over time. Even if it was much higher (80% falling to 60%) the impact on altnet revenue (2%) and returns (0.05%) would still be very low
It is also of significance that altnets who are deploying fibre networks disagree with TalkTalk	Ofcom should be basing its decisions on evidence, not the unevidenced claims of impartial stakeholders. It is clearly in altnets' commercial interests to have high legacy prices since it increases their revenue and margins (albeit to a small degree)

2.62 In summary, Ofcom points do not alter the conclusion based on evidence that any positive effect on altnet FTTP investment was small and that Ofcom's assertion that there is a "*significant positive relationship"* is false.

[29] Ofcom may have considered that it was appropriate to include investment before 2021 because Ofcom was attempting to assess the benefits of its so-called 'price continuity' approach whereby prices were above cost before WFTMR21. This is a flawed approach since the assessment should have been focussed on assessing the impact of the decision in WFTMR21 (prices in the period 2021-26). In any case, even if it were appropriate to include investment before 2021 then Ofcom should include the cost to consumers of high prices before 2021 which it did not do (see vol 4 §1.94).

[30] For instance: FTTC services offer lower speeds than FTTP services; there are substantial costs of switching between the two services, as new dropwire will need to be installed; it will take considerable time to switch between FTTC and FTTP services, as engineering works are required; FTTP services have lower fault rates than FTTC services; FTTC services diminish in quality as the premises are further from the street cabinet, while FTTP services do not

Impact of higher legacy Openreach prices on altnet market share

2.63 High legacy Openreach prices (before altnet entry) will tend to erode the competitiveness of non-BT ISPs and so reduce their share. This will have a negative impact on altnet returns given that the addressable market for altnets is non-BT ISPs. Ofcom's view on this point is not very clear. They seemed to accept that erosion will occur but claimed it would not be significant. For instance[31]:

> *we do not expect that keeping price caps the same in real terms would result in significant damage to ISPs' competitive positions in this review period, such that they would no longer be able to offer a large customer base to new network builders*

2.64 The misses the point – the relevant question is not whether an ISP can still offer a large customer base after the effect of high prices but rather what the incremental impact of the high prices is. Ofcom should have considered this effect and provided some analysis to assess its magnitude.

Impact of higher legacy Openreach prices on Openreach's FTTP investment incentives

2.65 We agree that altnet FTTP investment will encourage Openreach FTTP investment (since there is a race to become first to market reflecting first mover advantage). However, obviously if high prices have only a small impact on altnet FTTP investment, high prices can only have a small knock-on impact on Openreach FTTP investment.

2.66 Absent this knock-on effect (e.g. in areas where altnets are not investing) high prices will reduce Openreach FTTP investment incentive. This is because higher legacy prices will increase Openreach's incentive to sweat its FTTC assets since high prices will reduce the incremental return from FTTP investment[32]. Ofcom accepted this: "*We agree that higher FTTC prices will increase the relative profitability of remaining on FTTC compared to investing in FTTP, all else equal*"[33].

2.67 However, in assessing the impact on Openreach FTTP investment Ofcom claimed there a different positive effect: that as a result of greater legacy profits Openreach will invest more in FTTP since it makes greater legacy profits.

> *we expect Openreach to use its profits on copper services to invest in new networks*[34]
>
> *any higher returns Openreach would earn on its copper services would contribute to its full fibre investment*[35]

2.68 This argument is an unusual one, which finds little support in economic literature. Openreach's incentive to invest in FTTP is determined by the return on that investment not the level of cash generated elsewhere in its business. The mere existence of 'spare cash' will not increase Openreach's incentive to invest in FTTP.

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[31] WFTMR21 | Statement Mar 2021 | vol 4 §1.31

[32] This is because for a £1 legacy price increase, FTTP prices will increase by less than £1 due to imperfect substitution. The impact of this is that the incremental return from FTTP investment will reduce.

[33] WFTMR21 | Consultation Jan 2020 | vol 4 §1.24

[34] WFTMR Statement 18 March 2021 volume 4 §1.2

[35] WFTMR Statement 18 March 2021 volume 4 §1.46

2.69 In the WFTMR21 Statement, Ofcom 'responded' to TalkTalk's argument that Ofcom's claim regarding the impact of legacy profits was unsound. It said:

> *Allowing Openreach to set prices above the cost of copper services would also support Openreach's investment in FTTP. In particular, in the event we do need to regulate full fibre services in future, the higher profits arising from indexation would be relevant to any assessment of whether Openreach has had an opportunity to earn a fair return.* [36]

2.70 This does not explain why higher legacy profits will be used to invest in FTTP or increase the incentive to invest in FTTP – rather it says that high legacy profits might be recouped through lower prices in future.

2.71 It therefore appears that Ofcom has no sensible argument to support its claim that high legacy profits will increase FTTP investment.

Overall impact of higher legacy prices on altnet investment

2.72 Despite this clear *a priori* evidence and logic that high legacy prices would have at best a small positive impact on FTTP investment, in the WFTMR21 Statement[37] Ofcom made the extraordinary claim that the entire Openreach and altnet FTTP build in Area 2 (including build before 2021) (which was estimated at about 27m homes) was caused by legacy prices being above cost in the period 2021-26.

2.73 This is makes no sense.

2.74 First, it contradicts the clear evidence described above that high prices have a small effect on altnet investment.

2.75 Second, it effectively presumes that FTTP investment would have come to a standstill in 2021 without high legacy prices whereas there was considerable investment momentum in place and FTTP investment would have continued.

2.76 Third, it implies that no other factors had any effect on altnet FTTP build. There have of course been many external factors that will have increased FTTP build:

- Improving PIA and reducing prices has had, a substantial impact on altnet FTTP build
  - As Ofcom said in WFTMR21: "*the re-use of existing physical infrastructure (almost always using PIA) is a significant factor in many network investment plans*"[38] and "[PIA] *facilitates competition by cutting the upfront cost of building these competing networks by around half*"[39]

[36] WFTMR Statement 18 March 2021 volume 4 §1.2

[37] WFTMR21 | Statement Mar 2021 | vol 4 §1.95

[38] WFTMR21 | Statement Mar 2021 | Annexes §A3.3

[39] WFTMR21 | Statement Mar 2021 | vol 1 section 1

- Ofcom also said in 2021[40] "*the use of PIA will increase significantly over the period to 2026 to facilitate network roll-out*"[41] which has been borne out by a tenfold[42] increase in use
- And Enders Analysis recently said: "… *PIA and its pricing is therefore very significant to the altnets*" [43]

Whilst PIA can save £100s per connection (offset in part by ongoing PIA rental charge) the impact of high legacy prices was equivalent to a less than £1 reduction in capex[44].

- Making build easier through improvement in streetworks and wayleaves. The Government created a Barrier Busting Task Force to identify barriers to fixed and mobile network deployment, and to work with industry, local authorities, and others to overcome them. The team has brokered agreements on best practice in terms of streetworks and roadworks to improve relations between network builders and highways authorities.
- The Government also introduced supportive legislation:
  - the Telecommunications Infrastructure Leasehold Properties Act in 2021 to make accessing properties easier
  - The Building etc. (Amendment) (England) (No. 2) Regulations 2022 to require the construction of FTTP in new homes
  - Increase in capital tax allowances on new investment in FTTP networks including a 130% super-deduction (Apr 21 – Mar 23) and full expensing (Apr 23 – Mar 26)
  - reduction in non-domestic rates (or 'fibre tax') and tax holiday in England and Wales from April 2017 to April 2022[45] and in Scotland from April 2019 to April 2029
- Government subsidies both BDUK and the voucher scheme
- Ofcom introduced a variety of regulation that supported altnets
  - Steps to prevent anti-competitive build by Openreach. Ofcom said this will be a "*key area of focus for monitoring*" for Ofcom's Openreach monitoring Unit (OMU)[46]
  - putting in place restrictions on Openreach geographic and volume based discounts
  - reform of the switching regime to make changing ISP easier for customers

[40] WFTMR21 | Statement Mar 2021 | vol 2 §3.41

[41] Enders Analysis | TAR 2026: You can't always get what you want… | Page 13. "*PIA saves very significantly on roll-out costs, very roughly reducing a full build £600 per premises passed by around £200-£300*".

[42] Enders Analysis | TAR 2026: You can't always get what you want… | Page 13

[43] Enders Analysis | TAR 2026: You can't always get what you want… | Page 13

[44] TalkTalk Response to WFTMR Consultation | May 2020 | §5.29

[45] Government press release 5 Apr 2018

[46] Ofcom Openreach monitoring report 19 Nov 2020 §4.47 (see also §4.41-4.46).

  - new rules on broadband information regulation that helps customers distinguish FTTP products[47]
- there were also multiple other external factors that improved the 'business case' for FTTP investment and so caused increased investment
  - demand increasing. Ofcom said: "*The evidence suggests that both demand and supply-side factors will drive take-up of higher speed broadband services over the review period*"[48]
  - more finance becoming available reflecting reductions in risk due to: positive trial results; wholesale agreements being secured; and evidence from other countries becoming available that demonstrated the viability of new entrants
  - efficiency improvements, innovations and cost reductions particularly in technology and build techniques
- [✂ REDACTED ✂]

2.77 High legacy prices are one of a large number of initiatives that have contributed to increased FTTP investment. The evidence suggests that it has played a small role. Ofcom's 'sense-check' approach which implies that none of these other initiatives had any impact on FTTP investment is plainly implausible.

2.78 Looking back from today there is a temptation to adopt a similar flawed logic in terms of what actually did happen after 2021:

- since 2021 FTTP investment has increased substantially (true) and this coincided with high legacy prices (true)
- … and therefore high legacy prices caused the investment:
- but '<u>correlation does not imply causality</u>'.

2.79 There is clear evidence which demonstrates that there is no causal link (or at best a very weak causal link):

- The positive impact on altnet revenue (1%) and returns (0.03%) is so small it cannot have 'caused' the level of FTTP investment we have seen
- There are two well understood mechanisms by which high legacy prices will <u>reduce</u> FTTP investment: lower non-BT ISP share undermining altnet returns; increases Openreach incentive to sweat legacy assets
- There were many other significant factors that have contributed to FTTP investment such as PIA, improvements in wayleaves and streetworks, improved switching, measures to prevent anti-competitive behaviour, demand increasing and risks reducing

2.80 If Ofcom has evidence that high legacy prices did <u>cause</u> material FTTP build then it should present it. If not, it should not make these claims.

[47] Improving broadband information for consumers |Statement |13 December 2023

[48] WFTMR21 | Statement Mar 2021 | vol 2 §2.61

2.81 Ofcom claimed in WFTMR21 that consumers will be protected by its approach since legacy prices "*will not be able to increase in real terms*". Similarly it has been claimed that as end-user prices fell in real terms they were protected. That prices can only increase by CPI is irrelevant to a proper economic analysis. Proper economic analysis should be based on options or counterfactuals and assessing the costs and benefits of each: Ofcom stressed the benefit of high legacy prices on investment (albeit incorrectly); it should then balance that off against the cost, not make unsubstantiated statements that the costs are not that bad.

2.82 In section 10 we describe how Ofcom should conduct its analysis in order to identify the best option for customers.

2.83 It is notable that whilst the high legacy prices were unlikely to have caused material FTTP build, the cost in higher prices was far higher than Ofcom estimated – over the five years of the market review the excess profit for legacy services is likely to be about £2.0bn which is more than double the £0.9bn which Ofcom estimated in WFTMR21.

2.4.2 *Approach in TAR26*

2.84 As well as learning from the flaws in the logic used in WFTMR21, it is essential that the regulation imposed in TAR26 reflect the circumstances expected through the period 2026-31. In particular the impacts of legacy prices on future FTTP investment and on existing FTTP investment.

Impact on future FTTP investment

2.85 Ofcom must reflect that there will be limited further altnet investment after 2026. Ofcom recognised this possibility in the WFTMR21 Statement where Ofcom explained that looking forward to 2026 if "*competition has not emerged and is not expected to*" then "*we would expect to look at consumer outcomes*" and "*we may be required to set cost-based prices going forwards*" [49].

2.86 We think that after 2026, little additional altnet FTTP build is likely. We explain our reasoning below.

2.87 First, altnets generally tend not to 'overbuild' other altnets [✂ REDACTED ✂]. This is demonstrated by comments from a number of altnets, for example[50]:

- Matthew Hare, CEO Zzoomm: "*overbuild ? I'm really not a fan … we don't do it. We've may be overbuilt by accident a couple of hundred properties of other altnets. We've descoped about 265k properties because someone else has built there. [*altnet overbuild*] means you are going to share the market and you will get half the take-up you otherwise would*"
- Neil McArthur, CEO Freedom Fibre: "*I will not overbuild other altnets, absolutely not. We've had to walk away from a number of builds … because somebody else has*

[49] WFTMR21 | Statement Mar 2021 | vol 4 §1.113

[50] All these quotes are from interview that Richard Tang did with various industry figures. https://www.youtube.com/@RTZen

started building there. There cannot be any winners, we all need 30%, 40% penetration and that isn't going to happen if you have too many altnets"

- Richard Tang, CEO Zen Internet: "*I'm speaking to a few altnets … in the altnet community there is almost an unwritten rule let's not overbuild each other that would be silly*"

2.88 Second, altnets are unlikely to build in areas where Openreach has already built FTTP. We understand that some altnets avoid areas where Openreach has already built FTTP . We explain why altnets behave in this way below.

2.89 Altnets experience difficulty in building market share in areas where Openreach has built FTTP, particularly where Openreach has been established for several years. This is because once non-BT ISPs have migrated customers to Openreach FTTP it is difficult and costly to migrate customers to an altnet FTTP – a new physical connection is required (that is costly and disruptive) [✂ REDACTED ✂]. This reflects that it is easier to capture customers when they upgrade from FTTC to FTTP than it is once they already have FTTP. Ofcom recognised this important dynamic:

The move to gigabit-capable networks offers a window of opportunity for other network operators to invest, as large volumes of customers will need to be migrated from Openreach's legacy network to a new full-fibre network, which Openreach has not yet deployed at scale[51]

Switching costs mean that migration of end-customers is likely to be more difficult once they are connected to an FTTP network. This is because migration will lead to financial costs, and disruption to the end-customer. [52]

… It is likely to be more difficult for ISPs to convince customers the disruption of switching is justified when customer satisfaction is high and switching would not result in access to services not already available. This means that the potential for wholesale deals to support entry may be greater where most customers have not yet migrated onto an FTTP network. The opportunities provided by this migration process will eventually close, creating a time window where entry is more likely to occur.[53]

2.90 [✂ REDACTED ✂][54].

2.91 The difficulty in building share in areas where Openreach has already built is greater due to the high take-up that Openreach has achieved[55]

- Where build was 3 years old uptake was 40%
- Where build was 4 or more years old uptake was 50%

2.92 This has been in part helped by the stop-sell on legacy products and Equinox which both accelerate the migration to FTTP.

2.93 [✂ REDACTED ✂].

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[51] WFTMR21 | Statement Mar 2021 | vol 4 §1.20

[52] WFTMR Statement 18 March 2021 volume 2 §8.56c

[53] WFTMR Statement 18 March 2021 volume 2 §8.72-§8.73

[54] [✂ REDACTED ✂]

[55] Openreach Business Briefing | 7 Dec 2023 | page 19

2.94 Third, many of the remaining unbuilt areas in 2026 will be less economic and rural areas with a high cost to build which will not be viable for some altnets[56].

2.95 Thus the market opportunity for where it is viable for an altnet to build is diminishing – due to there already being an existing altnet or Openreach FTTP network or because the cost to build is too high.

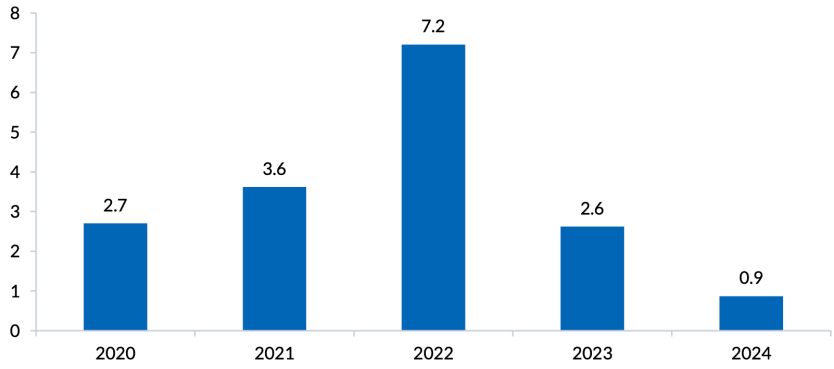
2.96 This dynamic of there being a closing market opportunity is already playing out. Altnet build rates have already slowed and several have announced reductions in their plans.

