



Telecoms Access Review

Virgin Media O2 response

June 2025

Non-confidential response

Executive summary

The Telecoms Access Review (“TAR”) is the important test of whether Ofcom remains committed to fostering investment in network competition and continuing to change the underlying dynamics of these associated markets for the long-term benefit of consumers. Virgin Media O2 (“VMO2”) endorses the proposed continuity from the 2021 Wholesale Fixed Telecommunications Market Review (“WFTMR”); it is clear that Ofcom’s approach is working in attracting investment to the sector. Maintaining a stable and predictable framework is essential, providing the confidence required for the significant, long-term capital investments that will define the UK’s digital future.

Ofcom’s consistent strategy has been the catalyst for an unprecedented wave of fibre deployment; its continued clarity will be vital as the market navigates the complex next phase of its evolution, more focussed on connecting customers to the newly built fibre networks and towards a longer-term where competition from Openreach’s rivals can take the place of some regulations.

We urge Ofcom to continue to provide this longer-term clarity, so that TAR acts as a stepping stone to the future, in the same way that the WFTMR has to date. Ofcom’s strategy has successfully ignited the engine of network construction – by Openreach and its prospective competitors. However, this achievement marks the end of the beginning, not the beginning of the end. Attention must now refocus from just fostering rollout of network footprints to enabling the emergence of material and sustainable competition to Openreach to take hold.

The capital required to connect customers will be as substantial as that already invested in passing their homes, and this investment will only flow if a truly competitive environment for customer acquisition is allowed to thrive. Growing take-up of Openreach’s rival networks during this market review period will take time and will likely be pivotal to whether Ofcom’s strategic shift in the 2016 Digital Communications Review (“DCR”) will ultimately be judged as a success. It is therefore critical that Ofcom resists calls for premature deregulation, which would risk ossifying the incumbent’s dominance for at least another generation.

Market consolidation and evolving competition

We commend Ofcom’s recognition that the market is entering a period of material uncertainty and that TAR proposals have been oriented to acknowledge and not ignore the prospect of change. The competitive landscape of 2031 is as yet unwritten, with the potential for significant market consolidation. In this context, Ofcom is right to act with caution and avoid pre-judging

outcomes or picking winners through its remedies. It also ought to avoid the risk of creating self-fulfilling prophecies and so we would encourage Ofcom to review its approach to analysing the potential dynamics of the Leased Line market further. The regulator's role is to provide a stable framework within which the market itself can determine the most efficient and competitive structure, whilst ensuring the incumbent cannot act on its ability and incentive to thwart these market dynamics.

Countering incumbent strategic behaviour

The most potent threat to nascent network competition is the incumbent's ability to stymie the market just as it begins to flourish. We remain acutely aware of the risk that Openreach could leverage commercial offers - such as those that aggressively accelerate migrations or effectively grant preferential terms to its largest customers - to lock-in its customer base and raise barriers to take-up on rivals' networks.

We therefore strongly support Ofcom's decision to retain and strengthen the constraints on such behaviour. VMO2's own significant investment in upgrading its entire network to XGS-PON¹, and the prospect of creating a powerful new wholesale alternative, must be afforded the same protections as altnet builds, particularly regarding the prohibition on geographic discounting.

We also recognise that over the next five years the level of competition may change. It is open for Ofcom to reflect the prevailing level of competition when reviewing individual offers. In so doing, Ofcom can give all parties certainty over the framework for the next five years, whilst adapting to change as it happens in the market.

The foundational role of PIA

Physical Infrastructure Access ("PIA") is the bedrock of network competition and Ofcom's strategic shift. We support Ofcom's commitment to providing stability for this foundational remedy. It is critical that Openreach's PIA processes, particularly those relating to network and asset transfers, are streamlined and efficient, ensuring they do not impede, frustrate, or jeopardise market consolidation. Any friction in the operation of PIA directly threatens the success of Ofcom's entire pro-competitive strategy. We urge Ofcom to provide unambiguous, long-term clarity that PIA will endure, giving all investors and wider stakeholders the certainty they need, given the structural market changes Ofcom and the sector have embarked on.

¹ 10-Gigabit-capable symmetric Passive Optical Network

Conclusion

In light of the above, we broadly support Ofcom's proposed approach to TAR, as we believe it has identified the likely key features that will shape the review period and the role that Ofcom should (and should not) play in shaping these.

1. Introduction

1. Virgin Media O2 (“VMO2”) welcomes this opportunity to respond to Ofcom’s Telecoms Access Review (“TAR”) (“the Consultation”). This market review constitutes the second half of a ten year regulatory strategy from Ofcom to “*promote investment in gigabit-capable networks through network competition where this is viable*”.
2. Historically, where Openreach has Significant Market Power (“SMP”) Ofcom has imposed a price control remedy to remedy the incentives of the SMP operator to undertake excessive pricing and/or other actions to protect its market position. This has been effective with a deployed copper network, where Ofcom has a good understanding of the costs.
3. The challenge presented in 2021 was different. The time was ripe to begin replacing Openreach’s copper last mile network with fibre. The historical approach would have been highly deterministic. Setting a regulated price would have determined the breakeven average cost of the new network, thereby determining the maximum economic level of rollout for that new network. If Ofcom were to have set the price below the competitive level, the rollout of FTTP would have been less than would have been achieved by a competitive market. If the price were set too high, Openreach may achieve supernormal profits; or an inefficient and frothy level of competitive investment might have been encouraged, which would have been undermined, if Ofcom later changed tack and lowered the regulated price in light of better information.
4. Hence in 2021 the Wholesale Fixed Telecommunications Market Review (“WFTMR”) allowed Openreach to set its own prices for Fibre to the Premises (“FTTP”) services, with an ‘anchor’ price set with respect to an existing copper product. The SMP remedies on Openreach focussed on ensuring that in setting the structure and terms of its offers, Openreach did not seek to foreclose its competition from entering the market and winning customers. In this way, it would be the action of competition that would determine the efficient market price that delivered the maximum economic level of FTTH rollout (and competition) in the UK. In 2021, Ofcom recognised that the payback for FTTH would be long and so it set the 2021 framework as the first of two five year market review periods, giving a clear signal for what to expect in the second period which is the subject of this consultation.

5. Openreach, VMO2, Nexfibre and others have invested in FTTP in the UK within the context of Ofcom's prevailing policy, so there is an expectation amongst stakeholders that the second market review period will see evolution of the framework, rather than revolution.
6. It is therefore welcome that Ofcom has been true to its statement in 2021 and continued with the existing regime, only adapting it where circumstances have changed or experience of the use of the current regime has suggested shortcomings. As VMO2 was supportive of the 2021 policy framework, we have limited our response to the TAR to focus on the following key elements:
 - Section 1: Introduces our response;
 - Section 2: Sets out our views on Ofcom's market definition and SMP analysis;
 - Section 3: Includes our views on Ofcom's proposals on non-pricing remedies; and
 - Section 4: Contains our responses to Ofcom's consultation questions.
7. The views expressed in this response are those of VMO2 and are broadly endorsed by our shareholders, Liberty Global and Telefónica. These positions are formulated specifically in the context of the unique competitive and market dynamics of the UK and Ofcom's approach to regulating the market, and so are without prejudice to any positions our shareholders may take in other regulatory jurisdictions.

Statement of Strategic Priorities

8. At the time of responding the Government had yet to consult on its new Statement of Strategic Priorities ("SSP") for Ofcom. Consequently, VMO2 reserves its position on whether Ofcom's proposals are in accordance with this new SSP. Should the SSP, as finally laid before Parliament, require us to make a further contribution about the SSP's impact on the TAR, we will make an additional submission to Ofcom's consultation process, at the appropriate juncture.
9. In the TAR, Ofcom treats VMO2 and its sister company nexfibre as a single economic entity. VMO2 and nexfibre have responded to this consultation as separate companies, reflecting the views of the different investors in these two entities. Due to the different nature of the businesses, the focus of each response is necessarily different. VMO2 is content to adopt the views expressed in the response of nexfibre on matters not covered by this response.

Fibre investment and economic growth

Securing further fibre investment

10. Ofcom has a range of duties that are relevant with regards to its decision-making in this review. In particular, Ofcom highlights that it considers that its objectives for this review are²:

“consistent with our duties in section 3 of the Communications Act 2003 (the Act). This includes our principal duty to further the interests of citizens in relation to communication matters, and to further the interests of consumers in relevant markets, where appropriate by promoting competition. In particular, we further the interests of citizens and consumers by setting our regulation to create appropriate conditions to incentivise both Openreach and other operators to invest in gigabit-capable networks, through network competition where viable, and appropriate investment incentives where not. We have described above the benefits that gigabit-capable networks can deliver for consumers in terms of higher speed and better quality services.”