2.97 Enders Analysis highlighted in its February 2024 report the slow down in build[57]

> *"[2023] was regularly punctuated by announcements of roll-out slowdowns/pauses and layoffs, with around 70% of the altnet coverage base making some kind of public announcement, and more besides likely affected"*
>
> *"a slowdown [*in build*] in 2024 is looking very likely, with financing drying up due to tougher financial conditions"*

2.98 This is in large part driven by a reduction in funding which this chart from Enders Analysis[58] starkly shows:

Figure 5: Altnet announced funding (£bn)



2.99 We estimate that after April 2026, the amount of potential future altnet FTTP build is limited – [✂ REDACTED ✂][59]. This is much smaller than the level of future altnet build that was

[56] Ofcom's Connected Nations - Planned Network Deployments 2024 estimates for May 2027 urban covered (25.6m premises, 99%) and rural (3.8m 88%). This implies that uncovered there are 250k urban not covered and 500k rural.

[57] Enders Analysis | UK altnets: The beginning of the end… | Page 1. Figure 4: Altnet job losses and slowdowns

[58] Enders Analysis | TAR 2026: You can't always get what you want… | Figure 5. The 2024 figure is for ~9 months

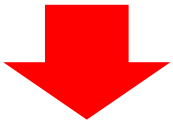
[59] Enders Analysis estimates altnet (excl VMO2/nexfibre) coverage growing by about 2-3% after 2025 (i.e. under 1m). Virgin coverage increase will mostly be upgrading DOCSIS to FTTP which is not relevant Nexfibre have stated ambition to grow to 5m by 2026 so unlikely significant additional coverage after April 2026. Sources: Enders Analysis | TAR 2026: You can't always get what you want… | Figure 7. https://www.nexfibre.co.uk/our-network/

Ofcom's Connected Nations - Planned Network Deployments 2024 report shows that in in May 2026 there will be 12%-15% of the UK not covered by FTTP which is 4-5m premises (total premises 31.8m) and the majority in rural areas (and by May 2027 4%-5%). The majority of future build after this 2026 is likely to be by Openreach. [✂ REDACTED ✂]

anticipated in 2021: 15-20m in Area 2[60] and 3m in Area 3. Clearly, the circumstances for TAR26 are significantly different than those for WFTMR21.

2.100 Given the small amount of future prospective build after 2026, there is no net consumer benefit from high legacy prices in the period 2026-31. The table below shows the various impacts on consumers of high legacy WLA prices.

Impact of high legacy WLA prices 2026-31 on consumers

Effect	**Customer impact (positive / negative)**
Altnet FTTP build: High legacy prices will have at best a small positive effect on the level of additional future build in the remaining part of the UK (**[✂ REDACTED ✂]**[61]) where future altnet FTTP is viable (and may have a negative impact given impact on non-BT ISP share)	
Openreach FTTP build: Prospective altnet FTTP build can incentivise Openreach FTTP build in the small area (**[✂ REDACTED ✂]**) where altnets may build[62]. Outside this area high legacy prices will have a negative impact on Openreach's incentives to build FTTP which is planned to total about 7m homes[63] due to the increased incentive to sweat existing assets.	*in altnet areas:*  *outside altnet areas*: 
High prices on consumers: High legacy prices will cause significant harm to customers – if CPI indexation is continued WLA prices will be about £1.7bn above cost from 2026-31. The consumer harm will be a similar amount. This is a disproportionate cost given the small impact on build. If say an extra 200,000 FTTP homes were built as a result of these higher prices, the cost would equate to £8,000 per home passed or about 15-20 times the build cost. It would be inefficient and wasteful.	

2.101 In summary, high legacy prices will not result in materially increased FTTP build after 2026 but will, obviously, cause significant customer harm. Thus Ofcom need to rethink its approach to remedies after 2026.

Impact on existing FTTP investments

2.102 When developing remedies, particularly price remedies, it is also necessary to consider their impact on existing FTTP investments, by both altnets and Openreach.

[60] The forecast of future build provided in WFTMR21 Statement for after 2021 were: CFH 8m, VMO2 2m (vol 2 Table 1.1) and Hyperoptic 5m (vol 2 §7.42). This excluded other known operators such as Gigaclear, Axione, Jurassic Fibre, Swish Fibre

[61] Obviously, prices in 2026-31 cannot affect build prior to 2026.

[62] Since altnet plans are announced reasonably well in advance Openreach will know where and where not altnets will build

[63] Openreach plan to build about 7m homes after FY26. Source: Openreach Business Briefing | Dec 2023 | page 13

2.103 Ofcom has said:

> *If we decide circumstances require a return to a cost-based control in parts of the UK, we would ensure that operators have a fair bet on investments*

2.104 We accept that in setting prices Ofcom must take the fair bet into account. However, in relation to Openreach returns it is worth noting that over the 2021-26 period their excess returns (in SMP markets) will be £3.3bn (see Annex 1) which will continue to some extent in 2026-31 (depending on TAR26 regulation). This compared to a forecast in WFTMR21 of £1.7bn. Openreach average FTTP prices are at least 40% above the price necessary to breakeven[64]. Therefore, there seems to be no justification that Openreach requires higher prices to earn an adequate overall return.

2.105 High legacy prices are not necessary to allow efficient scale altnets a reasonable return on their investment. There is various evidence that indicate that efficient altnets can make adequate returns:

- Openreach FTTP prices are above the level necessary for altnets to be viable (£11.10-£15.93[65]). In its Equinox 2 decision Ofcom said: "*Openreach's average FTTP price under the Equinox 2 Offer is above the top end of the estimated range for the unit cost of a reasonably efficient altnet in Area 2*"
- Ofcom based its cost estimates (referred to above) on altnets achieving a 33% share within 5 years of build[66]. Efficient altnets are able to beat this market share level and so their costs will be lower than the Ofcom estimates. CFH have stated in its 'oldest' build (Milton Keynes, which was finished in 2022) they have achieved 30% take-up with 40% take-up in the most mature parts of the city. It also said, it is "*consistently gaining a 40-50% share of the homes switching broadband provider within its footprint*"[67]. CFH's average uptake is lower since it is depressed by a high proportion of recent build which naturally have lower penetration
- As Greg Mensch said earlier this year: "*2024 has got off to a flying start for CityFibre. We've achieved profitability ahead of schedule"* [68]
- Subsequently to these statements, CFH has secured Sky as a wholesale customer which should see its market share rise further. As Enders Analysis said: "*With its 23% market share Sky is by far the largest ISP without its own network, and is likely to prove critical to the* [altnets'] *wholesale economics*" [69]

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[64] In 2021, Frontier Economics conducted an analysis that showed that if Openreach FTTP prices were set at £9.49 in 2020/21 and indexed by CPI then Openreach would cover their FTTP investment (in Area 2 and 3 but excluding the most rural areas). In other words this was the 'breakeven' price. The breakeven price in 2023/24 (given inflation) would be £11.40. In its Equinox 2 Statement (§4.39) Ofcom said that Openreach average price was above £15.93. The actual uptake is higher than projected meaning the breakeven price is likely to be lower

[65] Openreach proposed FTTP offer starting 1 April 2023 (Equinox 2) | Statement May 2023 | §4.39

[66] WFTMR21 | Statement Mar 2021 | Annexes §A15.83. It is worth noting that Ofcom's 33% assumption was, according to Ofcom, based on three way competition with each operator getting equal share. In practice, there will not be three-way competition across all of Area 2 and therefore under Ofcom's view an altnet should be able to achieve more than 33%

[67] CF Trading Update for the Year Ended 31 December 2023 (dated 26 January 2024) https://cityfibre.com/news/uks-largest-independent-fibre-network-reaches-100m-revenue-milestone

[68] CF Trading Update for the Year Ended 31 December 2023 (dated 26 January 2024) https://cityfibre.com/news/uks-largest-independent-fibre-network-reaches-100m-revenue-milestone

[69] Enders Analysis | UK altnets: The beginning of the end… | Page 8

- [✂ REDACTED ✂][70]
- As a result of the recession real wages fell below trend which will have increased margins (versus forecast). Real wage growth (versus CPI) averages about 1% per year[71] whereas in the 3½ years since late 2020 real wages have fallen by 3% – in other words, real wages are now about 4% below forecast[72]. This is effectively a windfall gain and will have reduced the price level necessary for altnets to be viable.
- The unexpected high inflation between late 2021 and early 2024 (with prices rising about 13% above target) will have also increased margins for previous investments since revenue will be higher than forecast as altnet prices are linked to CPI

2.106 It is worth noting that much of the competitor coverage in Area 2 is not new FTTP networks that have been built in the last few years. Rather it is VMO2's DOCSIS network much of which built over 15 years ago (albeit with some upgrades more recently) and most of the investment cost has already been recovered.

2.107 Furthermore, as we described above MPF/FTTC prices are an increasingly weak substitute for FTTP and, as a result, only a portion of MPF/FTTC price rises (or reductions) will flow into FTTP prices.

2.108 This indicates that further legacy prices rises are not necessary to allow efficient altnets to make a reasonable return. Further, there is a danger that high prices might encourage inefficient altnet build or and slow consolidation.

2.109 We discuss in the next sections our proposed WLA remedies to reflect these circumstances.

2.4.3 *Price remedies*

2.110 We discuss here our proposals for WLA price regulation. We agree with Ofcom when it said it needs to take account of the recent/prospective market developments:

> *"While the previous review set out a 10 year overarching strategy, the market review process requires us to review the relevant markets taking account of recent and prospective market developments."*[73]

2.111 In particular, Ofcom must recognise a number of dynamics:

- Continuing CPI+0% indexation in Area 2 and Area 3 will cost customers £1.7bn in 2021-26 (versus cost-based prices)
- There is little additional FTTP investment benefit from high WLA legacy prices since there is very little potential future FTTP investment and anyway high WLA legacy prices have little impact on FTTP investment incentives. The investment benefit is a small compared to the cost to consumers through high retail prices

[70] [✂ REDACTED ✂]

[71] X09: Real average weekly earnings using consumer price inflation (seasonally adjusted) https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/x09realaverageweeklyearningsusingconsumerpriceinflationseasonallyadjusted

[72] Real wages (vs CPI) are relevant since altnet prices are linked to CPI

[73] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | page 1.

- Efficient altnets are building to reasonable scale and are likely to see a reasonable return on their investments. High legacy prices are not necessary to ensure adequate return on investment

2.112 We first discuss price remedies in Area 2, Area 3 and then Area 1. Lastly we cover anchor pricing and volume based offers.

Area 2

2.113 In Area 2 Ofcom should set a price cap that allows the recent high % ROCE to continue but not increase further. The ROCE in the last three years averaged 18% or 2.5 times WACC which is unnecessarily high. Setting a price cap that effectively limits future ROCE will provide better protection to customers but will not jeopardise efficient altnet viability or materially affect the small amount of potential future altnet investment.

Area 3

2.114 Ofcom rightly stated in WFTMR21 that in areas where current/future investment was limited it may be right to set cost-based prices:

> *"we do not expect to introduce cost-based prices for full-fibre services until at least 2031 (provided there is sufficient ongoing investment)"*[74]
>
> *"[*if*] competition has not emerged and is not expected to" then (if other constraints don't apply) "we may be required to set cost-based prices going forwards"* [75]

2.115 Assuming Area 3 is defined as it was in WFTMR21 then there will be no rivals that provide a material and sustainable competitive constraint and future investment is unlikely. Therefore, prices should be cost-based and starting charge adjustments should apply. The precise approach would need to take to account the RAB pricing approach imposed in WFTMR21.

2.116 We do not think that this approach would breach the fair bet for Openreach since Openreach average FTTP prices are at least 40% above cost (see footnote 64) and the FTTP investment is performing well[76]. Furthermore, we think the excess profit in Area 3 legacy (and so too the implicit subsidy for Area 3 FTTP build) is far ahead of the WFTMR21 forecast

Area 1

2.117 Absent data for Area 1 on the geographic definition, competitive conditions and SMP assessment it is not possible to propose or comment on remedies. However, we do think that if material reductions in regulation are considered that Ofcom needs to be cautious, allow an orderly transition and reflect that some customers in Area 1 will have no competitive alternatives.

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[74] WFTMR21 | Statement Mar 2021 | vol 4 §1.111

[75] WFTMR21 | Statement Mar 2021 | vol 4 §1.113

[76] For example, the 50% uptake rate that Openreach is achieving on build cohorts over three years old is likely to have been higher than forecast.

Anchor product

2.118 Our view is that the current FTTC40 and FTTP40 anchors will provide an inadequate constraint for the 2026-31 period and provide inadequate consumer protection. We consider that the anchors should move to FTTC80 and FTTP80 (and possibly FTTP160). The full reasoning for this view is explained in the Frontier report[77]. In short the key points are:

- There are a reducing number of customers on the 40Mbps FTTC/FTTP – in FY24 only 23%[78] of Openreach FTTC/FTTP circuits were on 40Mbps and this is declining. [✂ REDACTED ✂][79] [80] . We expect that the portion on FTTP40 and FTTP80 will steadily fall
- As more customers move off the anchor product the constraint the anchor provides on higher speeds diminishes. This is because there is large resistance to downgrading speed even in response to large price rises on higher speeds and so price rises on higher speeds are profitable. This resistance results from behaviours such as status quo bias, loss aversion and regret aversion. This is backed up by survey evidence
- Further, other constraints on FTTC80 prices will reduce
  - The contractual cap on FTTC80 prices will be removed in April 2026
  - The pressure to keep FTTC80 prices low to be competitive against FTTP altnets in areas where Openreach has not built FTTP will diminish as Openreach FTTP covers more of the UK

2.119 Lastly, in regard to the anchor it is worth noting that whilst not having an anchor on FTTC80 prices will harm customers it will have no material positive impact on FTTP investment: there is limited prospective altnet FTTP investment (see §2.99); and, high FTTC80 prices discourage Openreach FTTP investment where there is no prospective altnet FTTP investment (see §2.66).

2.120 [✂ REDACTED ✂][81].

2.121 Ofcom will need to consider both the starting prices for each product (and/or fibre premium).

Volume-based offers

2.122 We consider that Openreach should continue to be able to make additional volume-based offers broadly in line with the approach imposed in WFTMR21. The approach for geographic-based pricing offers should also remain same as WFTMR21.

2.123 Equinox 1 and 2 have both encouraged ISPs to increase uptake of Openreach FTTP services as against using legacy products by providing price discount incentives if an order mix target

[77] Frontier Economics | Appropriate approach to pricing remedies on Openreach's Wholesale Local Access (WLA) services

[78] BT Regulatory Financial Statements FY24 | 7.1.1 Wholesale Local Access – Area 2 Summary | For the year ended 31 March 2024

[79] [✂ REDACTED ✂]

[80] [✂ REDACTED ✂]

[81] [✂ REDACTED ✂]

is met (Openreach FTTP orders of all Openreach orders – FTTP + legacy). This mechanism does not create an incentive to divert volume from altnets. It is in consumers interests since it allows lower retail prices and more effective competition between ISPs[82].

2.124 Equinox 2 (and Equinox 1) can also indirectly benefit altnets. Equinox 1/2 has and will continue to have the effect of increasing ISPs commitment to and investment in retailing FTTP through, for instance, accelerating product developments that support FTTP (such as VoIP), increasing marketing focus on FTTP, stopping selling of legacy, applying the same pricing between FTTC and FTTP, as well as raising all customers' awareness and demand for FTTP. These measures will not only apply to and benefit Openreach but it will also benefit altnets since the same approach will apply similarly to altnets.

2.4.4 *Quality remedies*

2.125 Quality remedies are discussed in section 7.

2.4.5 *Copper retirement*

2.126 We comment here on both exchange closure/exit and copper retirement thresholds since they are closely related. Exchange closure/exit is discussed more fully in section 9.

2.127 BT's exchange closure programme is a major transition that will provide BT substantial cost savings in space and power – probably £100s millions per year. However, to achieve this will require significant costs to customers and CPs to migrate customers and circuits to new products delivered form different locations. The key points are:

- why BT should, at a minimum, cover all reasonable costs incurred by CPs due to BT's exchange closure programme
- that BT should only be allowed to withdraw legacy copper products and/or terminate a CP's licence to use a BT exchange where certain prescribed circumstances have been met including: offering to cover CPs' costs; provision of high-quality migration products supported by SLA/SLGs; and, meeting stringent FTTP and SoGEA coverage targets
- that Ofcom should set up the OMU and OTA to allow a high degree of transparency and provide close monitoring and management of the programme to ensure concerns can be quickly addressed
- Ofcom should facilitate dialogue between telecoms networks and groups representing certain affected users – such as Telecare

2.128 In WFTMR21 Ofcom outlined its approach to enabling copper retirement through copper retirement measures aimed at accelerating the migration way from legacy networks (e.g. MPF, FTTC).