11. It is clear that the policy set out in the WFTMR in 2021 and continued in this review is all about creating investment incentives, not only for Openreach, but also its competitors, to create an effectively competitive market for gigabit wholesale local access, where none previously existed.
12. When reading the pre-consultation submissions of some firms, it is clear that different parties have different perspectives on what incentivising fibre investment means in practice. For example, some altnets believe that Ofcom should regulate to ensure that competitors to Openreach are economically viable³:

“35. Whilst Ofcom will wish to continue protecting consumers from potential over-pricing by Openreach at the wholesale level (as BT is unregulated in the broadband retail market), the most significant concern must be to prevent Openreach from pricing in a manner that deters infrastructure competitors from continued deployment and/or makes it much harder for those

² Consultation, Vol.1, §2.45

³ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/preconsultation-submissions/zoomm---tar-submission.pdf?v=392850>, Zoomm pre-consultation submission

competitors to attract sufficient take-up of their networks to become established and economically resilient long-term competitors to Openreach.

36. From the perspective of the wholesale broadband charge control, Zzoomm considers that Ofcom's only credible approach would be to introduce a price floor. As mentioned above, a suitable anchor product could potentially constitute both a price ceiling and a price floor (this would not unduly constrain BT's pricing freedom, as it has been pricing to the maximum level allowed for the anchor price consistently in the past and also during the WFTMR)."

13. Whereas BT Group describes the same framework as⁴:

"giving certainty and clarity to investors, by promoting investment by a range of actors, and by allowing all companies a fair opportunity, but not a guarantee, to make returns on investment commensurate with the risk these investments face."

14. Whilst Openreach is keen for Ofcom to deregulate some areas today⁵, its customers (the Internet Service Providers ("ISPs")), through the submissions of Frontier Economics⁶ believe that it would be too soon to deregulate Openreach, because that competition is nascent.

"It may also be prudent to take a cautious approach when measuring the effectiveness of competition where there is uncertainty over future competitive conditions, particularly when defining areas with "established competition"

Given the potential for competitive conditions to evolve differently from that expected, there is an inherent risk of over- and under-regulation, which

⁴ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/preconsultation-submissions/bt-group.pdf?v=392822>, BT Group pre-consultation submission §1.11

⁵ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/preconsultation-submissions/openreach-submission-to-tar26.pdf?v=392848>, Openreach pre-consultation submission

⁶ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/preconsultation-submissions/frontier---tar-geographic-market-definition-and-analysis.pdf?v=392825>, Frontier Economics submission on Geographic Market Definition and Analysis

Ofcom needs to balance when making regulatory decisions. If the current light-touch pricing flexibility approach is maintained for WLA and LLA services, the greater risk would appear to be under-regulation rather than over-regulation.

Given this, in markets where there is greater uncertainty over how competitive conditions will evolve, it may be prudent to take a cautious approach when defining areas where regulation could be reduced or withdrawn. This could include placing less weight on planned coverage by operators where future network build is uncertain, or placing lesser (or no) weight on operators where the constraint they will impose on Openreach going forward is less clear.

This could be particularly the case in the WLA market, where there is uncertainty over how the future build and take-up of altnets will develop over the TAR period, and uncertainty over the extent of further potential consolidation among altnets.”

15. We note in this regard that the objective of regulation is not to promote the business case of operators, and that if competition were effective and sustainable, then ISPs and consequently their customers, would be the net beneficiaries of effective and sustainable price competition at the wholesale level, should SMP remedies be relaxed or removed. It is instructive to see that this constituency is not making that case for the period 2031-36. This strongly suggests that even Openreach’s customers are concerned that it still has SMP and would act to stifle nascent infrastructure competition, absent ex ante remedies.
16. What Ofcom has proposed is a continuation of the existing regime, or the regulatory stability that Openreach has requested. Openreach’s fibre investment plans are already priced-in to its business plan and the expectations of BT Group’s investors⁷.
17. Openreach has now committed to deliver FTTP coverage to nearly all of the UK. Elsewhere Government subsidy will be delivering incremental gigabit capable coverage beyond Openreach’s fibre perimeter. To the extent that Openreach has remaining copper infrastructure in remote areas, it will become increasingly inefficient for Openreach to operate and maintain this legacy estate. Therefore, we do not believe that

⁷ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-rev-2026-31/preconsultation-submissions/bt-group.pdf?v=392822>, BT Group pre-consultation submission §2.2

Openreach needs further encouragement beyond the existing regulatory approach to complete its rollout. But that does not mean that VMO2 advocates no change at all. We are very supportive of the targeted changes set out in the consultation, which build on the five years of experience of the current regime.

18. Demonstrably continuation of the overall approach of the WFTMR would continue to provide adequate incentives to both Openreach and its competitors to either build new networks, or invest to connect customers to those networks. VMO2 agrees with the ISPs, that competition is currently too fragile to deregulate Openreach. As Openreach itself highlights, passing homes with fibre networks is perhaps half of the cost of the investment⁸.
19. Competitors to Openreach need to be able to fund the connections to their already deployed networks, in order to be a competitive constraint in the long run. That task has barely begun. It is the maintenance of *these* investment incentives that should now really be the regulatory focus, driving relevant amendments to remedies in the second period.
20. Finally, we agree with BT Group and Openreach, that the competition fostered by Ofcom's policies should take place on the merits, driven by the needs of ISPs and their customers, rather than to achieve an arbitrary public policy objective, whether that be a level of coverage or a market structure. Elsewhere we discuss Ofcom's statements about its willingness to see 'winners and losers' in this dynamic market, without any predetermination of a desired end-state outcome. This is refreshing.

[The relevance of continued fibre investment to economic growth](#)

21. Since the WFTMR, Ofcom has gained a new duty to promote economic growth. Section 108 of the Deregulation Act 2015 establishes that a person exercising a specified regulatory function must have regard to the desirability of promoting economic growth (the "Growth Duty"). In performing this duty, regulators must consider the importance of the promotion of economic growth and ensure any regulatory action they take is necessary and proportionate.

⁸ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/preconsultation-submissions/bt-group.pdf?v=392822>, BT Group pre-consultation submission §1.10

22. Fibre networks have been estimated to have the potential to significantly benefit the economy.⁹ But, that does not mean that every metre of fibre delivers the same impact. Competitive build does not of itself add to incremental output, because it very likely will substitute for existing fibre connections. What that competitive supply does is reduce the cost to businesses and consumers of accessing the output enhancing benefits of fibre networks, through competition. Furthermore, if investment incentives arising from regulation are tuned towards increased take-up, then in VMO2's view, Ofcom's revised policy for 2026-2031 would be more focussed on delivering an outcome (economic growth through increased output at more competitive prices) than investment in just passing homes achieves.

⁹ For example, the important role networks will play in unlocking efficiency gains from AI (<https://www.libertyglobal.com/liberty-global-and-ey-report-reveals-telecom-industry-crucial-to-unlocking-efficiency-gains-from-ai/>), or accelerated economic growth rates implied by greater ultrafast broadband availability https://www.ofcom.org.uk/_data/assets/pdf_file/0016/111481/WIK-Consult-report-The-Benefits-of-Ultrafast-Broadband-Deployment.pdf

2. Market definition and SMP

Physical infrastructure

Focal product

23. We agree with Ofcom approach of defining the focal product of physical infrastructure deployed for and used to support fixed elements of telecoms networks, such as ducts, poles and chambers.
24. We also agree that while there may be differences between specific forms of this physical infrastructure, the location, contiguity and the properties connected¹⁰, Ofcom's selected focal product has a homogenous underlying role in the hosting of fixed telecommunications network elements, despite these variations.

Non-telecoms physical infrastructure

25. We agree that non-telecoms physical infrastructure is a weak substitute for fixed telecoms physical infrastructure, for all the reasons Ofcom identifies¹¹ and more.
26. While various operators, including VMO2, have sought to pilot use of these alternatives they are fraught with complexities even in the niche circumstances they are considered or trialled. As Ofcom notes, this is despite the ability of telecoms network providers to enter into commercial arrangements with owners of this infrastructure or doing so via utilising Access to Infrastructure ("ATI") to support these agreements.

Wireless infrastructure

27. We agree with Ofcom's assessment that, certainly based on the current availability and capabilities, wireless technologies only offer a weak indirect constraint on fixed broadband as a consequence of the services that can be provided using these networks.
28. It is also not practical for an access seeker providing fixed broadband services to seek to deploy network using wireless technologies on wireless infrastructure in response to a

¹⁰ In addition to those variations Ofcom cites, there is also variety across, inter alia, different elements specifications, topology designs and capacity dimensioning.

¹¹ Consultation, Vol.2, §3.14

Small but Significant and Non-transitory Increase in Prices (“SSNIP”) on fixed telecoms physical infrastructure access in a way that would create a direct constraint.

29. Beyond the broader assessment of potential in direct or indirect constraints on the market, Ofcom considers the more specific use case of direct constraints in the context of mobile backhaul uses cases. In our view, Ofcom draws the correct conclusion that such an effect would be weak.
30. From our perspective, we would typically view a point-to-point microwave (“P2P MW”) link as strictly less preferred versus a fixed link option, if such an alternative is available. In general, a fixed link provides lower latency, greater scope for bandwidth capacity growth, as well as greater reliability and stability¹² when compared to a wireless alternative. These factors would be expected to significantly outweigh a hypothetical SSNIP, this preference is only likely to strengthen during the market review period.

Geographic market

31. We fully support Ofcom’s approach to analysing geographic market conditions facing access seekers as well as the conclusions it ultimately draws; that despite some geographic variations in the presence of physical infrastructures, these variations are not material to impact on the overriding features of the market that are nationwide. As a result, we agree with Ofcom’s proposal to define a single national market for this analysis.
32. Ofcom is correct to put significant weight on the importance of ubiquity, and to recognise that ubiquity can be framed at both a localised and nationwide level; each being individually important but also mutually reinforcing.
33. Deploying fixed telecoms network is a capex-intensive exercise with long payback periods and required high upfront cost to create a build engine to deploy resources to deliver that build. Ofcom notes¹³ that most network builders tend to deploy over one infrastructure and where multiple infrastructure sources are used by necessity rather than preference.
34. We agree that the ‘option value’ flexibility that ubiquity offers is likely to be consequential; this optionality enables build plans to be adapted, for example if build challenges arise or if an access seeker has lost first mover advantage. Equally, as Ofcom notes, this

¹² By avoiding, for example, rain or fog fade or other line of sight factors that may degrade performance.

¹³ Consultation, Vol.2, §3.39

optionality would be important if an access seeker wishes to expand the scale and scope of build in a locality beyond their original plans. As a result of these factors, it follows that a reduction in ubiquity versus an alternative is likely to disproportionately reduce efficiency, flexibility, and cost effectiveness of investments. This in turn would undermine the ability of an access seeker to effectively compete with BT and so to exert a constraint.

35. This has been VMO2's experience, as well as our build approach when supporting nexfibre's build activities. Our utilisation of Openreach's PIA product rapidly grew as a component of our historical Project Lightning build once our investments in operational, system and processes changes were undertaken. This trajectory has only grown through our build partnership with nexfibre. [X].
36. In addition, this leads to less duplication of infrastructure in the cityscape, with less construction inconveniencing citizens. This has clear environmental benefits for the benefit of both citizens and consumers in accordance with Ofcom's primary duty.

VMO2 as a constraint

37. We agree with Ofcom's assessment of the relative drawbacks of VMO2's duct and other physical infrastructure in comparison to BT's. We do not routinely deploy overhead infrastructure and have made extensive use of direct bury, narrow trenching and 'Toby box' termination points. The infrastructure was historically dimensioned and deployed to cost efficiently satisfy our own use requirements, leaving it more expensive and/or often unusable for sharing.
38. Existing capacity constraints are only likely to be exacerbated by our 'FibreUp' programme to overlay Hybrid Fibre-Coaxial ("HFC") with XGS-PON, this is likely to be more prevalent in certain sections of our network depending on existing topologies and is likely to vary across geographies. There are also likely to be unique circumstances associated with lead-in connections. These variations are challenging to predict prior to physical inspection at the point of deploying the overlay.
39. [X].
40. Furthermore, compared to WFTMR, VMO2's constraint based on physical infrastructure is likely to diminish during the upcoming review period. The importance of PIA has significantly increased during WFTMR given the widescale adoption by altnets. Even we, along with nexfibre, have substituted expansion of our own physical infrastructure

footprint to instead consume PIA. As a result, PIA now plays a much greater role in supporting network competition that it did when assessed for WFTMR, and this trend will surely continue in the upcoming review period.

41. Survey results from the Independent Networks Co-operative Association (“INCA”)¹⁴, as well as public commentary¹⁵ show that altnets often seek an FTTP first mover advantage or seek to minimise the extent of overbuild, especially with Openreach (but also other altnets, including VMO2). [X]. Therefore, we would anticipate rival networks would find it relatively unattractive to seek access to VMO2 infrastructure, as this would not confer first mover advantage, and would likely be overbuilding both VMO2 and Openreach FTTP. Unlike Openreach’s infrastructure, the alternative of using VMO2’s duct network would not be tractable, industrialised or available on a predictable basis.
42. As a result, we agree with Ofcom’s conclusion that the direct constraint from VMO2’s infrastructure is likely to be limited.

Other altnets and supply-side substitution as constraints

43. We agree that the competitive constraint offered by other altnet infrastructures is limited.
44. To an even greater extent than VMO2, these infrastructures will lack local or national ubiquity and to have similar capacity constraints for reuse because of modern build techniques such as narrow trenching that will likely have been adopted. Furthermore, the existing fragmentation of altnets would mean that any attempts to utilise these sources of infrastructure would require establishing numerous access agreements, each likely to have their own variations and nuances depending on the underlying infrastructure available and the contracting entity in a way that would be operationally and administratively costly and likely unmanageable.
45. This variability of approach by altnets suggests that case-by-case infrastructure sharing under ATI could be relevant, but that altnets could not plan an extensive rollout on anything other than PIA.
46. We agree that supply-side substitution is not plausible during this market review. There has been no evidence of the potential for new entrants to join the market and seek to

¹⁴ For example, <https://www.point-topic.com/post/independent-network-sector-report>, full report, page 33

¹⁵ For example, <https://neosnetworks.com/resources/blog/altnet-report-2025/>, section titled “Overbuild and increased market competition”

compete with Openreach's PIA product during the recent rapid expansion in network build. With many network operators now slowing or completing their network expansion activities, and with the PIA product continuing to evolve and improve it does not appear plausible that new entrants would emerge in the future. Even in that hypothetical scenario, it is clear that moving existing networks from PIA to another infrastructure supplier would not be commercially viable or practicable.

Three criteria test

47. We agree that the physical infrastructure market for fixed network elements exhibits high and non-transitory barriers and that new entry is unlikely. Whilst Ofcom is correct to note that there is likely to be continued network build during the review period, this is likely to make significant use of BT's infrastructure. To the extent there is incremental new physical infrastructure deployment it is likely that a material proportion of this will be to supplement or complement use of BT's infrastructure. Even in the case of VMO2 we have found that the intensity of our use of PIA has grown over time and the scope of our usage has likewise expanded, [X].
48. We agree that the physical infrastructure market for fixed network elements is not tending towards effective competition. As noted in above, we agree with Ofcom¹⁶ that switching costs for an existing network would be prohibitive. With many operators slowing down or pausing / cancelling further network build, the prospect of competition emerging is even more remote during this review period than the last.
49. We agree with Ofcom's view that competition law alone would not be sufficient to address these competition concerns, for the reasons Ofcom identifies.¹⁷ It is apparent from the extensive work that Ofcom, OTA¹⁸, access seekers and Openreach have undertaken since PIA was originally reformed in 2018 that this product and the resulting growth in network competition would not have been possible without ex ante intervention. Ofcom's intervention was vital to enable PIA to be introduced and effectively specified. The ex ante framework has given access seekers the necessary clarity to ensure the product will sustain and the terms of access will remain stable over the course of their network investments and operation.

¹⁶ Consultation, Vol.2, §§3.56-3.57

¹⁷ Consultation, Vol.2, §3.61

¹⁸ Office of the Telecommunications Adjudicator

SMP assessment

50. We agree with Ofcom's BT SMP finding. Direct and indirect constraint of competition is not sufficient to constrain BT. Scope for entry, expansion or substitution are not a material constraint. Equally, countervailing buying power is not an effective constraint given high switching costs and BT's own self-supply being very material contrast to the scale of PIA access seeker usage.

WLA

Focal product

51. We agree with Ofcom's proposal to define a single focal product in its analysis of the Wholesale Local Access ("WLA") market. Ofcom is right to note that the economies of scope associated with FTTP network deployment are material such that there is no clear and consistent brightline distinction between a given set of speed tiers or other product features that the market collectively offers, that would indicate a differentiated assessment of sub-markets is warranted.