- It allowed Openreach to stop-selling legacy products (step one) after FTTP coverage in an exchange reached 75%.

[82] If wholesale prices are closer to cost there will be less distortion between BT's vertically integrated ISP activities and external ISPs who purchase from Openreach

- Ofcom also highlighted the possibility of setting further 'enablers' such as allowing Openreach to raise the price of legacy products (step two) and withdrawing legacy products (step three) in areas where certain conditions are met.

2.129 We have two main comments on these steps.

2.130 First, we think introducing the intermediate step two (where Openreach prices can rise) might not be beneficial.

2.131 The underlying purpose for the copper retirement measures is to improve Openreach's FTTP investment case:

> *Our approach to copper retirement supports Openreach's full fibre investment case … limits the extent to which Openreach will have to operate both copper and full-fibre networks in parallel and increases Openreach's certainty that it will be able to migrate customers onto its new fibre network*[83]

2.132 The idea underlying the second step is that if wholesale prices increased for the affected customers then so would the retail prices which would encourage those customers to move off legacy services. However, this mechanism is unlikely to be effective:

- Ofcom rules on in-contract price rises will in many cases prevent these wholesale price increases being passed through to customers
- [✂ REDACTED ✂]
- Furthermore, any rise may be perceived by customers, particularly vulnerable customers, as an unreasonable financial 'punishment' and conceptualises the migration as matter of money.

2.133 Rather, a more effective message would be that customers need to move off a legacy service since it will be withdrawn in (say) 9 months (as happened in Salisbury). Thus we think Ofcom should consider whether the price rise stage should be 'skipped' and go straight to withdrawal stage.

2.134 Second, relates to step three (withdrawing legacy products) and is linked to our comments on exchange closure – see section 9. We explained why a licence to use an exchange should not be terminated until certain conditions are in place. Because withdrawing legacy products is a step that enables exchange closure the same conditions should apply. In particular:

- BT must offer to cover all CPs' reasonable and efficient costs
- There must be high-quality migration products that are supported by SLA/SLGs
- BT must meet stringent FTTP coverage targets

[83] WFTMR21 | Statement Mar 2021 | vol 3 §2.65

3 Leased line access (LLA) market

3.1 In this section we comment, in turn, on LLA product markets, geographic markets, SMP assessment and lastly, remedies – both price and other remedies. At the start we discuss why LLA rivals exert a far weaker competitive constraint than WLA rivals and how Ofcom should take this into account in its market analysis and remedies – in WFTMR21 Ofcom did not do this.

3.2 The key points:

- The geographic market definition, SMP assessment and remedies must reflect that a LLA rival will exert a much lower competitive constraint than a WLA rival. This reflects: limited ability to differentiate product (unlike WLA); absence of 'market transition' opportunity in LLA (as in WLA); LLA rivals face a significant cost disadvantage versus Openreach (not case in WLA); LLA rivals often lack credibility essential in LLA (much less important in WLA). In WFTMR21, Ofcom implicitly assumed a rival exerted the same constraint in LLA as WLA
- The Area 2 / Area 3 geographic market definition approach should be based on all LLA providers (whether or not they offer WLA) with material share/coverage who have network within 10m of leased line demand sites (not of residential premises)
- Unlike for FTTP there is limited benefit from LLA network investment. This is because Openreach already have a high quality LLA network and so rival investment cannot provide any quality benefit, and nor can it encourage Openreach to invest/upgrade its network. Thus whereas for FTTP they may have been some benefit from high WLA prices encouraging investment the same reason does not exist for LLA network
- Given that DFA has not been a successful remedy (<1% circuits) in Area 3, the cost-based charge control should be moved to Ethernet circuits to protect customers
- The charge control on Ethernet in Area 2 should be cost based since though there is some competition it is inadequate to constrain Openreach and there is no material customer benefit from encouraging more network investment

3.1 Weaker competitive impact from LLA rivals than WLA rivals

3.3 In WFTMR21 Ofcom adopted a 'one size fits all' approach to WLA and LLA market analysis (geographic market definition and SMP assessment) and to WLA and LLA remedies. For the most part[84], Ofcom defined the WLA and LLA geographic markets in the same way, had the same SMP finding and then imposed the same CPI price indexation remedies in both. This was implicitly based on the assumption that rivals have the same competitive impact in WLA and LLA. This was misplaced.

3.4 There are four well-understood reasons for why a rival who offers LLA services provides a far weaker competitive constraint than a rival that offers WLA.

3.5 First, in LLA, there is little opportunity to differentiate services and so rivals tend to offer similar LLA services with little product differentiation. In contrast, in the large parts of the

[84] The two deviations from the 'one size fits all' approach were that HNR and CLA were carved out from LLA Area 2 (20% of UK) and there was a cost-based remedy in LLA Area 3 (dark fibre access, DFA) though it had little effect

UK where Openreach does not have FTTP, a FTTP WLA rival can offer differentiated services with a significant quality benefit.

3.6 Second, for WLA there is a 'one-time' opportunity for rivals to build share as customers migrate from legacy (e.g. FTTC) products to FTTP since customers need to purchase 'anew'. For LLA, no such migration opportunity exists. Ofcom[85] recognised this: *The move to gigabit-capable networks offers a window of opportunity for other network operators to invest, as large volumes of customers will need to be migrated from Openreach's legacy network to a new full-fibre network, which Openreach has not yet deployed at scale*

3.7 Third, LLA rivals face significant cost and delay disadvantages versus Openreach (given how Ofcom defines a rival). In LLA the rival may have network a long distance from the business site and providing an LLA connection will require streetworks and wayleaves which is expensive and will cause delay[86]. This reflects that it is not viable in most case for a rival to build in advance to the curtilage of a customer's premise to provide LLA services[87]. Openreach though, already has a connection into around 90% of demand sites[88] and therefore the rival is at a significant competitive disadvantage for the majority of connections. [✂ REDACTED ✂][89].

3.8 In contrast a WLA rival can connect a WLA customer quickly and at low cost given it builds in advance close to the actual premise (i.e. the curtilage of a premise such as a Toby Box in the street) and no wayleaves are required. Openreach, if it is providing FTTP, faces broadly the same challenges.

3.9 Whilst PIA may reduce this disadvantage to some degree, even if LLA rivals are able to use PIA they will still face cost/time disadvantages[90]. Ofcom should provide information on the impact PIA has had.

3.10 Fourth, a rival offering WLA is disadvantaged little by their lack of track-record whereas for LLA a rival without track-record has difficulty building share. This reflects that for business-critical services, customers are understandably often risk-averse. [✂ REDACTED ✂].

3.11 The differences in competitive constraint between LLA and WLA rivals are very apparent from market share evidence. Ofcom recognised that market share is a good indicator of competitive constraint.

> *Market shares provide a useful first indication of competitive conditions in the market as the greater the number of competing networks that have managed to attain a material share of supply, the stronger is the indication that the intensity of competition is greater*[91]

[85] WFTMR21 | Statement Mar 2021 | vol 4 §1.20

[86] Even a leased line only rival who is considered present in the HNR/CLA may be 50m from a demand site

[87] This reflects that (a) the likely share for an LLA rival is low and therefore building a deep network is likely to result in significant wasted investment and (b) it is not always obvious which premises will have demand since it depends on the nature of businesses in them

[88] Openreach "on-net (duct connected)" connections are 81%-100% of all new connections. WFTMR21 Statement Mar 2021 | vol 2 | Table 8.3

[89] [✂ REDACTED ✂]

[90] For example have to build a physical connection into Openreach PIA network

[91] WFTMR21 | Statement Mar 2021 | vol 2 §8.15

3.12 The European Commission Guidelines[92] also reinforce the relevance of market share.

3.13 The lower competitive constraint that a (single) LLA rival has (versus a WLA rival) is well demonstrated by the overall market share that they achieve. An efficient rival in WLA can gain substantially more than the average rival in LLA[93] in a similar timeframe – perhaps 5-7 times more in a 5 year timeframe and 3-5 times more after 10 years:

- CFH in areas where it has operated for 4-5 years achieves a WLA share of 30% to 40% see §2.105 above) (and this will increase now that they have secured Sky as a wholesale customer)[94]
- A typical newer LLA rival in the HNR area (high network reach) achieves around 10% share after about 10 years[95]. This is also reflected that even in CLA where there are on average 5.1[96] rivals many who have been active for many years (e.g. COLT), Openreach share remains very high – 61%-70% of new connections.

3.14 [✂ REDACTED ✂][97].

3.15 A recent Enders Analysis report highlighted this difference between LLA and WLA[98]:

> *One area which has not developed as much as could have been hoped is leased lines, i.e. dedicated business ethernet connections. These have been broadly pulled into the same regulatory framework as broadband access (i.e. flat pricing in real terms across most of the country, although some limited areas, including central London, have no price control), on the assumption that all or most altnets would offer business connectivity services across their footprints and increasingly provide a competitive constraint. In the event, there has been quite limited increased competition in business connectivity, with most altnets highly consumer-focused and not even offering leased lines (notable exceptions being CityFibre and the business-focused altnets ITS and Vorboss). This is likely not due to a lack of capability, but difficulty with small providers developing the credibility and reputation of reliability required for the business market.*
>
> *… According to BT's latest* [RFS]*, Openreach is making a return of 22% on its regulated leased line products … with competition (or lack thereof) clearly having an effect here*

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[92] European Commission Guidelines on market analysis and the assessment of significant market power. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0507(01). §58 outlines that the "absolute and relative size of the undertaking" and "economies of scale" are important when assessing the strength of competitive constraint that an undertaking provides. §59 and §62 then explain why scale is important: the ease and sustainability of entry is a determinant of strength of competition; the ability of an entrant to achieve a sufficient scale to be profitable, or the "minimum cost-efficient scale", may be critical to determine whether entry is likely and sustainable

[93] [✂ REDACTED ✂].

[94] In these areas they will compete against BT (legacy and FTTP), in many areas Virgin (DOCSIS and FTTP) and in a few areas another altnet.

[95] In HNR there are 2.4 rivals on average who collectively have 45% market share (BT have mid point 51-60%). VMO2 who has operated for 20+ years is likely to be the largest with around 25% share (mid point 21%-30%). VMO2 will not be ubiquitous in HNR – estimate that they cover 60% (0.6). Thus there will be 1.8 remaining operators who collectively have a 20% share i.e. about 10% share each. These operators are younger than VMO2 but include operators who have been active for over 10 years e.g. COLT, euNetorks, Zayo, Vodafone. WFTMR21 | volume 4 | Table 8.3 and §8.241

[96] WFTMR21 | Statement Mar 2021 | vol 2 Table 8.3

[97] [✂ REDACTED ✂]

[98] Enders Analysis | TAR 2026: You can't always get what you want… | Page 8

3.16 Ofcom's approach in TAR26 must reflect this reality that LLA rivals impose a much weaker constraint on Openreach than WLA rivals. The key changes it needs to make are:

- Amend geographic market analysis by requiring a higher number of LLA rivals (than WLA rivals) for a PCS to be included. For example, for Area 2 which is titled 'actual/potential material and sustainable competition' define WLA Area 2 based on BT+1, LLA Area 2 based on BT+2 – with Area 3 including BT+1 and BT+0
- recognise that in LLA Openreach will have a higher degree of market power for a given number of rivals (and so SMP finding more likely)
- apply stronger remedies for LLA for a given number of rivals e.g. more alignment of prices to costs

3.17 We provide below our views on market definition, SMP assessment and remedies that reflect the impact of LLA rivals.

3.2 Product market definition

3.18 PXC consider that no WLA products including FTTP fall in the LLA market.

3.19 PXC have no other comments at this stage on product market definition.

3.3 Geographic market definition

3.20 In WFTMR21, Ofcom's approach to geographic market analysis was a 'hybrid' of two starkly different approaches.

3.21 First, Ofcom defined Area 2 and Area 3 using the same method as it used for WLA. It defined Area 2 as where VMO2 or CFH covered (or planned to cover) 50% of residential/business premises in a postcode sector (PCS). VMO2 and CFH were chosen since they were the only scale rivals that provided WLA and LLA products (i.e. MSN). Ofcom said[99]:

> *We expect Virgin Media and CityFibre to provide material and sustainable competition to BT in both the WLA and LL Access markets, and have therefore set the boundary for Area 2 in both product markets by reference to the expected presence of these networks.*

3.22 Second, within Area 2 Ofcom then 'carved out' two other areas where competition was greater – CLA (Central London Area) and HNR (High Network Reach). To do this Ofcom used a wholly different methodology. For example, HNR was defined as where two rivals to BT (i.e. BT+2) had an existing network flexibility point within 50m of 65% of leased line demand sites[100] in a PCS. Notably, the rivals included not just multi-service networks (VMO2 and CFH) but also leased line only operators[101]. Also, Ofcom did not consider planned build (of VMO2, CFH or other operators).

3.23 Ofcom did not justify why using two such different methods was appropriate. The proposed approach seemed designed to force consistency between the geographic markets for WLA

[99] WFTMR21 | Statement Mar 2021 | vol 2 §7.24

[100] These were large business sites, data centres and mobile cell sites

[101] The rivals were: CenturyLink, CityFibre, Colt, Eircom, EU Networks, Fibrespeed, GTT, MS3, SSE, Verizon, Virgin Media, Vodafone, WPD, and Zayo

and leased lines possibly so that Ofcom could align remedies across them. Such an approach is incompatible with the requirement for market analysis to be objective – which is a requirement where Ofcom does not have regulatory and policy discretion.

3.24 We consider that this hybrid methodology for defining the Area 2 versus Area 3 boundary is not appropriate for TAR26. In particular:

- It is not clear that CFH provides 'material and sustainable competition' as Ofcom assumed. [✂ REDACTED ✂][102] [103].
- Ofcom needs to take account of leased line only providers in defining the Area 2 versus Area 3 boundary. [✂ REDACTED ✂][104]
- In WFTMR21 the presence of an LLA rival in a post code sector was based on coverage of (mostly[105]) residential premises. What is relevant is proximity to leased line demand sites and using residential premises is a poor proxy since leased line demand sites are often in different places to residential premises (e.g. CBDs, business parks, retail parks). Thus, [✂ REDACTED ✂], might cover 60% of residential premises in a PCS but not be close to 10% of leased line demand sites since these are in different parts of cities/towns (e.g. out of town business parks, CBDs)

3.25 We see no benefit for having the same geographic market definition for WLA and LLA and Ofcom has not suggested there is any[106]. Notably BT Group too considered that the WLA and LLA markets should have different geographic market definitions[107]:

> *BT Group said that we must specifically assess the boundaries of the LL Access market (and not align our assessment with that for the WLA market), so as to include leased lines specific network rollout*

3.26 In TAR26, Ofcom needs to correct the flaws in the WFTMR21. We consider that the appropriate approach should:

- Only include operators that are likely to provide a material constraint (in a similar way that is considered for WLA – see §2.11). We think that Ofcom should only include:
  - Operators that currently offer LLA services. Operators that plan to offer LLA services in future are unlikely to provide material constraint due to lack of track-record and credibility as a trusted provider (see §3.10). Offering high quality LLA services is a non-trivial undertaking[108]

[102] [✂ REDACTED ✂]

[103] [✂ REDACTED ✂]

[104] [✂ REDACTED ✂]

[105] Residential account for 94% of all premises (29.8m of 31.8m). Source: Connected Nations | Supplementary report on Planned Network Deployments 2023 | §1.12

[106] In WFTMR21, TalkTalk raised a concern that "proposed approach seems designed to force consistency between the geographic markets for WLA and leased lines" (§7.145). Ofcom responded that they considered the Area 2 / Area 3 boundary should be the same for WLA and LLA (§7.149, - §7.156). They offered no suggestion that there was any positive benefit from consistency though they did suggest that even if the boundaries were different "*we would be likely to use the same boundary for the purposes of setting remedies*". WFTMR21 | Statement Mar 2021 | vol 2

[107] WFTMR21 | Statement Mar 2021 | vol 2 §7.144

[108] [✂ REDACTED ✂]

- Operators that already have wholesale agreements in place with major resellers (e.g. [✂ REDACTED ✂]). Without significant wholesale agreements LLA providers will have to self-retail which is difficult without scale[109]
- have a material market share in their coverage area (we would suggest a threshold of 5%) and a material coverage (15%). Operators that do not meet these criteria are unlikely to provide a material competitive constraint even if they have some wholesale agreements given they will lack the track-record and credibility[110]
- We do not consider that offering WLA services (i.e. being a multi-service operator, MSN) is a key factor in determining the likely constraint a rival provides in LLA. This reflects that there is limited synergy between the two (see §3.52) and [✂ REDACTED ✂][111]

- Be based on proximity of flexibility points to leased line demand sites (not coverage of residential premises)

3.27 Ofcom may consider whether to include future build – this may though in practice be very difficult since this would require detailed network maps for future build to be able to identify flexibility points

3.28 The geographic market analysis uses a figure known as the 'buffer distance' which is used to assess whether a rival is close enough to demand locations to act as a constraint. This is relevant since Openreach already has a connection to the site in 90% of cases (see footnote 88). Ofcom used a buffer distance of 50m. We and others have commented that the 50m figure is too high given the cost and delay for the rival will mean they cannot act as a competitive constraint. Ofcom said itself: "*While the costs of digging depend on distance, costs can still be material for relatively short distances*"[112].