Wireless and leased lines

52. We agree with Ofcom's provisional conclusion that wireless technologies are not within the relevant market. While these products do act as a potential substitute to a subset of customers of the WLA market, this remains relatively niche and so the constraint continues to be weak.
53. It is possible that in the longer-term, as wireless technologies continue to evolve and rollout of these evolutions take place, that a broader segment of the market may find the pricing, reliability and bandwidth capacity of such services are sufficient for their household's needs.
54. Such a scenario would likely require a sustained plateauing of bandwidth usage across a material proportion of customers to the extent that they would no longer have a concern that their usage may saturate the connection to bring the experience on par with their fixed alternative. However, as Ofcom's analysis shows, there is no sign that this hypothetical shift is imminent or forecasted to occur within this market review period.
55. It is also possible, as Ofcom notes, that wireless technologies will have an increasingly important role in hard-to-reach areas. While this would be expected to be predominantly in rural areas, it may also be of growing relevance if there are pockets of 'not-spots' in

otherwise more densely populated areas that commercial FTTP rollout has not addressed.

56. We also agree with Ofcom's assessment that leased lines should not be included in the WLA product market.

Prospects for market consolidation and implications for market analysis

57. We welcome Ofcom's consideration of the role that consolidation might play in the forthcoming market review period. Ofcom is right to reflect this potential dynamic explicitly in its analysis. We discuss this approach further before providing further comments on the wider geographic market analysis.

Current competitive constraints on Openreach and the relevance of market consolidation

58. Ofcom views consolidation of the currently fragmented market of altnets as an almost inevitable feature of the next market review period [V2 §§4.72-4.75].
59. It concludes at §4.75 that, *'While the exact timing and form of consolidation remains uncertain, this evidence suggests that there is likely to be some consolidation during the review period which could materially affect competition to BT.'*
60. Also, at §4.77, *'Overall, we believe this evidence indicates that prospects of consolidation represent a foreseeable development which is likely to materially affect competition over the course of the review period.'*
61. In this regard, Ofcom has been very careful to state that it will not pick winners and losers in what is a dynamic market.

"...above all really we just don't believe this is for the regulator to determine. I mean, it's terribly tempting for us to think, oh, you know, we'd like it to look like this rather than like that.

But actually it is for those with skin in the game, in the market to now be thinking about for them over the next few years. We're expecting to see some

*consolidation. I'm sure we're all expecting to see that. Many of the businesses in the market have been set up precisely with that end game as their plan.*¹⁹

*'in terms of Area 2, they are areas where there is already, or the potential for material and sustainable competition. So that might be areas where there are material and sustainable competitors. They might be existing competitors such as VMO2 that is a material and sustainable competitor. It might be a large new entrant competitor such as CityFibre or some of the other mid-sized altnets. We've also reflected there in our Area 2 definition the smaller altnets. And our thinking there is that whilst individually they might not be material in a sustainable competitors, in terms of the degree of constraint they place on be on Openreach today. It could be that through a process of consolidation, they could become that. So we've factored that into our assessment of Area 2.'*²⁰

62. We note that Ofcom has been very careful not to state a 'magic number' of participants in the market that it will regulate to ensure – chastened as Ofcom must be by the experience of its stated preference in various interventions from 2012-2016 regarding the number of mobile networks that are required for effective competition and the subsequent decision of the Competition and Markets Authority (“CMA”) in 2024 that deviates from that magic number by one. What Ofcom does do is link the continuation of the current regime in the next period to the presence of at least two prospective competitive constraints to Openreach.
63. Ofcom characterises the current alternative infrastructure players (“altnets”) into different groups:
- VMO2, which is already a material and sustainable constraint on Openreach. To be more precise, VMO2 is an indirect constraint on Openreach because it is currently only a relevant vertically integrated retail competitor to the brands sat on the Openreach network. In the future, if it is successful in attracting ISPs, implementing a wholesale platform and moving substantial volumes away from Openreach, then it *could* be considered a fully fledged direct constraint on Openreach²¹. Providing an

¹⁹ <https://www.ofcom.org.uk/siteassets/resources/documents/phones-telecoms-and-internet/information-for-industry/telecoms-regulation/tar-analyst-call-slides-20-march-2025.pdf?v=393124>, Ofcom Analyst briefing transcript p.10

²⁰ Ibid p.16

²¹ Using the criteria set out by Ofcom at Consultation, Vol.2, §§4.92-108.

increased constraint to that which it currently provides. As noted below, Ofcom also sees the prospect of VMO2 consolidating altnets could further expand the reach of this constraint;

- CityFibre, in contrast to VMO2, is not currently seen as a competitive constraint on Openreach, *but ‘is likely to have the potential to become a material and sustainable competitor to BT’* [V2 §4.56]. As we can see above, that will be something for the market to determine over the coming (and possibly future) market review periods;
- Altnets with fewer than 50,000 homes passed are not seen as a constraint on Openreach, largely because they are very unlikely to attract ISPs in wholesale partnerships, due to the costs of integration of such a small footprint likely outweighing the benefits [V2 §§4.80] and also because Ofcom considers them to be less attractive consolidation targets [V2 §§4.86]; and
- Altnets with greater than 50,000 homes passed, but which are not of the scale of CityFibre [V2 §§4.61–4.63]. This tier of altnets include the likes of Gigaclear, Netomina, Community Fibre and Hyperoptic, as well as others. Whilst Ofcom believes that they are beginning to compete effectively with BT at a retail level, they are individually of insufficient scale to provide a competitive constraint at the wholesale level. Their scale may be increased through consolidation, either together or with VMO2 or CityFibre. Meaning that the competitive overlap they uniquely provide to Openreach plus one other network, could then become at least a ‘potential constraint’ or even an actual constraint, depending on the firm which consolidates them²².

64. With regard to this final tier of altnets, we have some additional observations on Ofcom’s analysis:

- There may be ways other than through consolidation that these altnets (and others) become a constraint on Openreach. For example, if they were to form, or join a wholesale platform that is itself integrated with major ISPs. But again, even if this removes frictional costs in using these altnets, there would still be a requirement under

²² See, for example, Consultation, Vol.2 §4.81, ‘...As such, we consider that areas in which these altnets are present, or plan to be present, should be treated as areas in which there is likely to be the potential for material and sustainable competition to arise.’

Ofcom's tests at [V2 §§4.92-108] for this approach to deliver contracts with ISPs and switching of meaningful volumes away from Openreach.

- At [V2 §4.75] Ofcom suggests that altnets of this scale might achieve the relevant scale through consolidation amongst themselves (rather than being subsumed into one of the two more relevant players). In our view, such a consolidation is unlikely to be a sustainable proposition. Merging two significantly loss-making businesses together only succeeds in creating a larger business making marginally smaller aggregate losses (assuming some head office eliminations). The route to sustainability is through:
 - Increasing scale substantially, with an acquirer that brings incremental wholesale traffic through the acquirer's existing ISP contracts;
 - Increasing the effectiveness of the operation of the altnet through leveraging a national retail brand with a larger range of higher value products (economies of scale and scope);
 - Leveraging the economies of scope of a well established carrier grade network provider to expand the offering in the acquired altnet's footprint, to include higher value services such as leased lines.

[We welcome the clear regulatory signal for TAR 2031-36](#)

65. Consistent with its approach in the WFTMR, Ofcom provides visibility to investors as to the relevant factors it would consider when approaching the next market review period from 2031-2036. This is very important for investors in the market. The investment cycle for building a fibre network is long and the investments can be substantial, as accepted at [V4 §1.92].
66. In VMO2's case, on formation of the joint venture, its shareholders announced that they committed to invest significant capital to overlay the HFC network of Virgin Media with XGS-PON, such that it was future-proof for the future demands of our customers²³. ~~{X}~~
67. This is not unique to VMO2; it is important for Ofcom to recognise that the process of market consolidation has the potential for fresh investors to enter the market, and/or newly merged entities to recast their long-term business strategies and investment

²³ <https://www.libertyglobal.com/virgin-media-o2-announces-2028-full-fibre-upgrade-plan/>

plans. In these cases, the starting point for this long-term certainty may during 2026–31, rather than the certainty or clarity previously offered in 2021.

68. Successful consolidation transactions have the potential to act as a catalyst, strengthening, and sustaining effective competition. All else equal, consolidation is likely to:
- Create economies of scale and scope to allow the resulting entities to more effectively compete with Openreach and other market participants across wider geographies and broader product propositions;
 - Unlock synergies by de-duplicating common costs, enabling more intensive utilisation of deployed assets as well as wider efficiencies such as optimisation of their carbon footprint;
 - Reinforce financial resilience by providing the potential for greater profitability and attracting further private investment enabling continued investment in network and operations and being less susceptible to external economic shocks that have been all too frequent in recent years; and
 - Deliver improved customer outcomes through investment in more advanced, secure and resilient networks and an enhanced ability for service innovation for consumer and business customers alike.
69. Hence the desire of firms, seeking to become relevant, effective and sustainable competitors to Openreach in the WLA market, to have as much visibility as possible going forwards.
70. Investors will make their capital allocation to the UK fibre market cognisant of the signal that Ofcom sends in its decision. That regulatory signal is for the length of the review. Given the length of the investment cycle in fibre, it is important that investors in competitors to Openreach can do so in the knowledge that the rug will not be pulled from under them through a mid-period review or alternative mechanisms. We see little downside for Openreach in this situation, as the investment cycle for FTTP is so long, that retaining this fixed cadence of market reviews will not cause it harm given that any sufficiently substantial change to the competitive environment is likely only towards the end of the next period.

71. Finally, if competition were to develop more quickly during the next cycle, perhaps as a result of consolidation, Ofcom is still free to reflect this in its application of the SMP remedies. For example, it may be that Openreach offers that might not be approved with the current market conditions, might be approved if market conditions had become more competitive. The decision not to deregulate Openreach does not ossify the market for the duration.

Openreach can expect to be deregulated in the WLA market only when competition in Area 1 is effective and sustainable

72. Ofcom's continued commitment to promoting competition through fibre investment [V4 §1.93] should be reassuring for Openreach. As this consultation pertains to the SMP regulation of Openreach, Ofcom naturally provides Openreach with clarity as to its potential regulatory trajectory. In particular, Ofcom confirms at [V1 §2.59] *'[w]here effective competition emerges, there will be no need for Ofcom to regulate.'*

73. Ofcom provides welcome clarity that it recognises the significance of the decisions it will likely face in 2031 or beyond, noting that *"[t]his will put us on a path to even greater deregulation in the future, allowing competition to replace regulation **permanently**."* [V2 §2.59 – emphasis added].

74. Ofcom commits to deregulate Openreach should competition emerge and be effective and sustainable for the long run. Elsewhere we discuss the nature of this test for effectiveness and sustainability, as defined in the TAR. This outcome is understood by all investors in the market, as well as ISPs. What is unclear is which of the current participants will still be in the market as effective and sustainable competitors to Openreach at that juncture?

Competition may still be prospective in 2031

75. At the investor and press event that accompanied the publication of this consultation²⁴ Ofcom summarised a set of other outcomes that might emerge post-2031 and what regulatory approaches would be relevant in these circumstances²⁵. This includes the

²⁴ <https://www.ofcom.org.uk/siteassets/resources/documents/phones-telecoms-and-internet/information-for-industry/telecoms-regulation/transcript-to-analyst--investor-call-20-march-2025.pdf?v=393207>

²⁵ <https://www.ofcom.org.uk/siteassets/resources/documents/phones-telecoms-and-internet/information-for-industry/telecoms-regulation/tar-analyst-call-slides-20-march-2025.pdf?v=393124>

possibility that the current market circumstances may persist, with competitive investment still happening and competition evolving. Ofcom states that it will continue to ‘regulate [Openreach] to support this’ in such circumstances.

76. We note in this regard that VMO2 will still be investing in migrating its customers from HFC to fibre during the next review period, so at least from our perspective, this statement is welcome as it allows us to make investments to overbuild our network, confident in the longer-term regulatory regime should the market exhibit similar conditions to today.

It is also clear as to what might happen if this de-regulatory experiment fails

77. Should Ofcom’s efforts be unsuccessful, with competition to Openreach in the WLA market proving to be persistently ineffective and/or unsustainable, then at some point in the next or a further market review, Openreach might expect to experience a cost-based charge control, within the bounds of the ‘fair bet’ principle. This is set out at [V4 §§1.98-1.99]. Essentially Openreach can expect to keep any upside from its investment up and until the charge control is put in place. There would be no retroactive attempt by Ofcom to recover the rewards for risk taking in the prospective charge control. Further details are provided at [V4 §§1.100-1.104].
78. VMO2 believes that this, as well as other narrative from Ofcom²⁶, provides ample comfort for Openreach to continue to invest, whilst Ofcom continues with its policy of seeking to address Openreach’s SMP through the stimulation of infrastructure competition and investment in alternative fibre provision. We believe it is also positive that Ofcom sets out a range of examples of how Openreach might avert the need to return to charge controlled pricing via certain voluntary commitments [V4 §1.95].

There are other potential outcomes identified too

79. The current definition of Area 2 relies on the prospective presence of at least two effective and sustainable competitors to Openreach. In particular, it should be noted that the presence of this number of competitors is currently the determining factor between the definition Areas 2 and 3, whereas the effectiveness and sustainability of the competition they may provide is the test for the existence of a, currently hypothetical, Area 1 [V2 §4.94].

²⁶ For example, Consultation, Vol.4, §1.95

80. There is, of course, another outcome to consider. At [V2 §4.95] Ofcom states that if, for example, it turns out that the wholesale market can only economically support one scale effective and sustainable competitor, then this outcome would be insufficient to remove the SMP designation from Openreach as *‘a single competitor would not be able to exert a sufficiently strong constraint on BT’*.
81. In this regard, we welcome the acceptance in Ofcom’s analyst presentation that in this different set of circumstances Ofcom would need to assess whether a different set of regulatory conditions would need to be imposed on Openreach. Leaving open the possibility that a *“light touch regulation [of Openreach] may be appropriate”*.

Geographic unit

82. Consistent with our view in WFTMR, we continue to agree with Ofcom that postcode sectors are the appropriate geographic unit. This unit of measure strikes an appropriate balance between granularity and tractability.

Three criteria test

High and non-transitory barriers to entry

83. We agree with Ofcom’s assessment of the three criteria test in the WLA market. It is right to note that barriers to entry remain high and are non-transitory. Entry and expansion in the market of WLA services is high costs, with long payback periods and subject to the risk of competing against the incumbent. BT has the market position and strategic incentive to maintain its existing market share so as to continue to benefit from the economies of scale that position currently affords it.
84. Absent the existing remedies that flowed from Ofcom’s prior findings of BT’s SMP, it seems clear that the market dynamics we observe today would not have materialised. As Ofcom notes, significant costs associated with connecting customers alongside wider barriers such as acquiring wayleaves, accessing Multi-Dwelling Units (“MDUs”) and building a scaled and skilled workforce to connect and maintain these networks will continue to be a practical barrier in the extended process of entry.
85. It is also plausible that in the medium term, the effective barriers to entry may rise still further once the migration from copper services is substantively complete. While the current phase of network rollout and end-customer acquisition appears set to continue,

and wholesale customers are likely to evaluate their intended sourcing of future WLA services, this current state of flux will likely result in a new stable equilibrium state over time. Although the timing and form of that new state is uncertain, it seems plausible that future market entry after that point could become incrementally more challenging.

A market which does not tend towards effective competition

86. We strongly agree with Ofcom's assessment that at this stage it is not possible to conclude that, absent existing WLA remedies, the market is tending towards effective competition. While there are some geographic variations of BT's market share within Area 2 it would be highly premature to assume this trend will continue
87. Throughout its market analysis Ofcom rightly identifies that competition is clearly emerging but that it not yet reached the necessary thresholds to be material and sustainable, to the extent that it could constrain the incumbent. It is our view that absent the protections afforded by Ofcom's SMP remedies, BT would have the ability and strategic incentive to undermine this nascent competition maturing.
88. As a result, we believe Ofcom ought to adopt a cautious and conservative approach to evaluating whether the market is tending this way. More concretely, we think Ofcom's framing of 'material and sustainable' competition is the right approach. In our view this means that this criterion test would effectively need to ask whether effective competition has emerged and taken root sufficiently that it will continue to be sustainable and not at risk of being undone, through any strategic behaviour by Openreach.
89. While Ofcom concludes that VMO2 already represents material and sustainable competition to Openreach as an indirect constraint, it is clear that we do not currently act as a direct constraint at all. Were we to become a direct constraint at some point in the future, all else equal, this would be expected to meaningfully increase the relative extent of the constraint we might place on BT. Ofcom already acknowledges²⁷ this possibility, and so it is embedded in its market analysis. However, in this scenario it would be important that Ofcom adopts a similar approach to benchmarking the scale of impact as it does for other competitors to BT.²⁸ I.e. it may take a non-trivial period of time to

²⁷ For example, Consultation, Vol.2, §4.59

²⁸ For example, Consultation, Vol.2, §4.60.c, where Ofcom caveats its reference to CityFibre's recent deal with Sky.

proceed from signing an agreement to make system and operational changes in a way that would start to exert any actual rather than prospective direct constraint.