3.29 Ofcom has not provided a robust justification for its use of 50m.

- In the WFTMR21 Consultation Ofcom said that it does not consider that the 50m buffer distance is actually the distance which operators are generally willing to dig from a flexibility point to reach customers' premises[113]. Rather, Ofcom said that its decision to use a 50m buffer distance largely reflects errors in its geospatial analysis

[109] The exception to this test is VMO2 who do not provide LLA services in the wholesale market but have a significant enough share to be a material constraint (even though the constraint is indirect)

[110] [✂ REDACTED ✂]

[111] [✂ REDACTED ✂]

[112] WFTMR21 | Statement Mar 2021 | vol 2 §8.295. Whilst this comment was made in reference to IEC services it is equally true of LLA services

[113] WFTMR21 Consultation Jan 2020 | V2 Footnote 243: "*Due to data limitations, we could not accurately measure the distances between the location of networks and customer sites. We did not have reliable information on the extent to which operators had existing fibre or duct connections into specific business sites for most of the UK. Furthermore, we had to approximate where the fibre entry point for a business sites was located and we did not always know the exact location of customer sites, which introduced a degree of error. Taking these factors into account, we considered that we should count rival networks presence for operators with network within a 'buffer distance' of 50 metres of the geographic centroid of post code where the business is located. We thought that this buffer distance would be a reasonable indicator of the number of rival operators' networks that were much closer than 50m to the actual location of businesses. This is because we considered that - due to measurement errors – the distances measured by our model will overstate the actual distances between networks and business sites. As such, the 50m buffer distance in practice captures networks with existing connections or which need very short network extensions*."

which it said systematically overstated the actual distance between the flexibility point and the premises[114]. This ignores errors which understate the actual distance in some cases[115]. Also, Ofcom didn't justify why 50m is sensible figure to correct for these errors.

- In the WFTMR21 Statement Ofcom took a different approach saying "*Given our overarching objectives and trade-offs, we believe that using a buffer distance of 50m remains the right judgment*". Ofcom did not explain why its objectives and trade-offs meant that using a 50m figure was justified

3.30 If Ofcom does persist with using a 50m buffer distance, then it is incumbent on Ofcom to ensure that its SMP assessment and remedies reflect this i.e. it will be counting rivals as 'present' who do not in fact materially constrain Openreach.

3.31 We consider a network coverage threshold of 65% would be reasonable, reflecting the need for rivals to impose a sufficient competitive constraint on Openreach to meaningfully alter its competitive behaviour.

3.32 [✂ REDACTED ✂].

3.4 SMP assessment

3.33 It is not possible at this stage to comment on possible SMP findings absent evidence regarding the competitive conditions in each market. Here we comment on certain aspects of the approach in WFTMR21 and the overall approach that Ofcom should adopt in its SMP assessment in TAR26.

3.34 In WFTMR21 in the CLA (Central London Area) Ofcom found that Openreach did not have SMP in the CLA. We consider that this finding was not robust:

- Openreach's share of new connections is between 51% and 70%[116] but probably in the high 50s[117]. This is well above the level where there is a presumption of dominance[118]. Ofcom should consider whether the high market share may imply that Ofcom has counted rivals that are not material constraints
- Some LLA rivals such as VMO2 and Colt are vertically integrated and not active in the wholesale market. Therefore, the constraint they provide in the (wholesale) LLA market is indirect and weaker than a direct constraint. As a result, Openreach's market share understates its strength in the LLA market

[114] These errors are due to the flaws in the data on which the model is based, particularly flaws around knowing the precise locations of business premises and the location at which communications providers can access those premises.

[115] Comment of Ciara Kalmus, Day 3: "*I think there's a point where you have to draw the line somewhere. I would not say the sources of error cancel each other out because to say the sources of error cancel each other out would be to imply the 50-metre distance in the model is an actual dig distance*"

[116] WFTMR21 | Statement Mar 2021 | vol 2 §8.260

[117] The 51-60% figure is for 2017-2019. For each year the figures were: 2017: 51-60%, 2018 – 61-70%, 2019: 51-60%. WFTMR21 | Statement Mar 2021 | Annex 5 Tables 5.15, 5.16, 5.17

[118] ECJ's judgment in case C-62/86, *AKZO* [1991] ECR I-3359, §60

- Though Ofcom points to on average over five networks being 'present' at each demand site[119] this is based on the assumption that if a rival network is 50m from the site it is 'present' which as we describe above is unfounded.
- The modest discounts in CLA are not probably not reflective of competitive pressure but rather the materially lower costs in areas with more concentrated demand

3.35 Of course the TAR26 SMP assessment in CLA will depend on the relevant evidence. However, we urge Ofcom to take a critical view of whether Openreach genuinely has no SMP in CLA – including assessing the returns it has achieved (Openreach profitability in non-SMP markets from FY22-FY24 has been well above WACC but the breakdown for LLA CLA is not available). Ofcom must publish information about Openreach returns since, alongside market share, this is the most informative evidence regarding whether Openreach has significant market power.

3.36 Similarly, Ofcom must take an evidenced based approach to whether Openreach has SMP in HNR where, in WFTMR21, suggested the SMP finding was 'finely balanced'.

3.37 It will be important to understand the impact of PIA and whether Openreach' share of new connections has been declining[120].

3.38 The SMP assessment (and remedies) must reflect that some of constraint is indirect (e.g. VMO2).

3.5 Remedies

3.39 In this section we first discuss the overall approach to remedies and why in TAR26 Ofcom needs to diverge from its one size fits all approach that it adopted in WFTMR21 i.e. same CPI+0% charge control in Area 2 and Area 3 in both WLA and LLA. We then provide our views on price and other remedies. Quality remedies are discussed in section 7.

3.5.1 *Overall approach to remedies*

3.40 Rather than the one size fits all remedies that was adopted across WLA and LLA in WFTMR21, in TAR26 Ofcom must adapt LLA remedies to reflect three key facts:

- The much weaker competitive constraint that a LLA rival provides
- limited consumer benefit from LLA network investment
- trivial impact from LLA prices on FTTP network investment

3.41 We discuss each of these below

[119] WFTMR21 | Statement Mar 2021 | vol 2 §8.261 "*over five competing networks are present at demand sites in the CLA, 94% of sites have access to two or more competing networks and 60% have access to five or more*"

[120] This must be on a like-for-like basis. It would be inappropriate to compare the CLA over time since its definition may change.

LLA rivals provide weak constraint

3.42 As we described above, a LLA rival provides much less competitive constraint on LLA services than a rival offering WLA on WLA services. This reflects four well-understood dynamics:

- Inability to differentiate product (unlike in WLA)
- There is no 'market transition' opportunity in LLA (as there is in WLA)
- LLA providers have significant cost disadvantage versus Openreach (which not case in WLA)
- LLA rivals often lack track record and credibility that is essential in LLA (track record/credibility is much less important in WLA)

limited consumer benefit from LLA network investment

3.43 Ofcom must also reflect in the LLA remedies the limited benefit from additional LLA network investment. We describe why this is the case below.

3.44 In WLA, Ofcom's remedies (such as high legacy price regulation) were driven in large part by a desire to encourage widespread FTTP build by rivals/altnets which would encourage Openreach FTTP investment: "*In Area 2, our objective is to promote competition and investment in gigabit-capable networks, by Openreach and other operators*" and "… [CPI+0% indexation] *is the only option that is effective in achieving this objective*" [121]. Though as we discuss above in practice high prices probably had no material impact on FTTP build.

3.45 Ofcom's objective reflected that FTTP was considered superior to legacy networks (copper/FTTC) since it provided significantly higher bandwidth, better reliability and future-proofing (i.e. higher quality).

3.46 However, this quality benefit does not exist for LLA networks since Openreach already have a high quality LLA nationwide network. This means:

- there is no significant quality improvement/benefit for consumers that a rival network investment can bring – a rival will provide the same technology as is already available nationwide
- there is no benefit for consumers from encouraging Openreach to invest/upgrade its network since Openreach already the most advanced technology

3.47 We also note that Ofcom's objective is to promote investment in gigabit-capable networks. Leased lines only networks are not classified as gigabit-capable networks. Therefore, it cannot be Ofcom's objective to promote investment in leased line only networks.

3.48 It is essential that in TAR26, Ofcom reflect these two significant differences (no quality benefit from additional competition; much less competition benefit from additional rivals) in the remedies that it imposes.

[121] WFTMR21 | Statement Mar 2021 | vol 4 §1.83

Trivial impact from LLA prices on FTTP network investment

3.49 In WFTMR21, Ofcom suggested that high LLA prices would encourage FTTP network investment (i.e. multi-service networks offering broadband to residential and business customers and leased lines). For example:

> *We set out in Volume 4 Section 1 evidence that shows that leased lines play an important role in the business case for the deployment of* [FTTP] *networks providing both broadband and leased lines services*[122]
>
> *We consider that the evidence set out in Volume 4 Section 1 is sufficient to conclude that leased lines play an important role in the business case for the deployment of networks providing both broadband and leased lines services*[123]

3.50 In practice, the impact of LLA prices on FTTP investment returns will be small. We explain why below.

3.51 The limited impact is most obviously well evidenced by the fact that many LLA providers do not provide WLA services and *vice-versa*.

- If there was a material impact on FTTP investment returns by offering LLA services one would expect most new FTTP providers to be providing LLA services and doing so successfully. But most altnets do not offer LLA services: the exception is [✂ REDACTED ✂].
- If the impact was significant one would also expect providers offering leased lines to also offer WLA services – however, most do not. New leased line networks such as ITS [✂ REDACTED ✂] and Vorboss do not offer widespread WLA services[124].
- Similarly, we understand that some rivals who provide WLA and LLA only provide LLA in parts of the their WLA network footprint.

3.52 Thus market behaviour implies that there is limited impact. This reflects a number of underlying factors:

- Given the LLA market share a new network can gain is much less than WLA the revenue (and so margin) from LLA services will be small. See §3.13 above
- Whilst there are some shared costs (or economies of scope) between offering LLA and WLA services they are limited
  - Much of the 'last mile' passive network required for business LLA customers is in different localities to that required for WLA customers (mostly residential) – for instance: CBDs, business parks, retail parks. The potential for shared network is limited further since much of an LLA network is not pre-built but is built in response to demand.
  - Even when LLA and WLA customers need network in the same area the potential for passive network sharing is limited by the different types of passive assets used – deep ducting for LLA versus (often) lower cost shallow microtrenching and poles for WLA. This means that if an WLA operator wanted

[122] WFTMR Statement 18 March 2021 Annexes §A12.143

[123] WFTMR Statement 18 March 2021 Annexes §A12.152

[124] [✂ REDACTED ✂]

to use their passive network for LLA they would need to incur additional cost to use deep ducting

- The active and electronics are different "*since the network architecture required to support leased lines and broadband access services are different*"[125]
- Much of the system and product development is different reflecting the different products and the higher reliability that is required for LLA
- There is limited operational shared cost. As Ofcom said: "*the operational requirements for the provision of leased lines and broadband wholesale services are different. For example, different operational field forces may be needed to provide mass market broadband as opposed to leased lines, where there are fewer customers but provisioning and fault repair may be more complex*" [126]
- The commercial activities are different with different product, sales and marketing activities
- In our WFTMR21 response we developed a model that estimated that the FTTP cost saving from sharing with leased line network is less than 1%[127]

3.53 In WFTMR21 Ofcom provided a response to TalkTalk's argument and evidence that high leased line prices would have minimal impact on FTTP investment. However, despite having its own FTTP model which had the capability to evaluate some of these impacts Ofcom chose instead to make evidence-free claims such as "*For the reasons set out in Volume 4 Section 1, we remain of the view that there is a significant and positive relationship between higher wholesale [*LLA*] prices and network build.*"[128]. On inspection, there was no hard evidence in these unspecific cross-references (just more 'suggestions', 'may bes' and 'CFH told us'). Further, Ofcom refused to engage properly with the evidence that TalkTalk provided. It is not acceptable that a substantial cost to consumers (£1bn if CPI+0% is continued) is premised on suggestions and unevidenced theories – Ofcom should either provide robust evidence of the impact or accept the existing evidence that the impact is small.

3.5.2 *Product and price remedies*

3.54 Below we describe our view on the product and price remedies in light of the points above. We first explain what has happened with DFA since it was imposed in Area 3 and then outline the suggested product and price remedies in Area 3, Area 2 and then HNR.

Area 3 and DFA

3.55 In WFTMR21, dark fibre access (DFA) was made available for the first time though only in Area 3. However, there has been very little adoption of DFA – according to the FY24 RFS[129] only 494 of 90,000 LLA Area 3 circuits were DFA (about 0.5%). [✂ REDACTED ✂].

[125] WFTMR21 | Consultation Jan 2020 | vol 2 §6.82

[126] WFTMR21 | Consultation Jan 2020 | vol 2 §6.82

[127] TalkTalk Response to WFTMR Consultation | May 2020 | §7.138

[128] WFTMR Statement | March 2021 | Annexes §A12.173

[129] BT Regulatory Financial Statements FY24 | 8.2.1 Leased Lines Access – Area 3 Summary | For the year ended 31 March 2024

3.56 [✂ REDACTED ✂].

3.57 [✂ REDACTED ✂].

3.58 [✂ REDACTED ✂][130]

3.59 [✂ REDACTED ✂][131]

3.60 [✂ REDACTED ✂][132].

3.61 [✂ REDACTED ✂]. Therefore, in order to meet Ofcom's stated objectives in Area 3 (preventing Openreach setting excessive prices where there is no material/sustainable competition[133]) Ofcom must impose a cost-based charge control on active (Ethernet and OSA) services. There should be starting charge adjustments to align price to cost immediately.

3.62 If Ofcom do decide to persist in Area 3 with DFA and high Ethernet prices then Ofcom must extend DFA availability to Area 2 (and DFA must be cost based). This will increase the potential volume on DFA by over three times and make it close to nationally available which will significantly improve the business case by making the fixed cost and complexity more worthwhile. If Ofcom does not extend it, it is likely that DFA will become a 'ghost' product and consumers will not be protected from excessive prices.

Area 2

3.63 We consider that a cost-based charge control on active/Ethernet service should be extended beyond Area 3. In Area 2, there is on average 0.92 rivals present (under Ofcom's definition). This (less than one) rival provides limited constraint as evidenced by Openreach holding a very high market share (61-70%)[134]. It might be that this rival provides some 'material and sustainable competition' but it is insufficient to constrain Openreach. As Ofcom said in WFTMR21 (albeit in relation to WLA): "*Two players is not sufficient to deliver effective competition*".[135]

3.64 Given that there is no material benefit from high LLA prices in encouraging leased line or FTTP network investment the proportionate remedy in Area 2 is to set cost-based prices on Ethernet.

3.65 In part the remedies will need to reflect the actual geographic market definitions adopted. For instance, if LLA Area 2 is based on BT+2 rather than BT+1 then weaker remedies could be appropriate (but Area 3 would be larger). The basic point is that where there is only one rival to Openreach a cost-based charge control is necessary.

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[130] SLA – service level agreement. For instance, an SLA for repair sets a repair time after which compensation is payable

[131] WFTMR21 | Statement Mar 2021 | vol 2 Table 8.3

[132] [✂ REDACTED ✂]

[133] WFTMR21 | Statement Mar 2021 | vol 3 §6.108-§6.112

[134] WFTMR21 | Statement Mar 2021 | vol 2 Table 8.3

[135] WFTMR21 | Consultation Jan 2020 | vol 4 §8.54

HNR

3.66 In HNR, we consider that Ofcom should impose a CPI+0% safeguard cap on prices.

Other

3.67 We have three other comments regarding price remedies.

3.68 First, it is important to not lose sight of the negative impact that prices above cost has on downstream competition as well as on consumers: and in particular how BT is able to use high Openreach prices to margin squeeze downstream competitors. [✂ REDACTED ✂].