Insufficiency of competition law

90. We agree with Ofcom's assessment that competition law alone is not sufficient to address potential competition concerns that result from BT's SMP, and as noted previously we agree that absent ex ante remedies, BT would have the ability and incentive to abuse its dominant position.
91. As Ofcom notes, the imposition of these ex ante remedies, alongside Ofcom's previous and continued clarity about its longer term trajectory for its regulatory framework, are conducive for investment and so itself helps fostering the growth in competitive constraints.
92. Ofcom is right to highlight that while ex post competition law enforcement has the ability to impose significant fines, it may not be able to address irreversible damage to competition that may have occurred during the forthcoming review period.
93. Ofcom also notes that²⁹:

“Second, regulation must remain effective for the review period, and ex ante regulation better enables us to do this as it can be tailored to the particular circumstances in the markets and services provided.”
94. We agree with Ofcom's sentiment, and as we discuss throughout this response we welcome that in some instances Ofcom has maintained a clear role for regulatory judgement in light of current uncertainties about how the market will evolve. However, we would still anticipate that any such tailoring ought to still be faithful to core conclusions and analysis of the TAR.
95. For example, we would be concerned if, as a result of continued incremental strengthening of the constraint that BT's competitors exert, Ofcom were to take a permissive approach to Openreach introducing commercial offers. Openreach's desire to do this would likely be significant – as Ofcom recognises throughout the consultation. As a result, having recognised the risk that BT would seek to adopt exclusionary behaviours if it were to have the opportunity absent SMP remedies, it is important that Ofcom

²⁹ Consultation, Vol.2, §4.151

remains clear that it will not grant that opportunity if competition begins to show signs of moving from prospectively to actually material and sustainable. To do otherwise would risk undermining the necessary certainty that Ofcom's approach has created thus far.

Insufficiency of competition law

96. For the reasons set out in the preceding paragraphs we agree with Ofcom's provisional conclusions that the WLA market should be defined by Area 2 and 3 in the form that Ofcom presents.

LLA

Product market

97. Ofcom proposes to define a single Leased Line Access ("LLA") product market encompassing Ethernet and WDM³⁰ services, as well as dark fibre. Ofcom excludes business grade broadband and microwave links for mobile backhaul from this market, as well as IEC.
98. We agree with Ofcom's analysis that there is scope for effective leased line supply-side substitution across bandwidths in the event of a SSNIP. We would also agree that this supply-side constraint is also feasible between active leased line services and dark fibre. However, the demand-side effect is likely to be more constrained as only a subset of leased line customers are likely to have an appetite to consume dark fibre services, and these customers are likely skewed towards higher bandwidth LLA services.
99. Ofcom notes the nascent but growing availability of Ethernet over PON services as a potential substitute for existing LLA services. Ofcom is correct to identify that while these services may not currently be suitable for all LLA customer use cases, pre-existing (and likely future) propositions on offer in the market are expected to be strong substitutes for existing LLA services; delivering many of the key services features such as symmetric and uncontended bandwidth, and are likely paired with LLA-grade service level commitments that would be expected by these customers.
100. Although the rate at which providers rollout these propositions, and the speed and extent of adoption is somewhat uncertain, it is right to include these products within the market

³⁰ Wave Division Multiplexing

at this early stage. It would seem highly plausible that such services will increasingly provide a strong and practicable substitute to a material set of existing LLA customers during the review period, especially as the maximum bandwidth and geographic availability increases.

101. We also agree with Ofcom that, due to the lack of some of the key service features such as uncontended symmetric bandwidth and LLA-grade service level commitments, business-grade broadband services are not a close substitute for most LLA customers.

Wireless, P2P Microwave and satellite

102. We broadly agree with Ofcom's assessment of each of the referenced technologies. From our perspective these would in varying degrees fulfil the role of a temporary or back-up solution, or a 'last resort' option where a fixed connection is not available and we would expect this preference is likely to be common across many users of LLA services. Given this preference resulting from the relevant drawbacks of each technology we would agree that these services are unlikely to constrain a hypothetical monopolist SSNIP.

Geographic markets

103. In TAR, Ofcom proposes to depart from its WFTMR approach to geographic market definition, resulting in an Area 2/3 boundary for LLA that is distinct from the equivalent WLA markets. Ofcom's justification for this divergence is the entry (and success) of LL-only providers during the previous five year period as well as the lower propensity of altnets to enter the LLA market, despite having deployed network to compete in the WLA market.
104. We welcome that Ofcom's analytical framework takes account of the degree to which LLA providers exert, or have the potential to exert, material and sustainable constraints on BT; this is a positive parallel with Ofcom's approach in the WLA market. We agree with this approach, as mere presence (or planned presence) alone is not sufficient to form a view on the degree of competitive constraint exerted on BT. Likewise mere presence provides limited comfort about the sustainability of that actual or prospective competition over the market review period.
105. As a result of this framework Ofcom determines a set of LL-only providers that exert a material and sustainable constraint on BT alongside VMO2 and CityFibre (that respectively exert, or the potential to exert a constraint) as multi-service networks.

106. As a result of this identification approach, Ofcom appears to place limited weight on:
- The prospects of other altnets, (Zoomm, Netomnia, brsk and Allpoints) that have entered the LLA market but only to a limited extent at this stage;
 - The potential for other altnets, which have a growing presence in the WLA market but have yet to develop concrete plans to enter the LLA to do so during the review period; or
 - The prospect that future consolidation, either by LL-only providers or Multi-Service Networks (“MSNs”) to introduce or strengthen LLA service competition across these other networks.
107. We recognise Ofcom will likely have made use of its formal information gathering powers and then applied its regulatory judgement in seeking to form a view on the prospects of the actors listed above having an impact on the dynamics of the LLA market.
108. Nevertheless, given the dynamics of the market during the WFTMR review period we might reasonably expect that some altnets may have longer-term plans to enter the LLA market but that this has not been an initial priority during the initial phases of build out and entry into the WLA market. There may be a variety of factors that could explain the delay to acting on this ultimate intent:
- An initial focus on mass market WLA rollout, subsequently enabling better network economics enable competitive commercial offers after network reach has been developed;
 - A focus/pressure exerted by initial investors to meet penetration targets centred on WLA customers, to support ongoing funding;
 - Additional supply chain complexity for diverse Customer Premises Equipment (“CPE”) or network elements, or incremental network investment requirements to support requirements for resilience or diversity beyond those required for WLA market entry; or
 - A recognition that the scale, density or maturity of technical and customer support may be first acquired from WLA market entry before seeking to expand to LLA services.

109. It would seem quite likely that many altnets may have LLA entry as a potential longer-term goal to provide incremental revenues, but that these have yet to be initiated or even formalised given the early stages of their investments.
110. We also note, for example, that Ofcom lists Netomnia in its WLA analysis as one of a set of altnets included in its analysis of Area 2. Ofcom's assessment is that Netomnia has the potential, perhaps through some form of consolidation, to contribute to the material and sustainable competition exerted on BT during the market review period. It is also listed in Ofcom's analysis as a nascent entrant in the LLA market.
111. In its analysis Ofcom does not seem to place material weight on the prospect that LL-only providers or MSN providers might bolster or introduce incremental LLA constraints on BT in geographies beyond their existing or planned networks as a result of consolidation activities.
112. Although the precise dynamics of the market during the market review and inherently uncertain, Ofcom's narrower approach to identifying material and sustainable competitors in the LLA market seems in tension with its approach to the WLA market. This tension is more pronounced where Ofcom seems to draw on examples of actors that have the potential to exert constraints on BT in the WLA market by virtue of their potential role in market consolidation, but this same prospect is not reflected in the LLA market. We believe it would be better if Ofcom acted symmetrically in this regard.
113. In our view this apparent divergence in the methodology of identifying relevant competitors may have a material impact on the resulting boundary between Area 2 and 3 in the LLA market. This may be significant given Ofcom's approach to LLA Area 3 remedies in TAR, as we discuss in the relevant section below. We are mindful that Ofcom's current approach may be a self-fulfilling prophecy as it has the potential to limit the ability of altnets in LLA Area 3 to enter that market. Similarly, this approach may undermine the ability of LL-only providers or MSN providers introduce LLA service provision if they were to consider consolidating an altnet that is located in LLA Area 3 geographies but that is not currently active in that service market.
114. Given these uncertainties and the potential for consolidation to be a material features of these markets during the review period, we would encourage Ofcom to ensure that its market analysis and resulting remedies do not have the effect of undermining or limiting the scope for competition to emerge during the review period.