3.69 Second, the Ethernet balancing charge[136] should be updated given the increasing proportion of Cat 1 circuits which don't involve excess construction.

3.70 Third, [✂ REDACTED ✂].

3.5.3 *Quality remedies*

3.71 Our views on quality remedies are discussed in Section 7.

4 Inter-exchange connectivity (IEC) market

4.1 Below we highlight a number of issues that Ofcom must address in its IEC market analysis and remedies

- Need for market share data so that market analysis and remedies can be robust
- Changing its use of an inaccurate proxy for degree of competition on routes
- Incorrect inclusion of rivals who provide little constraint
- Approach to product/price remedies
- Very high Openreach profitability

4.1 Need for market share data

4.2 With hindsight, Ofcom's IEC market analysis and remedies in WFTMR21 lacked critical evidence. In particular, it appears the whole analysis was completed absent any data on market share – none was mentioned in the Statement. This is despite market share being probably the most important single measure of competitive conditions and has the advantage that it is relatively straightforward to objectively measure (unlike many other factors such as entry barriers). Ofcom said: "*Market shares provide a useful first indication of competitive conditions in the market …*"[137].

[136] The balancing charge is an amount added to all EAD connections that covers the average cost of excess construction charges (ECCs) up to £2,800

[137] WFTMR21 | Statement Mar 2021 | vol 2 § 8.15

4.3 Ofcom's approach is inconsistent with the Tameside duty that decision-makers must "*take reasonable steps to acquaint [*themselves*] with the relevant information*"[138]. This is a legal failure than can and should be addressed in TAR26.

4.4 It may be that there are potential inaccuracies in market share data, particularly at a granular level. However, given Ofcom's information gathering powers it must be possible to gather data that is accurate enough to usefully inform the market analysis and remedies.

4.2 Inaccurate proxy for competition on routes

4.5 Another clear weakness in WFTMR21 was how it defined geographic markets and conducted its SMP assessment. Ofcom have a rather convoluted and confused methodology.

4.6 Evidently competition acts on a route by route basis between exchanges. As Ofcom noted: "*competition conditions vary on a route-by-route basis*"[139]. Thus, the objective should be to assess the level of competition on each route and then group routes into geographic markets which have similar levels of competition.

4.7 Ofcom claim "*it is not practical to assess competition conditions for each CI Inter-exchange connectivity circuit [*i.e. route*]. Therefore, we define each BT exchange as a distinct geographic market*" [140]. Ofcom explains[141] that at the SMP assessment stage it assesses SMP on routes with different levels of competition (BT+2, BT+1, BT only)

> *our approach to SMP leads us to defining which routes are, and are not, competitive based on the rules we apply to each end of the route*

4.8 It appears that the level of competition on each route was assumed to equal the lower of the number of rivals at each end exchange e.g. if BT+2 at one end and BT+1 at other end then there was one competitor on a route.

4.9 Using this indirect proxy clearly has the potential for systematically overestimating the competition on each route since if the rivals at each end are different there will be fewer rival on the route (and it is the route that matters). The level of error will be larger with a high number of PCOs (as Ofcom has assumed).

4.10 However, Ofcom said in its Statement:

> *We remain of the view that it would be onerous for both us and for telecoms providers. It is also unclear that it would necessarily provide better results than those achieved through a methodology based on PCO presence, as it would not take into account the extent to which different routes can be substitutes*[142]

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[138] *Secretary of State for Education and Science v Tameside Metropolitan Borough Council [1977] AC 1014.* Similarly, Ofcom's approach could be construed as a "failure to make proper enquiries" and/or "failure to take account of a relevant consideration"

[139] BCMR 2019 | June 2019 | vol 3 §7.76. Ofcom referred to BCMR19 when explaining its approach in WFTMR21

[140] BCMR 2019 | June 2019 | vol 3 §7.76.

[141] BCMR 2019 | June 2019 | footnote 571

[142] WFTMR21 | Statement Mar 2021 | vol 2 §8.298

4.11 Neither of these points is, in our view, good reason for continuing with its inaccurate proxy method:

- Ofcom have not particularised why it would be onerous – TalkTalk has previously provided an explanation why in practice it would not require substantially more effort than the current exchange by exchange analysis but Ofcom did not engage with this
- Ofcom have not detailed how the substitution between routes might work. However, it seems implausible since it would require substituting a single circuit between two exchanges (A and B) with two circuits interconnected at an intermediate exchange (A to C and C to B)[143]. The cost of the indirect routing would be more than double the single hop and so could not be an effective substitute. We request that, at a minimum, Ofcom properly explain this 'substitution' argument

4.12 Ofcom should adopt a route-by-route analysis.

4.13 If Ofcom do persist with this inaccurate proxy method then it is incumbent on Ofcom to ensure that its SMP assessment and remedies reflect that the actual level of competition is less than the label (e.g. between BT+2 exchanges then may be no rivals)

4.3 Inclusion of rivals that provide minimal or no constraint

4.14 Another weakness in Ofcom's approach in WFTMR21 was its approach to selecting which rivals to include in its market analysis (it referred to these as PCOs – Principal Core Operator). For example:

- Ofcom said that "*Each PCO has the capability to supply competitive backhaul services and act as a constraint on Openreach*" which Ofcom said also reflected whether the rival had their own infrastructure and a substantial footprint[144]. Ofcom included no assessment of whether they were active in offering IEC services, whether they were considered by potential customers or whether they had a material market share (which is an important indicator of competitive constraint)
- Ofcom had no specified (or transparent) thresholds for including a rival. Ofcom said: "*We take a judgment on whether a PCO meets the above criteria in the round, based on our assessment of the evidence on PCO activities, including the specific exchanges where they are present and their actual wholesale activity*" [145].

4.15 On this basis Ofcom included: CenturyLink, CFH, Colt, eir, SSE, Virgin Media, Vodafone and Zayo.

4.16 [✂ REDACTED ✂][146].

4.17 [✂ REDACTED ✂].

4.18 [✂ REDACTED ✂].

[143] It might be possible in edge cases e.g. where A and B is beyond the distance range for an Ethernet circuit

[144] WFTMR21 | Statement Mar 2021 | vol 2 §8.290

[145] WFTMR21 | Statement Mar 2021 | vol 2 §8.292

[146] [✂ REDACTED ✂]

4.4 Remedies

4.19 In WFTMR21 Ofcom's approach was:

4.20 To/from BT+2 exchanges: no SMP

4.21 To/from BT+1 exchanges: active services (EAD, OSA) with prices indexed at CPI+0%. The underlying reasoning was that where there was actual or potential material and sustainable competition and prices above cost were suitable

4.22 To/from BT only exchanges: cost-based DFX except exchange where PCO within 100m[147]; active services (EAD, OSA) prices indexed at CPI+0%. This reflected that:

- a cost-based remedy was necessary preventing Openreach setting excessive prices where there is no material/sustainable competition[148]
- the most effective product remedy was dark fibre since it enables more innovation and competition (in the active layer), promotes downstream competition and allows greater efficiency in choice of bandwidth and use of customer equipment[149]. DFX has been extensively adopted (c70% of all external circuits where it is available) and has proven effective

4.23 We agree adapting the type of regulation to differing competitive conditions. However, Ofcom has substantially overestimated the routes where Openreach is subject to material and sustainable competition. For instance:

- It has included operators as PCOs who whilst technically able to provide a IEC connection [✂ REDACTED ✂]
- A PCO (even a credible one) is unlikely to extend their network 100m to provide an IEC circuit. The costs involved are unlikely to be viable
- Some routes that are classified as, for instance, BT+1 will have no viable provider since the PCO at each end is different (as discussed at §4.9)
- Even if there is one provider who is a credible competitor to Openreach on the route, this is insufficient competition to constrain Openreach's dominance. As Ofcom said in WFTMR21 (albeit in relation to WLA): "*Two players is not sufficient to deliver effective competition*"[150]

4.24 Furthermore, Ofcom's approach seems to be premised on the concept that high IEC prices will deliver a material benefit to consumers through additional network investment. However, this is flawed:

- As with LLA given Openreach has a national IEC network there is no material quality benefit from an additional network
- IEC prices can have no material impact on FTTP investment for several reasons but most obviously since the majority of altnets cannot (due to their low coverage and dispersed footprints) offer IEC circuits. Whilst nexfibre do (through VMO2) provide

[147] WFTMR21 | Statement Mar 2021 | vol 3 Table 6.1

[148] WFTMR21 | Statement Mar 2021 | vol 3 §6.187-§6.190

[149] WFTMR21 | Statement Mar 2021 | vol 3 §6.21, §6.22

[150] WFTMR21 | Consultation Jan 2020 | vol 4 §8.54

IEC circuits the level of investment after 2026 is likely to be minimal. In any case, the impact on FTTP investment returns from high IEC prices will be trivial.

4.25 Therefore we consider that where there is zero or one competitor on a route cost-based cost based DFX should be made available. Active products (EAD, OSA) should be made available everywhere with prices above cost including on routes where there are two competitors (if SMP is found).

4.5 Addressing high profitability

4.26 In TAR26 Ofcom must address the high level of profit in IEC (based on an initial analysis of the published RFS)

- in BT only and BT+1 ROCE is over 60% and increasing year on year
- in the last 3 years (FY22-FY24) prices have been more than 50% above cost
- we estimate the total excess profit in 2021-26 will be about £0.5bn (and could exceed that) which is more than two times that forecast by Ofcom in WFTMR21 (£0.2bn)
- On DFX services, prices are 20% above cost ROCE is over 400% (sic)[151]

4.27 [✂ REDACTED ✂]

4.28 [✂ REDACTED ✂] We estimate that if CPI+0% indexation is continued it will cost consumers about £0.7bn.

4.6 Other issues

4.29 In TAR26 Ofcom should also consider a number of other issues.

- Ofcom must factor in the impact of BT's exchange closure programme. In particular this will truncate the period over which rival IEC networks can earn a margin, create uncertainty and so reduce further rival investment in IEC networks
- Ofcom must be wary of assuming that rivals who are close to (but not in) the exchange are able to offer a constraint. This is because of the significant costs of connecting into an exchange – for instance, an external Cablelink costs £2,075
- Ofcom should consider the need for resilience on backhaul routes which tends to reduce appeal of rivals

[151] BT RFS FY24 | Table 9.1.1

5 Ancillary services

5.1 In this section we provide a number of comments on the regulation of ancillary services (which include certain migrations, connections, tie cables, Cablelink, accommodation and power). Our comments cover ancillary services in the WLA, LLA and IEC markets as well as shared ancillary services. The full list of ancillary charges is laid out in WFTMR21 Statement Mar 2021 | vol 4 table 5.1-5.6.

5.2 The prices of shared ancillary services are substantially above cost. In the period FY22-FY24 revenues were about 20% above cost resulting in a ROCE of 16% - more than twice the WACC.

5.3 In WFTMR21 many ancillary services were regulated using a CPI+0% charge control that mirrored the main charge control.

5.4 Power charges have been regulated using a 'basis of charges' obligation that effectively requires Openreach to set prices to recover costs. PXC and other operators have in the past had concerns that Openreach's charges are not reflective of their costs – for instance, when spot market prices fall, Openreach prices do not respond. Though transparency and confidence have improved we would encourage Ofcom to assess whether additional regulation could help further.

5.5 There were many other essential ancillary services which were not covered under the charge controls or basis of charges obligation. We refer to these as non-charge controlled ancillary services ("**NAS**"). For these NAS, a 'fair and reasonable' requirement applied. Ofcom explained this as:

> *our general position is that we would interpret this fair and reasonable requirement to mean that BT should not set prices that would equate to a margin squeeze under ex post competition law for existing and new forms of network access. While we would assess any dispute on the relevant facts, our starting point for evaluating cost and margins on individual services in this context would be to allow a LRIC retail margin on each service, assessed by reference to an equally efficient operator (EEO) standard. For the avoidance of doubt, under our interpretation of this fair and reasonable requirement, BT is also required to cover its retail costs across a broader portfolio of broadband products, such that BT's rivals can supply a comparable range of products.*

5.6 [✂ REDACTED ✂]:

> *The regulation is forward-looking ('ex ante') in nature, rather than relying on retrospective 'ex post' competition law to address concerns arising from identified conduct*[152]

5.7 [✂ REDACTED ✂][153].

In April 2023, Openreach announced that it would increase the FTTP late cancellation charge from £115 to £185. They initially argued that the key reason for the substantial increase was to incentivise CPs to reduce late cancellations. When CPs explained why this could not be the

[152] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | §2.2

[153] Many of these points were documented in a letter to Brian Potterill and David Clarkson (from Andrew Heaney) dated 4 July 2023

case, Openreach accepted this but then argued that the increase was due to high costs of late cancellations. CPs provided information why the increased costs resulting from late cancellation were far less than £185 (and £115) but Openreach refused to engage and insisted they would impose the increase whatever (which they did). [✂ REDACTED ✂]

5.8 This shows that Openreach is willing to act abusively and [✂ REDACTED ✂].

5.9 [✂ REDACTED ✂][154]

5.10 [✂ REDACTED ✂]

5.11 We consider that a stronger (but proportionate) approach needs to be imposed. This could include

- Imposing charge controls that mirror the main charge control on some NAS (so they are no longer non-charge controlled)
- Imposing safeguard cap on all NAS (e.g. a cap (say) 3% above the main cap[155]
- Imposing an obligation that the price should be cost reflective. This could be similar to the basis of charges or cost orientation obligation that has been applied previously that required (something like): charges must be reasonably derived from the costs of provision based on a forward looking long run incremental costs and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

6 Non-SMP services

6.1 There were a number of markets where in WFTMR21 Openreach was found to not have SMP. The key ones are: WFAEL (which includes WLR); LLA-CLA; and, IEC-BT+2. They are material accounting in aggregate for about 22% of Openreach revenue in FY24.

6.2 The financial performance of these (in aggregate) is provided in the Regulatory Financial Statements and is summarised in the table below.

Openreach non-SMP market performance, unadjusted (£m)

	FY22	FY23	FY24
unadjusted			
revenue	1,790	1,582	1,356
opex+depr	1,093	848	995
return	697	734	361
MCE	2,921	2,724	2,359
excess return	469	522	177
% ROCE	24%	27%	15%

[154] Using, say, the cost attribution methodology used for BT's RFS

[155] So, for instance, if the main cap was CPI-5% and the safeguard was 3% above the main cap the safeguard cap would be CPI-2%

6.3 These high returns could imply a number of things

- Contrary to Ofcom's no SMP finding in WFTMR21, competition is not strong enough to constrain Openreach's prices to competitive levels
- The CPI+0% indexation on MPF prices has allowed WLR prices to rise above the competitive level
- Openreach is diverting costs to SMP products (from non-SMP) and so the excess profits in non-SMP products are overstated and SMP product profits are understated

6.4 Ofcom should investigate the reason for these high returns and take appropriate action.

7 Quality remedies

7.1 This section provides PXC's view on remedies related to quality. We first discuss general principles and then our proposals for quality remedies for the main products.

7.1 General principles

7.2 Companies have an incentive to increase profits by raising prices and/or reducing costs. In competitive markets this behaviour is curtailed by rivals who ensure that prices and costs are at set at 'competitive levels' (i.e. that which would ensue in a competitive market) . However, companies with market power (such as Openreach) can exploit their dominance to raise prices above (and/or reduce costs below) the competitive level. One way to reduce costs below the competitive level is to deteriorate quality. Low quality (even where EOI exists) can also benefit BT's downstream retail businesses: there is sometimes a perception that the incumbent retail's activity is better quality and 'safer'[156]; and, deteriorating quality can discourage switching which protects the incumbent's customer base from competition.

7.3 The incentive to reduce quality is increased when prices are capped (which is the case for many Openreach products).

7.4 These theoretical behaviours have been played out in practice. Openreach when unconstrained by regulation increases prices to achieve excess profits. They have also, at times, deteriorated quality to unacceptably low levels to reduce costs and earn excess profits. There has in the past, for instance, been service crises on MPF/FTTC as well as Ethernet where quality has fallen to unacceptable levels and consumers have suffered.

7.5 It is essential that to protect consumers' interests regulation prevents both of these behaviours – both excess prices and low quality. Both are necessary.

7.6 Ofcom recognised this in WFTMR21: "*We … consider that regulation is needed to deliver the QoS customers require and ensure that the network access remedies facilitate effective downstream competition*" [157].

7.7 Over the last 15 years, quality related regulation has developed and Ofcom now imposes a package of measures aimed at ensuring good quality.

7.8 Minimum service levels (MSLs). These set quality levels for certain provisioning and fault repair activities and if Openreach fall below these levels they may face sanctions such as fines. For instance, for FTTC 85% of faults need to be repaired within the 2 day SLA

7.9 Service level agreements and service level guarantees (SLAs and SLGs). These require Openreach to pay compensation to a CP if provisioning or fault repair quality on a particular

[156] Where equivalence of inputs (EOI) does not apply there is a strong incentive to deteriorate the quality of the wholesale products that external CPs use. Even where EOI does apply deteriorating quality for internal and external CPs can benefit BT's own retail business since customer perception is sometimes that the old/established incumbent is safer than a newer provider

[157] WFTMR21 | Statement Mar 2021 | vol 5 §2.6

circuit falls below a certain level. On FTTC repairs, compensation of £6.09 per day late[158] is paid for repairs over the 2 day SLA.

7.10 Transparency. Openreach is obliged to measure and publish a range of quality KPIs that go beyond the metrics where MSLs apply. For instance on Openreach must publish KPIs on faults rates including overall faults, early life faults and dead on arrivals – fault rates are not subject to MSLs.

7.11 Non-discrimination. This obligation requires that Openreach does not discriminate between internal CPs (or customers) and external CPs. In practice, for most products this is delivered through an equivalence of input (EOI) obligation whereby internal CPs must use the same wholesale product (and associated processes) that are provided to external CPs.

7.12 Each of these measures is necessary and provides a different mechanism to deliver good quality.

- the MSLs (given the large potential fine and reputational harm) provide a strong incentive to meet a particular quality level. However, once this level is met the MSL provides no incentive to improve above that level. Ofcom said in WFTMR21 that MSLs are "*intended to be a lower bound rather than a target for Openreach to achieve*" i.e. they are set below the optimal or competitive level.
- the SLA/SLGs provide an incentive to improve quality above the MSL level and, if the SLGs reflect the full cost to CPs/customers of poor quality they can, in theory, ensure an optimal level of quality. In effect the SLGs can internalise for Openreach the externality of poor quality. SLGs also have the benefit that CPs and customers are compensated for poor quality (which does not happen with MSLs)
- Transparency obligations ensure that CPs and Ofcom are aware of a wide range of quality metrics (much broader than for MSLs or SLA/SLGs). This allows CPs/Ofcom to identify emerging issues, put pressure on Openreach for improvement in quality in a broader range of areas and, if necessary, impose regulatory obligations to improve quality[159]
- Absent EOI obligations, Openreach has strong incentives to deteriorate quality only on products provided to external customers in order to protect BT's downstream businesses. EOI mostly removes this incentive.

7.13 One important feature of the obligations is that there is a material and genuine financial cost for Openreach from delivering poor quality. Given Openreach's profit maximising objective, this financial impact is critical to the obligations having an effect.

7.14 The need for and impact of MSLs is evident from Openreach's behaviour

- since MSLs have been introduced the harmful service crises seen before have not reoccurred
- Openreach has provided sufficient resources to ensure that quality is met where an MSL exists

[158] The amount is equal to the monthly rental charge which for FTTC 40/10 is £73.12 per year

[159] See WFTMR21 | Statement Mar 2021 | vol 5 §3.112

- Prior to there being any SLA (or MSL) on MPF/WLR provisioning, Openreach diverted resources to MPF/WLR repair where there was an MSL resulting in poor provisioning lead time
- during industrial action in 2022 FTTP (which has no MSLs) provision quality materially deteriorated whereas MPF and FTTC (which have MSLs) fared relatively better.

7.15 These behaviours imply that MSLs strongly incentivise Openreach's behaviour.

7.16 It is important to recognise that given Openreach's market power CPs cannot negotiate fair quality obligations with Openreach any more than they can negotiate fair price levels. Therefore, Ofcom's intervention on quality is as critical as its intervention on price.

7.17 In general, one would expect that quality obligations would strengthen over time. This reflects two particular dynamics:

- First, consumer demand for high quality increases as the importance of broadband grows
- Second, costs of delivering quality improvements will tend to decrease due to efficiency improvements from learning and use of new technology such as remote diagnostics, AI and automation

7.18 Quality obligations could be strengthened in a number of ways

- Adding further metrics subject to MSLs or SLA/SLGs
- Amending SLAs e.g. repair within 4 hours rather than 5 hours
- Amending MSL level e.g. 95% within SLA rather than 90%
- Increasing SLG payments

7.2 Specific suggestions

7.19 Below we comment on the specific quality remedies for the major products and then other common issues such as SLGs and MBORCs.

7.2.1 *WLA - MPF and FTTC*

7.20 For MPF and FTTC given Openreach's continuing market power quality remedies are essential. The shift to FTTH where Openreach faces more competition could result in Openreach shifting operational resources away from legacy products and deteriorating quality.

7.21 There is a case for increasing the MSL levels to reflect:

- The increasing importance of broadband
- innovations reducing the cost of delivering high quality
- that quality increases will not result in higher consumer prices.

7.22 This emphasises the need for robust quality remedies, and particularly MSLs, to continue. At a minimum the current package of quality remedies should continue.

7.2.2 *WLA - FTTP*

7.23 In WFTMR21 Ofcom chose not to impose MSLs on FTTP since it considered[160] the product too immature to be able to set appropriate MSLs. We consider that FTTP MSLs must now be imposed:

- FTTP already accounts for the majority of connections and about a quarter of installed circuits. By the end of the market review period it will be the dominant WLA product
- FTTP is now sufficiently well developed to be able to set appropriate MSLs (i.e. metric definition and level)
- We are facing unacceptable quality problems in certain areas. For instance, there are a material portion (over 10%) of provisions where the original provision date is missed (due to a need for 'infrastructure' build) and it can be many weeks for installation to occur. Further, during this period there is minimal communication or commitment from Openreach regarding the delivery date. It is also worth noting that, due to the method Openreach have chosen to measure provisions, these late provisions are counted as 'successful'
- [✂ REDACTED ✂]
- MSLs are critical to the success of Ofcom's and Government strategy for investment in and uptake of FTTP since higher quality will lead to higher uptake and make more FTTP investment viable. Notably, Openreach quality is perceived by many customers are being representative of the quality of all FTTP (including that provided by altnets as well as Openreach)

7.24 Ofcom could in theory set MSLs part way through the market review period by giving itself (as it did in WFTMR21) Direction-making powers. It could do this, for instance, if quality fell to an unacceptably low level. However, this is significantly inferior to setting MSLs in advance. Setting MSLs after quality falls would result in an extended period of time (probably more than a year at best) before the problem was identified, new regulation was developed, consulted upon and imposed. It is only MSLs imposed *ex ante* that provide strong incentives to Openreach and properly protect consumers.

7.25 Whilst it may be possible in the longer term for competition to be sufficiently strong in certain geographic area to ensure that Openreach provides a competitive level of quality, competition today (even in areas where there are two material rivals e.g. CityFibre and Virgin) is inadequate. For instance, if competition for quality was effective the different rivals would be developing new MSLs, SLA and SLGs. However, instead altnets tend to be following what Openreach does and are 'learning' about what is needed.

7.26 It is notable that given prices are set by Equinox and are not linked to costs so if MSLs resulted in higher quality this would not result in higher wholesale prices or higher retail prices for consumers.

[160] WFTMR21 | Statement Mar 2021 | vol 5 §3.104

7.27 [✂ REDACTED ✂]

7.28 We recognise that the FTTP product is not fully mature and there will be some continuing changes in products and processes. Imposing MSLs can (at least in theory) hinder product/process innovation since in certain idiosyncratic cases where though an innovation is positive for customers it makes it marginally more difficult for Openreach to reach the MSL level. Openreach have in the past argued that this is a reason for not imposing MSLs. This is not the correct response. It is essential that MSLs are introduced as soon as possible and the theoretical risk that certain innovations might be hindered would be to 'throw out the baby with the bathwater'. Instead, if Ofcom is concerned that innovations might be hindered then it should provide the option to revise MSLs part way through this market review period and/or set a fixed review point in, say, 2028.

7.29 We think that the FTTP MSL level should be set above the current quality level (certainly by the end of the market review period). This is for a number of reasons

- The current level is unlikely to reflect the competitive level of quality given that there is no FTTP competition in some areas and in other areas competition is weak
- As the product matures and exploits new innovations, the cost of delivering higher quality reduces which will increase the competitive level of quality
- Increases in quality will not result in any additional cost to consumers

7.30 We do not consider that, in this market review period, it would be appropriate to have different MSLs in different geographic areas. This is for a number of reasons:

- From an economic perspective, the minimum service level should be (close to) the level that would pertain in a competitive market. This level would reflect the cost of and willingness to pay (WTP) for different service levels. There is no reason to think that cost or WTP would be materially different between Area 2 and Area 3. Due to the more dispersed nature of Area 3 delivering higher quality may be slightly more expensive but this is not likely to be that material and anyway robustly determining the difference in cost and so the difference in minimum service level would be difficult.
- Another 'economic' reason for differing service levels would be if competition (in Area 2) were likely to deliver adequate constraint to encourage Openreach to deliver a competitive level of quality (whereas in Area 3 there is no material competition). [✂ REDACTED ✂]
- Operationally it is complex for ISPs (and indirectly PXC) to handle different quality levels in terms of the messages we provide to customers and when autocomp might apply. It may also be difficult for Openreach to manage differing service levels since their field forces (and some individual engineers) will cover customers in Area 2 and Area 3.
- Lastly, it is probably, at this point, an unnecessary complication that will absorb Ofcom time.

7.2.3 *LLA and IEC*

7.31 In LLA/IEC existing MSLs must be maintained.

7.32 As we discuss in sections 3 and 4, LLA/IEC rivals have limited competitive impact so competition will not prevent Openreach abusing its market position by deteriorating quality.

7.33 There have been very harmful service crises on Ethernet in the past as Openreach has under-resourced Ethernet delivery (for instance, by switching capacity to other products). Any relaxation or removal of MSLs risks a damaging effect on business and on economic growth (which is relevant given Ofcom's growth duty) particularly since recovering from an Ethernet service crisis is often protracted (given the product complexity) and results in reputational damage across the industry.

7.34 In 2023, Openreach requested that the Ethernet/dark fibre quality MSL metric for repair was changed from OTR (on time repair) to MTTR (mean time to repair). We agreed with the change to an MTTR metric. However, the specific levels proposed by Openreach would result in a substantial reduction in quality. Openreach proposed an MTTR of 5:00 hours whereas the MTTR consistent with the current standard (94% OTR) was about 2:30[161]. In other words, Openreach proposed a doubling of the time to repair faults compared to what they are currently required to deliver. Ofcom decided not to amend the MSL. If a similar amendment is considered in the TAR then Ofcom should consider the points made above as well as the greater detail included in TalkTalk's response provided in August 2023[162].

7.2.4 *SLGs*

7.35 Another aspect that needs amending is the quantum of SLGs. The quantum of some SLGs have remained static since they were set in 2008. For instance: the late provision SLG has remained at £8.

7.36 Ofcom has said that the SLG amount should be "*an estimate of the average loss suffered by a CP in the event of a service failure*"[163]. Over time the cost to consumers of service failures will have increased as broadband has become more and more essential to daily life. This increased cost to consumers will have translated into higher costs to CPs since higher customer dissatisfaction will result in higher churn, reputational damage, goodwill costs and customer service costs. Therefore, the cost to CPs of service failures will have increased over time. Over the period since 2008 average prices have risen by about 50%[164].

7.37 We consider that SLGs which have remained static/frozen should be reviewed. These include:

- Provision delays FTTC (£8); and the same applies for FTTP
- Missed appointment FTTC (£56); and the same applies for FTTP
- DOA FTTC (£12); and the same applies for FTTP
- Repeat faults (£10); and the same applies for FTTP

[161] This (2:31) was derived by (1) deriving the MTTR 1:51 consistent with the current 94% OTR by assuming a (negative) linear relationship between OTR and MTTR based on recent data provided by Ofcom and (2) assuming the MTTR for all faults (excluding customer faults and excluding MBOR faults) was 36% longer than the MTTR for all faults based on the recent data provided by Ofcom

[162] https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-2-6-weeks/264328---quality-of-service-for-ethernet-and-dark-fibre/responses/talktalk/?v=202690

[163] Service level guarantees: incentivising performance | March 2008 | §2.8

[164] Using CPI inflation as a proxy

7.2.5 *MBORC definition*

7.38 We consider that industrial action should not be included within the MBORC (matters beyond our reasonable control) definition. Openreach clearly has *some* control over industrial action and allowing Openreach to avoid paying SLGs (one of the consequences of declaring MBORC) weakens its incentives to efficiently avoid or resolve industrial action. We note that during the extended BT-wide industrial action in 2022 an MBORC was not declared on Ethernet fault repair. This implies that Openreach can maintain Ethernet repair standards even during extended periods of industrial action and therefore it is not necessary to include industrial action within the MBORC definition.

7.39 [✂ REDACTED ✂].

7.2.6 *SLG negotiation process*

7.40 The current WFTMR21 regulation includes a process for negotiating new SLA/SLGs. Recently, Openreach has effectively ignored this process in the negotiation of a cancelled order SLG. In particular, it failed to engage and only provided its reasoning (for rejection) one week before the end of the six month negotiation window. It has not complied with its obligations[165] to:

- *to approach negotiation of these matters with professional courtesy and an openness and willingness to consider the issues raised and any evidence presented*
- *to be responsive to requests for negotiation and dialogue in a timely manner*

7.41 Ofcom should consider whether the current rules are effective in curtailing Openreach's market power.

7.2.7 *'Shrinkflation'*

7.42 As we explained above Openreach can exploit its market power to increase its profits by either raising prices above or reducing costs below the competitive level. Deteriorating quality is one way in which it can and has reduced costs. Another way Openreach can and has reduced costs to exploit its market power is by reducing the features of a product (i.e. 'shrinkflation'). There are three recent/upcoming examples of this:

- Removing 'Job Control' function from wholesale ethernet services. This function managed the provisioning process and facilitated timely resolution of faults. CPs now need to deliver activities previously carried out by Openreach. This effectively shifts costs from Openreach to CPs
- Reduced payments for Automatic Compensation Scheme. ISPs are committed to increase auto-comp end-user payments with CPI, but Openreach has not done the same for its contribution. Retailers now fund a significantly higher share of the AC-related costs, despite the costs being driven by issues primarily caused by Openreach
- Reducing scope of EAD2 (due for launch in 2025/26) versus existing EAD services. Whereas under EAD Openreach provide/install the NTU and associated SFPs, under

[165] Ofcom BCMR | Annex 22 §§22.15-22.18. This is referred to in in WFTMR21 as how Ofcom expects Openreach and CPs to behave

EAD2 Openreach will not provide this and it will instead be provided by ISPs. As explained in our comments regarding baskets (see section 8) this provides an additional opportunity to game the basket structure and gain excess profit (possibly about £200m)

7.43 Ofcom should consider how it can address this exploitative behaviour. There are a number of options including barring such changes and adjusting price controls to ensure that the change does not result in excess profit.

8 Baskets

8.1 We have concerns about baskets and how Openreach can exploit the flexibility they provide. [✂ REDACTED ✂] [166] [167]

9 Exchange exit

9.1 BT plans to close about 4,500 of its 5,500 exchanges over next 10-15 years. The key motivation for BT for this network reconfiguration is cost saving – it will significantly reduce BT's £1.2bn annual expenditure on building space and power. It will also deliver environmental benefits.

9.2 This is a major undertaking not just for BT itself but also for those CPs that have existing presence in the closing exchanges – such as PXC, Sky and Vodafone[168]. CPs will have to undertake costly and disruptive work to exit these exchanges (and so allow BT to close the exchange) which will have negative impacts on customers. In particular:

- Migrating all customers in closing exchanges from legacy copper products such as MPF and FTTC to products such as FTTP and SoGEA served from enduring exchanges – this will inevitably include 'force' migrating a material number of reticent customers[169]
- Shifting the A-end of Ethernet circuits from the closing exchange to enduring exchanges ('reparenting')
- Ceasing exchange based Openreach products (such as space, power, tie cables, Cablelinks) and backhaul and removing CPs' own network equipment in closing exchanges
- Expanding space, power, Cablelinks, backhaul and equipment in enduring exchanges

9.3 The significant costs and potential disruption make this network reconfiguration different to other major programmes (such as 21CN) where users of the BT network are less affected and CP costs lower.