IEC

Product market

115. We agree with Ofcom's proposal to define a single product market for Inter-Exchange Connectivity ("IEC"), incorporating all bandwidths and dark fibre. Likewise we would agree that while IEC and LLA services use similar products to support these services.
116. The potential suppliers of these services do differ, and it would likely be complex for an LLA supplier that only provides end-user site connectivity to rapidly enter the IEC market to compete. As a result we agree with Ofcom's assessment that IEC would currently seem to be distinct from LLA.

Geographic market

117. We agree with Ofcom's proposal to define each BT exchange as a separate market, and for the reasons Ofcom notes, we see little practical or analytical benefit in seeking to adopt a more complex route-by-route approach.

Three criteria test

118. We would agree with Ofcom's assessment that there are high and non-transitory barriers to entry in the IEC market. Any pre-existing barriers that might otherwise make significant entry difficult will only be compounded by BT's forthcoming exchange closure programme.
119. Ofcom notes that, in the future, PIA may have a greater role in enabling more CPs to connect exchanges. Although Ofcom finds limited evidence of entry or exit from the IEC market at individual exchanges since 2021, it is possible that altnet consolidation during the market review period may stitch together networks in a way that allows these combinations to link exchanges, increasing IEC supply at certain exchanges. However, clearly this would take time and would be dependent on the specific entities that might combine so it is not practicable to consider this potential prospectively.
120. For the reasons already noted, especially the imminent exchange closure programme, we agree the market is not tending towards effective competition. Likewise competition law is not sufficient given IEC represents a critical input for CPs to backhaul traffic from their networks and BT would have the ability to do significant competitive harm to the market which ex post competition law would likely be too slow and/or insufficient to fully mitigate.

SMP assessment

121. We agree with Ofcom's provisional finding, consistent with WFTMR, that BT has SMP at BT Only and BT+1 exchanges and no CP has SMP at BT+2 exchanges (including exchanges newly classified as BT+2 in TAR).

3. Non-pricing remedies

Copper retirement

Selection of Option 1 of the second threshold and interaction with network competition

122. We broadly agree with Ofcom's approach of not defining a third threshold criteria in TAR.
123. It is reasonable to recognise that Openreach is still at the initial stages of a long-term programme to switch off its legacy copper network. In the process it will gather evidence and experience from areas of early FTTP deployment as well as the exchange closure migration process to understand which mechanisms may be required to deal with the long-tail of premises that are currently supplied with copper services that may be commercially or technically infeasible to supply with fibre in the long-term.
124. As a result, it would seem legitimate to provide Openreach with operational flexibility to eventually make rational choices in these limited circumstances, whilst ensuring that any impacted customers are not harmed.
125. Given the long timeframes, it is quite plausible that alternative technological solutions (e.g. LEO³¹ satellite, FWA³² or even simply high-quality 5G Standalone mobile) may provide an effective solution to back-fill these exception cases.
126. Depending on the scale and the circumstances, there may be a role for public policy initiatives to help with the issue.
127. As a result, we agree with Ofcom's decision not to define a third criteria at this stage. Further analysis will allow more data to be available on the scale of the challenge that are expected to remain and the emerging solutions available to address them.
128. Given that context, it is also important to recognise that copper switch-off will represent an increasingly important issue when it comes to the behaviour of a dominant provider. It

³¹ Low Earth Orbit

³² Fixed Wireless Access

has every incentive to use these processes to exclude its rivals and retain that dominant position into the new technology.

129. The copper retirement programme provides a focal point of activity for Openreach to retain its dominant position, by either:
- Targeting its switch-off programme to lock-in as much BT copper to BT fibre migration in the absence of altnets in an area; or
 - Create migration propositions, with the justification of implementing copper retirement, that mean that the contestable market for Openreach's competitors is reduced.
130. Dealing with targeting first, VMO2 would like to see a lot more specificity from Ofcom on its future monitoring of Openreach's exchange closure strategy, to ensure that the strategy is not overly focussed on securing the retention of customers in areas that are not served (or have only limited service availability) from altnets today.
131. Second, we would be very sceptical about the justification for offers to ISPs to force migrations to happen, especially if these were to be front-loaded in this long-term process. Indeed, the real issue here is likely to focus on enabling engagement with customers, not engagement with (or commercially incentivising) ISPs.
132. For example, whilst Ofcom says that PSTN³³ switch-off is a separate issue at [Vol.3 §], even if ISPs have migrated their customers to IP³⁴ voice on copper, they still would need to get those customers to move from copper to fibre – including a home visit and likely drilling a hole in the side of their house.
133. It is already clear that there are some real practical considerations to think about with copper retirement. What we can already observe with PSTN switch-off is instructive. There are a significant number of customers who will be difficult to engage in the programme, resistive to change or whose personal circumstances mean that scheduling a technician's visit will be challenging.
134. Given that a large proportion of this customer cohort sit within BT Retail, this suggests to VMO2 that it might only be justifiable to turn to incentivising ISPs to base migrate, after

³³ Public Switched Telephone Network

³⁴ Internet Protocol

BT's own retail brands have taken initiative to migrate all of its own retail base, ie when it is the long-tail of bases of the ISPs that are standing in the way of copper retirement ultimately being achieved and concluded.

Exchange closure

135. We recognise Ofcom's desire to allow commercial negotiations to continue to seek to find a workable solution to issues that arise through exchange closure.
136. Given the scale, complexity and the diverse challenges facing Openreach customers Ofcom should closely monitor the development of these negotiations and stand ready to help shape and influence discussions as appropriate, in a way that may avoid issues devolving into formal dispute proceedings that would likely be counterproductive for all stakeholders.
137. For the avoidance of doubt, we fully support the comments submitted by UKCTA on this topic.

PIA

138. We agree with Ofcom's proposal to retain a specific network access remedy in the form of PIA. PIA is a vital product to continue to grow and sustain network-based competition in the context of BT's SMP within the Physical Infrastructure market. Given the current circumstances – in particular, the lack of infrastructure competition – it is essential to maintain these obligations. Relying solely on the general access obligations would be insufficient, as it would fail to ensure, and would not provide clarity and certainty to all stakeholders, especially infrastructure access seekers; nor would it enable the further specific PIA obligations to be imposed that have been important to PIA's adoption.

Network Adjustments and Ancillaries

139. We agree with Ofcom that Network Adjustments obligations are justified and necessary. Network adjustments have been an important component of the product and likely a material contributor to the product's successful adoption.
140. We agree with Ofcom's analysis that Openreach should continue to be required to provide the range of ancillary services identified; these are important and necessary enablers for access seekers to deploy their networks using PIA.

Reference offer (“RO”) and internal reference offer (“IRO”)

141. We agree that the RO and IRO continue to play an important role in seeking to demonstrate BT’s adherence to its No Undue Discrimination obligation, by identifying areas of non-equivalence.
142. We would welcome continued vigilance of the accuracy and completeness of the IRO. At times, it can be challenging for access seekers to satisfactorily scrutinise the content of the IRO. This is due to the inevitable information asymmetry of access seekers not knowing Openreach’s own internal processes for consuming its own infrastructure inputs. Equally, it is also possible that Openreach may not have a full understanding of how seemingly de minimis differences between PIA and its own use of infrastructure could impact on PIA users. During the WFTMR period, access seekers (and Openreach itself) have identified capabilities or on-going initiatives where differences in processes or access to information systems are emerging.
143. It is important that measures are taken to avoid these divergences occurring, as even a short time period of differential processes or access to data might confer material advantage to consuming BT’s infrastructure. It may be that there is a valid role for the Openreach Monitoring Unit³⁵ to begin to take an active, or even proactive, role to understand if Openreach is developing internal initiatives that have the potential to adversely affect PIA users if they were not to be made equivalently available to them.

Contract lengths and new developments

144. We welcome Ofcom’s observation that Openreach is considering the introduction of contract lengths longer than five years. While we (and we believe wider industry) were not aware that this was under active consideration, it is a positive development.
145. Given the nature of the product and the associated long-lived nature of the investments made when using PIA, it would be a positive development if Openreach were to introduce minimum contract lengths that are more consistent with Ofcom’s framing of PIA as a key remedy in its market regulation and the greater certainty this would provide to investors. It would clearly be problematic if uncertainty were to emerge about the longer-term availability of PIA, or if there was the potential for terms of access to be varied. This uncertainty would clearly place access seekers at a material disadvantage in

³⁵ Where necessary including Ofcom’s formal information gathering powers.

terms of the value of assets for their investors (or potential investors), as well as the ability to attract wholesale (or even end) customers to their networks.