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[166] For example, Charge control review for LLU and WLR services | 4 March 2012 | §4.142, §4.170

[167] For instance, in Jan 2023 Openreach increased EAD-LA100 rental prices from £1,452 to £1,488

[168] BT will itself have to carry out the same activities in respect of its own broadband and Ethernet customers

[169] [✂ REDACTED ✂]

9.4 The costs CPs incur are a combination of:

- charges imposed by Openreach – such as FTTP migration/connection, A-end shifts, LIJ removal, tie cable cease, Cablelink connection
- costs incurred by CPs themselves ('own' costs) such as engineering, project management, customer management, churn, new exchange equipment, replacement CPE, margin loss (in some cases) and working capital

9.5 We estimate for PXC alone the cost is likely to be [✂ REDACTED ✂] and will also come with significant risks in terms of customer disruption and dissatisfaction. A critical issue in this is how much of these CP costs, BT will cover. If BT does not cover CPs' costs then many will be passed onto customers and end-user prices will increase.

9.6 Consumers' interests will be very affected by this network configuration process and so this should be a natural concern for Ofcom. This was reflected in Ofcom's recent TAR document

> *We will also need to consider the retirement of Openreach's copper network and subsequent closure of exchanges. We remain supportive of Openreach retiring its old copper network. Our regulatory approach to this will take into account how to achieve the best outcomes for consumers, both in relation to migrating quickly and smoothly to the better services available on gigabit-capable networks, and to ensuring the promotion of competition.* [170]

9.7 In June 2023 Openreach began a consultation about how the exchange exit process will happen. The formal consultation was concluded by Openreach in March 2024 with a formal response to industry. However, BT's planned approach will not meet Ofcom's objectives:

- The impact of exchange closure for many customers will be disruption with little or no improvement in service. For instance: Ethernet customers will suffer disruption yet receive the same service at the same price; some broadband customers will be forced to change product and suffer disruption even though they are happy with their current product. In reality, exchange closure itself will not result in any service benefit to customers
- BT are only offering to cover a small portion of the costs CPs will incur. This will be harmful to competition and detrimental to customers as many costs will be passed through. Under BT's proposals, this network reconfiguration has the perverse result that whilst BT's costs reduce the prices customers pay rise !
- The products and processes necessary for these migrations to be efficient and robust are absent or inadequate

9.8 BT has also not recognised the particular challenges where the value chain is fragmented and there are two or more CPs between Openreach and the customer. For instance, PXC sell to resellers [✂ REDACTED ✂].

9.9 [✂ REDACTED ✂].

9.10 [✂ REDACTED ✂].

9.11 This submission explains our reasoning as to why BT should cover all or the majority of costs that CPs incur, the inadequacy of the proposed products and processes, and the remedies Ofcom should consider to meet its objectives and ensure consumers are properly protected.

[170] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024. §3.10

Much reflects analysis by Frontier Economics for PXC, Sky and Vodafone provided to Ofcom in June 2024[171]. In particular we believe the TAR should

- Set out the principle that BT should, at a minimum, cover all reasonable costs incurred by CPs due to BT's exchange closure programme
- Only allow BT to withdraw legacy copper products and/or terminate a CP's licence to use a BT exchange where a prescribed circumstances have been met including: offering to cover CPs' costs; provision of high-quality migration products supported by SLA/SLGs; meeting stringent FTTP and SoGEA coverage targets
- Set up the OMU and OTA to allow a high degree of transparency and provide close monitoring and management of the programme to ensure concerns can be quickly addressed

9.12 The remainder of this submission covers what approach should be taken to BT covering CPs' transition costs (section 9.1), the need for robust processes (section 9.2) and suggested remedies (section 9.3).

9.1 Approach to BT covering CP transition costs

9.13 Exchange exit and closure is a network reconfiguration programme which has significant impacts on the costs incurred by all market players. At the moment BT's approach is broadly that it should retain the cost savings itself and CPs should bear the majority of CPs' transition costs (both Openreach charges and own costs). We consider below whether this approach is reasonable.

9.14 It is instructive to consider what happens in a competitive market where the operator which is reconfiguring their network competes with other providers. [✂ REDACTED ✂].

9.15 BT's move to 21CN some 15 years ago was a major network reconfiguration that required CPs to reconfigure their interconnection with BT. In this case, BT was required to provide compensation to CPs for the costs they incurred[172].

9.16 However, in the case of exchange exit, BT are not following the approach taken in competitive markets or 21CN – instead they are obliging CPs to exit and effectively forcing CPs to bear the majority of costs themselves. These costs will get passed through to customers. This results in the perverse outcome whereby BT's costs reduce but the prices customers pay rise !

9.17 There are a number of economic considerations that support the case that BT should cover CPs' own costs as well as Openreach charges (i.e. it should waive Openreach charges). By covering these costs some of the BT cost saving will effectively be shared with CPs and be passed through to consumers. We discuss the key economic considerations below.

[171] Frontier Economics | Frontier Economics | Regulatory Assessment of BT's Exchange Closure Programme | 11 June 2024

[172] Undertakings given to Ofcom by BT Pursuant to the Enterprise Act 2002 §11.18. https://www.ofcom.org.uk/siteassets/resources/documents/phones-telecoms-and-internet/information-for-industry/bt/consolidated_undertakings24.pdf

9.1.1 *Allocative efficiency*

9.18 Allocative efficiency refers to the concept that prices are set in a way to optimally allocate resources. Generally, allocative efficiency is maximised when prices reflect suppliers' incremental costs. This would imply that any incremental cost savings should be passed through to CPs who would then pass through these to consumers (less costs CPs incur).

9.19 A principle implicit in allocative efficiency is cost causality – the concept that a cost should be incurred by the party (or product) that causes it. If a product's price does not include certain of the costs that it causes then there may be excessively high consumption (and *vice versa*). In this case, since BT is causing the network reconfiguration (as well as benefitting from it) then BT should bear the cost (i.e. its own cost plus CPs' costs). Adhering to this principle ensures, amongst other things, that companies make efficient (and cost minimising decisions) – see section 9.1.2 below.

9.1.2 *Productive efficiency*

9.20 Productive efficiency refers to the minimisation of overall costs. In the case of exchange closure this means that the BT should design its exchange exit/closure approach to minimise the overall cost of the reconfiguration to all parties: BT, CPs and customers.

9.21 The most robust way to achieve this productive efficiency is for BT to incur not just its own costs but also all the costs of CPs and customers. By BT internalising the costs that it causes, BT will have strong incentives to design an approach that minimises overall cost.

9.22 It is worth noting that BT has to date made no or little attempt to minimise overall costs since it has made no effort to understand these costs. That BT has selected the 103 exchanges on the basis of greatest benefit to itself (where largest rental costs savings) is a further demonstration the lack of consideration of overall industry costs.

9.23 One key way to improve efficiency and reduce overall costs is to identify enduring sites early and provide incentives to encourage new Ethernet circuits to be connected to these enduring exchanges rather than sites which will be closed (thereby avoiding the cost and disruption of reparenting). This requires both identification of enduring exchanges well in advance and adequate commercial incentives to encourage CPs to connect circuits to enduring exchanges rather than exchanges that will close. BT has not yet identified enduring exchange and though it has offered some limited incentives they are inadequate.

9.1.3 *Competition in downstream markets*

9.24 The services that consumers purchase are provided by a range of CPs downstream of Openreach. The price, quality and innovation of these services depends on effective competition between downstream CPs and in particular that competition is not distorted. Exchange closure creates two risks to effective competition.

9.25 The first risk to competition is that BT's downstream businesses face different costs to other CPs. There are two differences in the costs that BT faces:

- They face the underlying cost of the Openreach products and not the charge
- They can internalise the cost savings of BT Group

9.26 The 'best' approach to address this risk (aside of structural separation) would be for BT to pass through all the BT cost savings to CPs thereby ensuring that BT divisions and external CPs competed on the same cost basis. Due to competition between CPs in downstream markets these savings would be passed through to consumers.

9.27 The second risk to competition is discrimination whereby BT (or Openreach) treats its internal divisions better than other CPs. This could manifest in a number of ways, for instance: product and processes designed to meet BT divisions' needs; better quality products for BT divisions; or preferential access to limited resources. Whilst equivalence of input obligations and legal separation potentially addresses some of these risks we consider that in this situation there is a higher risk of discrimination:

- the one-off nature of this reconfiguration
- the need for BT to adapt its closure programme for each CP
- the fact that BT and Openreach need to cooperate on exchange closure given that BT Networks (not Openreach) operates and controls the exchange buildings – which is reflected in the absence of EOI for accommodation and power products[173]

9.28 This implies the need for a high degree of transparency and close monitoring (by the OMU) to ensure that there is no discrimination.

9.1.4 *FTTP investment and competition*

9.29 A key objective for Ofcom in this market review is "*incentivising investment and promoting network competition*"[174] and particularly encouraging FTTP investment by altnets and Openreach.

9.30 There are two possible impacts on FTTP investment returns and viability that might result from BT covering CPs' transition costs

- first, if all the cost savings from exchange closure had been included in the BT FTTP business case (and so increasing FTTP returns) then if BT were required to cover CPs' costs this might reduce returns and FTTP investment
- second, if BT were required to cover CPs' costs then might this affect FTTP uptake (for Openreach and altnets)

9.31 We think the impact of the cost saving sharing approach on FTTP investment returns, uptake and investment is immaterial for a number of reasons:

- Exchange closure does not rely on or depend on roll-out of FTTP since it can (and will) happen where FTTP is not available. Provided SoGEA is available (which it is almost nationally) exchange closure can occur without any FTTP coverage. Therefore, FTTP roll-out is not a necessary condition for exchange closure and so it is incorrect to include the cost saving from exchange closure in the FTTP investment case

[173] "*Exemptions to the EOI condition … accommodation services other than in relation to the allocation of space and power*" Promoting competition and investment in fibre networks |Wholesale Fixed Telecoms Market Review 2021-26 | Volume 3: Non-pricing remedies. Table 3.2

[174] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024. Section 1

- Firm plans for closure of just 103 have only recently been developed. This implies the quantum and timing of the cost saving was unknown. Thus most BT FTTP investment decisions have been made prior to any robust understanding of the cost saving from exchange closure. This lack of understanding of cost savings is even more the case for altnet FTTP plans[175]
- Any impact from the BT cost saving on the FTTP investment viability is significantly reduced by the 10-20 year gap[176] between FTTP investment and exchange closure. Assuming, an 8% discount rate (which is what Ofcom assumes[177]) the impact of a £100m exchange closure benefit is about £29m at the time of FTTP investment
- BT does not appear to be facing difficulties raising funds for FTTP investment reflecting the significant 'excess' profits on Openreach products and the low capex and high uptake it is achieving. Therefore, sharing the cost savings is unlikely to materially diminish the ability to fund FTTP
- If BT shared some or all of the cost savings with CPs it is unlikely to have a material negative impact on the rate of migration to FTTH networks as the bulk of the exchange closure programme is likely to happen after most customers will have migrated to FTTH networks. Furthermore, any impact on FTTP uptake will be 10-15 years after FTTP investment so the impact on the return will be reduced.

9.32 Therefore, even if BT shared all of the cost savings with CPs it is unlikely to have any material impact on FTTP investment (or alter returns that were expected when FTTP investments were made).

9.33 BT's network configuration will also strand the assets of providers of backhaul network to closing exchanges. This competitive impact needs to be considered.

9.1.5 *Summary of economic considerations*

9.34 In competitive markets, the cost saving benefits of network reconfigurations are shared with customers to cover the costs they incur. Economic efficiency will be improved if BT covered, at a minimum, all CP costs resulting from exchange closure. The economic impacts are summarised in the table below.

[175] Altnets may have, in theory, made their FTTP investment decisions reflecting BT's costs to provide FTTP (which would affect their price) which could reflect exchange closure cost savings

[176] Most FTTP build is in the period 2020 to 2027 and exchange closure will mainly happen from 2029 to 2040.

[177] Promoting competition and investment in fibre networks |Wholesale Fixed Telecoms Market Review 2021-26 | Volume 3: Annexes. A15.83. Ofcom suggested two pre-tax WACCs 7.8% for Openreach and 8.3% for altnets

Economic impact of sharing cost savings

Consideration	Optimal cost saving sharing approach
Allocative efficiency	BT cover all CP costs
Productive efficiency	BT cover all CP costs
Competition in downstream markets	BT share all net cost savings (i.e. more than all CP costs)[178]
FTTP investment and competition	Unlikely any material impact

9.35 Sharing costs in this way will also likely ensure a smoother implementation as CPs will have commercial incentives to migrate. Under the current proposals where exchange exit is a net cost to CPs, they have minimal incentive to move quickly and efficiently.

9.36 In theory, costs savings from exchange closure could be passed through to CPs and customers through lower future FTTP/SoGEA charges. However, this is inferior to cost savings being passed on upfront (to match CPs' costs which are being incurred upfront):

- Currently though FTTC prices are regulated neither FTTC nor FTTP prices are linked to, or close to, costs[179] which means cost savings will not be passed through.
- In the future, Openreach is likely to continue to hold SMP and therefore competitive pressure will not ensure cost savings are passed through. If the price regulation approach is not changed then cost savings will not be passed through. Even if price regulation is changed, there can be no certainty today that cost savings will be passed through
- Even in competitive areas (where no SMP), given Openreach's strong market position cost savings may not be passed through
- The prospect of lower prices in future would not provide incentives for CPs to ensure a smooth implementation since they could not / would not rely on the promise of 'jam tomorrow' in making their decisions

9.37 Therefore, cost savings (sufficient to cover CPs' costs) should be passed through at the point of migration when CPs' costs are incurred.

9.38 Lastly, it is worth considering Ofcom's approach to other technology migrations. Ofcom has adopted an approach whereby regulated prices are set on the basis of a hypothetical ongoing network or HON so that customers are no worse off than if the technology transition had not happened. A HON-type approach here would require BT to set migration charges such that CPs overall had no higher costs than if the exchange closure programme did not happen. In effect, this would mean that BT would cover the costs CPs incur.

[178] The programme should only go ahead if the total industry net cost savings are positive. This implies that the BT net cost savings must be greater that all CP costs.

[179] This is for two reasons, only FTTC prices are regulated (not FTTP prices) and the price of FTTC is above FTTC costs

9.2 Need for robust processes

9.39 Migration from legacy to FTTP/SoGEA and reparenting/A-end shifts both involve disruption and risks to service continuity. It is therefore critical that robust processes are in place prior to any exchange exits occurring. This was reflected in the Ofcom's 2023 Openreach Monitoring Report which said:

> *Although the focus of Openreach's consultation is on the 100 exchanges that it plans to close by 2030, we expect Openreach to also consider whether its* ***products, processes and prices are fit for purpose for CPs' network reconfigurations*** *across the broader estate of exchanges in the coming years. More broadly Openreach should consider the needs of its customers who are also network competitors*[180]

9.40 We see a need for several improvements to products and processes.

9.41 First, protections for vulnerable customers – for instance those who depend on services (such as analogue care alarms) that are not supported on FTTP/SoGEA. Protections might include managed migrations and rapid restoration processes in case of faults.

9.42 Second, a robust/reliable process with adequate resourcing and SLA/SLGs for reparenting Ethernet circuits. Currently, there is no defined or automated/industrialised process for this and CPs are forced to use Openreach's bespoke and manual 'VAS' service:

- it is expensive - around £2,000 per circuit which equates to over 12 months rental for most circuits[181]
- it is a highly manual process meaning that it is inefficient (costly) and unreliable/faulty
- there is limited capacity and the current process does not appear to be scalable (we estimate probably around 100,000 Ethernet circuits will need to be migrated)
- any process needs to provide for out of hours migrations (currently, there is no option for out of hours working between 12pm and 6am which is essential for some circuits) as well as the ability to coordinate multiple sites and jeopardy management
- there are no SLAs or SLGs

9.43 The need is for highly robust/reliable processes (with high quality and minimal downtime) is particularly important for CNI customers given the vital services they provide. Similarly, processes must be suitable for complex situations such as where multiple sites need coordinating.

9.44 Third, there also appears to be no adequate plan for customers who are unable to get an FTTP or SOGEA connection in exchanges that Openreach closes[182]. Openreach have suggested that in some cases that these customers might be served by rearranged copper circuits provided from different exchanges (which is likely to result in service deterioration

[180] Openreach monitoring report | Ensuring an independent Openreach committed to fair competition | 27 June 2023. §3.42

[181] [✂ REDACTED ✂]. Rental price for EAD-LA 100 and EAD-LA 1000 from Apr 24 is £1,668

[182] See §36 Openreach Industry consultation - How we propose to exit the 103 priority exchanges by 2030

due to longer copper circuits) and in other cases Openreach indicates that it will not provide any connection[183].

9.45 Lastly, a process needs to be developed for freeing space in enduring exchanges by supporting CPs to rationalise their space use. At the moment, in some enduring exchanges there may be too little space available to accommodate the additional equipment that will be required to support services from exchanges that are closing.

9.3 Remedies

9.46 In light of BT's proposals and behaviour, we think that Ofcom should consider a range of remedies to ensure that an efficient approach to cost sharing is adopted and processes are fit for purpose. These could be implemented through a combination of SMP Conditions, appropriate direction giving powers, guidelines in the TAR Statement or other instruments:

- Make clear Ofcom's principles and expectations in respect of the exchange closure process – for example: BT cover all of CP's costs; customers no worse off; benefits shared; minimal disruption. This approach should apply across all exchanges and in the case where CPs exit exchanges in advance of BT's planned timing
- Remove or amend the ability of BT to terminate a CP's licence to use exchange space[184] [✂ REDACTED ✂]. BT should only be able to force an exit provided:
  - If offers fair and reasonable terms that cover CPs costs, include robust processes supported by SLAs and SLGs
  - There is adequate sufficient space and power in enduring exchanges
  - Operational readiness targets are met in respect of products and processes to protect customers affected by exchange exit
  - Allow reasonable timelines for CPs to exit and not be contingent on the behaviour of other CPs
  - Meet stringent FTTP and SoGEA coverage targets
- When deciding on the 'third copper retirement threshold' which allows BT to withdraw legacy services such as MPF and FTTC (where FTTP is available) require that BT meets a similar set of criteria as for terminating a licence (see above). A low threshold would effectively allow BT to force CPs off legacy products and out of an exchange
- Provide guidelines that will allow for a balanced negotiation of terms – for example, guidelines were provided in WFTMR21 for SLG negotiations (though they have not worked well and Openreach have disregarded them in some cases)
- Encourage BT to publish a long-term closure plan that will allow CPs to efficiently plan their migration
- Encourage BT to support rationalisation of space in exchanges to free space in closing exchanges

[183] Openreach says "[*alternative solutions might include] … the CP providing a non-Openreach product*"

[184] For example, Access Locate Schedule 4 Section 7 §7.3 BT may terminate a Licence at a BT Building on not less than twelve months' notice where BT is vacating the BT Building ("Vacating Site").

- Ensure that the OMU is suitably resourced to observe and monitor progress and ensure non-discrimination (which may require new KPIs)
- Empower the OTA to oversee the development of products and processes
- Ensure that Ofcom has sufficient powers to adjust regulation during the upcoming market review period (2026-31) given the significant developments that may happen during that period
- Consider whether there is a need for a coordinated programme to raise awareness amongst end-users and providers of affected services (e.g. telecare) – akin to that for digital TV switchover. This could speed migration reducing cost and disruption

10 Approach to identify best regulation for consumers

10.1 In developing its proposals and then finalising regulation Ofcom must follow robust practice in how it chooses regulation that best serves consumers' interests.

10.2 One framework to identify the best regulation is to develop a two or more options and then determine which best meets consumer interests by assessing the costs and benefits of each (sometimes referred to as a 'cost benefit analysis' or CBA).

10.3 In WFTMR21 Ofcom did not adopt this framework. For example, in the WFTMR21 Consultation in Jan 2020 Ofcom rejected options not on the basis of an assessment of costs and benefits but because they did not meet the objective of increasing FTTP network investment. For example WFTMR21 Consultation vol 4 §1.41-1-43: Ofcom said it rejected cost-based prices since it "*would reduce the incentive to invest in competing networks*".

10.4 This approach was repeated in WFTMR21 Statement where Ofcom concluded[185]:

> *We conclude above that pricing continuity* [i.e. CPI+0%] *meets our objective in Area 2. We have also considered three other potential approaches (bringing prices closer to the cost of copper services, adaptive regulation and a copper wedge) and concluded that price continuity is the only approach that would be effective in meeting our objective*
>
> *Some stakeholders argued that we should conduct a detailed cost benefit analysis (CBA),where we compare the price continuity approach with other approaches. We do not believe that it is necessary to conduct such an assessment. For the reasons set out below and in Volume 4, Section 7, we are satisfied that pricing continuity meets our statutory duties and the legal tests set out in the Act. In particular, in reaching our decision we considered alternative approaches and concluded these would not be effective in meeting our objective*

10.5 Thus Ofcom's CPI+0% option was selected because the other options did not meet the objective. This is a flawed approach:

- It takes no account at all of the costs of the option – thus under its approach even if the costs of its chosen option was ten times the potential benefits Ofcom would be justified in selecting it

[185] WFTMR21 | Statement Mar 2021 | vol 4 §1.90

- Under Ofcom's approach since even higher prices (CPI+2%) would better meet Ofcom's objective and therefore would be 'preferable'
- The objective is unspecified and unjustified – for instance, what level of FTTP investment and why has this been chosen

10.6 In a similar vane, in responding to concerns about the cost to consumers Ofcom just made unsubstantiated vague statements that the cost is acceptable because prices don't rise in real terms. It didn't attempt to understand or quantify the cost and trade it off against the benefits.

10.7 We consider that Ofcom's approach for selecting regulation in WFTMR21 was flawed. Its approach fails to assess whether a particular option is proportionate and whether the benefits outweigh the costs. Ofcom's approach in WFTMR21 was also inconsistent with Ofcom's own guidelines which state that it will undertake 'impact assessments' that, inter alia: "*identify and, where possible, quantify the costs and benefits flowing from the impacts which each option would have*"[186].

10.8 In the WFTMR21 Statement, Ofcom did provide a kind-of CBA which it referred to as a 'high-level sense check'. Ofcom said

> *While we do not believe it is necessary to conduct a detailed CBA, we have carried out a high-level sense check that pricing continuity is proportionate and would not produce adverse effects which are disproportionate to the aims pursued. Specifically, we have checked that the benefits of the pricing continuity approach – in the form of greater competition and investment – outweigh any higher prices paid by consumers in the short term.*

10.9 However, this 'high level sense check' was riddled with basic errors and inconsistencies. For instance, it assumed that all investment (including investment prior to 2021) was caused by setting prices at CPI+0% in the period 2021-26 – in other words zero investment would have happened under a cost-based pricing approach and there was no effect on investment from PIA, government policy, demand increasing etc (see §2.76). As well as being inaccurate, impartial and lacking analytical rigour it was also only provided in the Statement long after the decision was made and after stakeholders could comment on it.

10.10 We are pleased that in its TAR Introduction publication Ofcom did seem to imply that it would seek to understand the balance between costs and benefits:

> *In considering any remedies in this review, we will also need to make sure that they do not lead to costs for consumers that are not offset by the benefits we expect to develop in the longer term*[187]

10.11 We describe below a sound framework that Ofcom should follow for TAR26.

- Ofcom must consider different options.
- Ofcom must impartially, objectively and transparently assess the costs and benefit of each option.

[186] Ofcom, Better Policy Making, Ofcom's approach to Impact Assessment, at §2.1

[187] Telecoms Access Review 2026 | Starting work on the 2026-2031 review | 26 March 2024 | §3.6

10.12 These two steps should not be afterthoughts or conducted as an *ex post facto* exercise to attempt to justify an already baked in decision. It is only by considering different options and their costs and benefits early on the process that Ofcom can be confident it has selected the best option for consumers. Further, it is a failure of consultation if these steps are done and published so late that stakeholders cannot comment on them whilst the decisions are at a formative stage[188].

[188] Sedley Consultation Principles: Sedley defined that a consultation is only legitimate when these four principles are met: 1. proposals are still at a formative stage (i.e. a final decision has not yet been made, or predetermined); 2. there is sufficient information to give 'intelligent consideration'; 3. there is adequate time for consideration and response; 4. 'conscientious consideration' must be given to the consultation responses before a decision is made

11 Other issues

11.1 Below we highlight a number of other issues that are common across several markets.

11.2 In the case where cost-based prices are set, Ofcom must consider how the cost estimates should reflect copper recovery income gained from selling copper that is recovered from the legacy network.

11.3 In the 2021-26 period there was unexpected high inflation. Ofcom should consider whether it should impose a cap on the level of CPI that is used in the charge control calculations.

11.4 Ofcom needs to take steps to allow wholesale regulation to adapt to reflect new retail regulation. So for instance wholesale auto-compensation charges (from Openreach) should increase in line with rises in retail auto-compensation charges. Also Ofcom should consider whether and how the new ban on inflation linked price rises[189] should be reflected in wholesale charges (which are linked to CPI).

[189] Statement: Prohibiting inflation-linked price rises | July 2024

12 Annex 1: Excess profit and consumer harm data

12.1 In this annex we provide analysis of the level of 'excess' profits. By excess profit we mean the level of return in excess of that implied by the WACC. Excess profit is a good proxy for the level of consumer harm from higher retail prices caused by Openreach wholesale prices being above cost.

12.2 The actual/estimates are shown in the table below.

Openreach excess profits / consumer harm (£m)

	Actual and PXC estimates				WFTMR21 forecast
	FY22-FY24		FY22-FY26	FY27-FY31	FY22-FY26
	unadjusted	adjusted			
WLA - legacy	1,344	1,239	1,978	1,650	852
LLA - A2, A3, HNR	377	260	653	960	654
IEC - BT only, BT+1	319	292	529	658	210
Shared ancillaries	83	82	133	230	0
Total	2,122	1,872	3,293	3,499	1,716
Non-SMP	1,168	330	1,445		
Total	3,290	2,202	4,738		

12.3 Below we describe our approach and sources.

12.4 The impact on retail prices from Openreach wholesale prices being above cost is not equal to the level of Openreach excess profit. However, it is a good proxy. There are two main differences between level of excess Openreach profit and increased retail prices however, these are opposite effects and will approximately balance each other. We explain this below.

12.5 In a scenario where Openreach had a 100% market share, a £1 increase in wholesale prices would lead to a close to £1[190] increase in retail prices (assuming BT did not use the price increase to reduce margins). However, in practice Openreach does not have 100% market share. This has two effects[191]:

- Network competitors (such as VMO2) will increase prices for their customers though not by £1 – this will mean that the excess profits will understate the consumer harm
- In response to this, ISPs who use Openreach will reduce their prices (i.e. the pass through into retail will be less than £1) to remain competitive. This will mean that the excess profits will overstate the consumer harm. In WFTMR21 it appears that Ofcom assumed that ISPs did not reduce their prices[192]

[190] It may be materially less than £1 if price elasticities were high

[191] There may be a third small effect of higher WLA legacy prices on other Openreach products such as WLR. However, this is likely to be limited

[192] "*The calculation assumes full pass through from wholesale to retail prices*". WFTMR21 | Statement Mar 2021 | vol 4 footnote 33

12.6 Roughly these two effects will tend to cancel each other so the level of consumer harm is approximately equal to the level of excess profit.

12.7 The data for FY22-FY24 actuals is derived as follows:

- Source is BT's Regulatory Financial Statements (RFS) – RFS FY24 for FY23 and FY24, RFS FY23 for FY22.
- We show both the unadjusted and adjusted figures. As a result of high inflation the returns can be distorted and not representative on the underlying return. The adjusted figures amend the figures to remove some of the impact of high inflation
- The excess return is derived assuming a 7.0% WACC for WLA, 7.8% for LLA, IEC and shared ancillaries and 7.8% for non-SMP[193]
- The FY22-FY26 total is based on the unadjusted figures for FY22-FY24

12.8 We do not include FTTP. The RFS uses straight line depreciation. Thus the profit shown is not representative of the return or likely profitability of Openreach's FTTP investment. The indications are that Openreach will enjoy a good return on its FTTP investments (see footnote 64).

12.9 The forecasts for FY25 onwards are derived as follows:

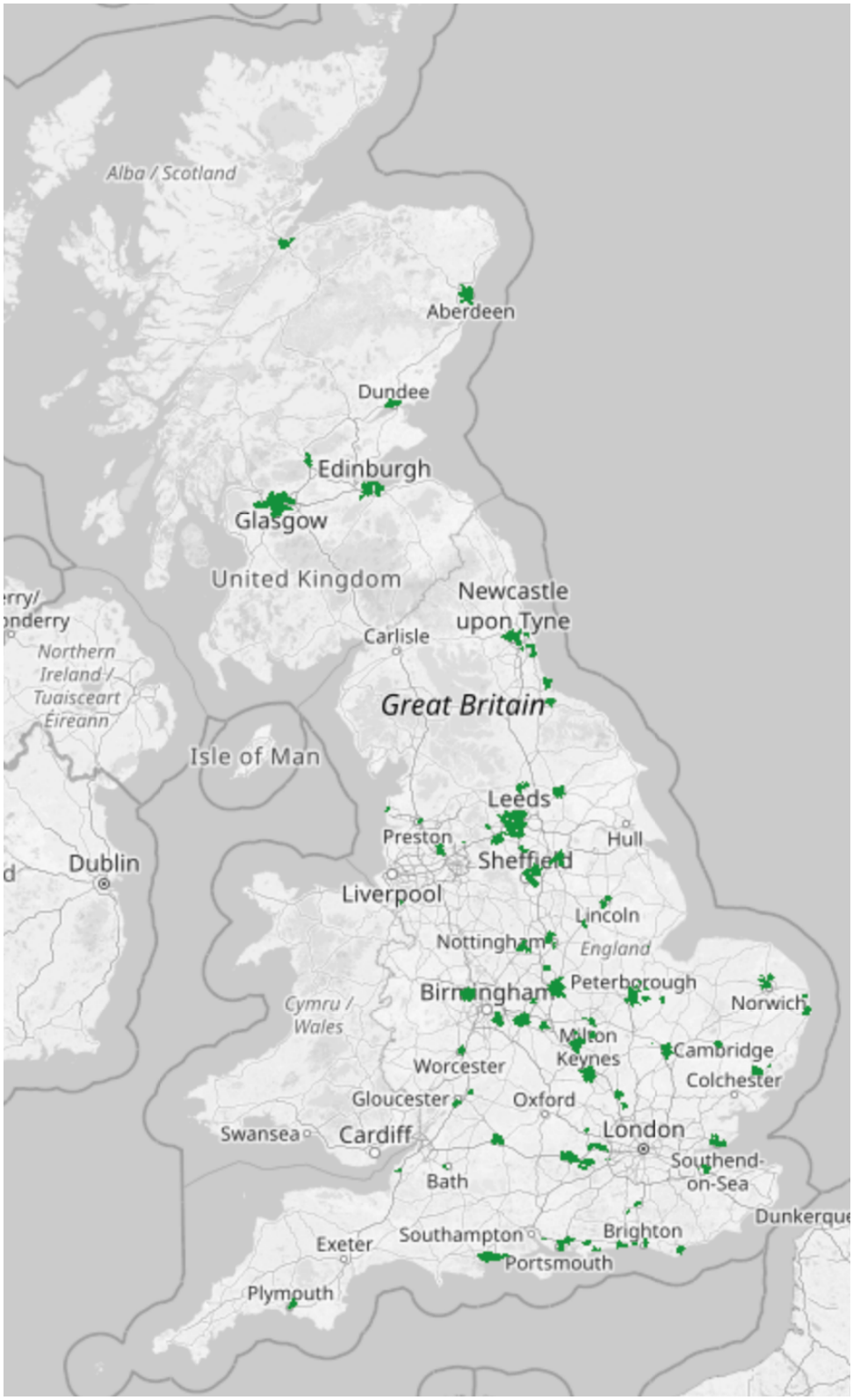
- based on PXC estimates that reflects the historic trend in the adjusted returns
- For FY26-FY31 based on assumption of continuing CPI+0% price indexation
- The growth in excess profits reflect
  - CPI is 2% going forwards so prices rise at 2% pa.
  - Unit costs tend to fall in real terms (by 4% to 5%) as a result of efficiency[194] and (mostly) unit input price reductions. This will mean that the excess profit (absent volume changes) will grow at 5-10%
  - Assume a decline in volumes of WLA legacy and a modest increase in volumes of LLA services. We assume no volume change for IEC or shared ancillaries.

12.10 The Ofcom WFTMR21 forecasts are from WFTMR21 Consultation Annexes Tables A16.7, 16.9 and 16.11. These tables do not include a figure for excess profit for WLA legacy in Area 3 – presumably since this conceptualised as a contribution to the 3.2m FTTP build in Area 3 in the RAB model. We were unable to identify an estimate for this in WFTMR21 and so estimated a figure of £200m.

[193] WFTMR21 | Statement Mar 2021 | Annexes Table A21.1

[194] For instance in WFTMR21 for active services, Ofcom used mid-range efficiency improvements of about 4% for WLA and 5% for LLA WFTMR21 Statement | Mar 2021 | Annexes §A14.80

13 Annex 2: CityFibre coverage map (Oct 24)



Source: https://labs.thinkbroadband.com/local/broadband-map#6/52.241/1.736/gigafast/