146. While Ofcom cannot unduly fetter its discretion and so needs to evaluate the physical infrastructure market as part of its five-year market review cycle, we would welcome Ofcom providing greater clarity about the central role that PIA plays in its strategic framework for the physical infrastructure and associated downstream markets.
147. We agree that it is important that Openreach ensures that information on the availability of infrastructure to serve new developments is provided in a timely manner. We are aware that historically Openreach has sought to improve its records in this area.
148. There is a clear challenge with information asymmetry; whereby Openreach has visibility of planned new infrastructure associated with its ongoing FTTP network deployment ahead of making infrastructure 'live' and available for PIA users to consume. This clearly enables a material first-mover advantage. While we recognise seeking to address, or narrow, this asymmetry is complex³⁶ we would welcome further consideration of what practical steps could be taken to level the playing field.

Market consolidation

149. We strongly support Ofcom's view³⁷ that it is:

"[...] important that PIA processes and contractual requirements work smoothly and efficiently in [market consolidation events] and do not act as a barrier to consolidation by unduly adding complexity or delay to the process."

150. While Openreach likely has the incentive and the ability to intentionally frustrate market consolidation activities that include assets deployed using PIA; to date we have not experienced this. Instead, we would anticipate it is more likely that Openreach could inadvertently have this effect while pursuing broader good faith objectives with the PIA product.
151. In our view industry is currently observing such a scenario at the time of writing this consultation response in the form of Unauthorised Use reforms. While it is welcomed that Openreach is seeking to adapt PIA terms to better meet the challenges industry is

³⁶ Changes to the information available could raise challenges surrounding commercial confidentiality as well as the risk that planned infrastructure is ultimately not pursued.

³⁷ Consultation, Vol.3, §5.67

collectively facing, and it is also fair that Openreach has the opportunity to recover its efficiently incurred costs, it is also important that Openreach has appropriate regard to the risk that its initial proposals could stymie consolidation. Openreach's initial, uncapped and material, charging proposals appear to create significant jeopardy for the acquirer, if material Unauthorised Use³⁸ is subsequently uncovered, and it is not clear that Openreach's proposed charging structure is closely aligned to cost causation. The potential risk of significant charges above and beyond back rental and interest, would need to be accounted for in the transaction, potentially causing additional friction and/or suppressing effective asset prices.

152. While the specific scenario of Unauthorised Use reforms may be concluded by the time of the TAR Statement, it illustrates the concerning scenario where Openreach seeks, in good faith, to reform the terms of the product (to better enforce the PIA contract and recover its costs)
153. We would also welcome Openreach reviewing its PIA novation process, to shorten timeframes, simplify or modernise administration, and provide greater certainty about timeframes for completion. In our experience the timeframes involved in a PIA novation can vary materially, which can add additional complexity to choreographing the often-complex set of activities associated with a transaction. While these processes may have been based on existing processes for other active wholesale services, that may not mean they are best suited for PIA, and the potential for elevated volumes of activity if market consolidation were to occur.

Leased Lines

154. We agree with Ofcom's proposal to not require Openreach to offer Dark Fibre Access ("DFA") in LLA Area 2. As Ofcom notes, the availability of such a product is likely to undermine the growth in material and sustainable competition as customers are likely to have an incentive to consume Openreach's regulated service in preference to those offered from competing networks.
155. As noted in our comments on Ofcom's LLA market analysis for Areas 2 and 3, we are concerned that Ofcom's identification criteria may have overstated the scale of Area 3. Further analysis and a greater weight on the prospect for market entry via consolidation

³⁸ Given the definition of Unauthorised Use may be as a result of inadequate record keeping or deficient processes by the acquiree, rather than intentional.

or otherwise may result in a LLA Area 3 that is more closely aligned with Ofcom's WLA Area 3.

156. We believe there is a material risk that if Area 3 is overstated then the availability of DFA in these misclassified geographies may undermine the ability for material and sustainable competition to develop, due to the availability of a DFA remedy. In other words, Ofcom risks creating the self-fulfilling prophecy that we referenced in response to its market analysis.

Geographic discounts and other commercial terms

Presumed prohibition on geographic discounts

157. We continue to support Ofcom's proposals to impose a presumptive prohibition on geographic discounts on Openreach, unless Ofcom explicitly consents. While this presumption is valid and important, it is also reasonable and pragmatic that Openreach has the ability to request permission from Ofcom to undertake such a discounting approach if the justification can be adequately evidenced.

Prohibition scope

158. We welcome Ofcom's refinements to these prohibition conditions, namely that the scope will be amended to incorporate WLA connections charges and retail inducements offered by Openreach directly to end users. These are entirely reasonable amendments to the regime and reflect the fact that under WFTMR, Openreach had the incentive and ability to seek to circumvent the prohibition on geographic rental discounts by seeking out other mechanisms to achieve broadly similar effects through alternative means.
159. As Ofcom notes, connection charges are an important component of cashflows for altnets and ISPs and Openreach has an incentive to utilise its incumbency advantage when competing with altnets, as it has demonstrated. At this point in the cycle, where altnets are trying to penetrate the networks that have already been built, the cashflow hit of having to remove connection charges to compete with targeted Openreach connection discounts, would make creating sustainable competition more difficult than it already is.
160. As the market has observed, Openreach has recently trialled geographically targeted retail inducements. If successful and without a presumed prohibition in place it would be logical and expected that Openreach would continue this activity and likely expand and

deepen the inducements on offer. While such offers to date do not seek to favour any one particular Openreach WLA customer, it did utilise Openreach's incumbency advantage by leveraging existing ISPs brands and the large end-user customer bases already present on its network.

161. We also welcome Ofcom's clarification regarding geographically defined migration credits and the broad definition it applies. However, we would encourage Ofcom to go further and acknowledge that while the list of geographically targeted mechanism it has identified in TAR is broader, it is broadening the scope to include activities that Openreach has undertaken that were not explicitly included in WFTMR. It would be regrettable if during the review period Openreach were to introduce a range of other geographically targeted incentive mechanism that Ofcom had not explicitly highlighted in TAR, but had a comparable effect. We note a helpful parallel in Ofcom's approach to recognising a potential risk that it is not possible to pre-empt all forms of terms that might be problematic; in its commentary regarding terms that are not conditional.³⁹ We would encourage Ofcom to consider providing a similar acknowledgement that it is not feasible to identify all specific forms of geographically targeted mechanisms that might present a competition concern.

Limitation on competition concerns

162. Ofcom notes that its primary concern relates to new network build by altnets and it seeks to draw a distinction between VMO2's existing network footprint and areas of new network build by us.⁴⁰
163. The implication of Ofcom's statements is that it may be relatively less concerned about Openreach proposals to undertake geographic discounting in areas that specifically target VMO2's pre-existing network. This stance is potentially concerning and the signal and incentive given to Openreach to pursue such a pricing strategy may significantly undermine the development of material and sustainable competition.
164. It is important to note that VMO2 is making significant investments to overlay our entire HFC network with XGS-PON, which by definition encompasses our existing footprint. [X]. As a result, we would consider our existing footprint, in the context of our FTTP

³⁹ Consultation, Vol.3, §9.96

⁴⁰ Consultation, Vol.3, §§9.11-12

network overlay, to have the same characteristics that Ofcom associates with new network build by altnets.⁴¹

165. The same considerations apply to investment incentives for VMO2 as they do for other altnets, just with a different scale. The cashflows from already penetrated areas are used to fund the construction of new network, or the overlay of FTTP. Targeted prices from Openreach that would reduce VMO2's cashflow would have a similar detrimental effect on the pace of our investment – negatively affecting competition.
166. [X].
167. In its market analysis Ofcom identifies VMO2 as, currently, the only provider to offer material and sustainable competition to Openreach. It seems clear that Openreach will have the strongest incentive to seek to limit the extent of that constraint and to avoid it growing strong. A key mechanism to strengthen VMO2's constraint on Openreach is via successful entry into the wholesale market.
168. As Ofcom has now recognised with regard to geographic connection discounts and retail inducements, Openreach would have the ability and incentive to constrain VMO2's entry into the wholesale market using mechanisms available to it. We would therefore encourage Ofcom to reconsider its view that it would be less likely to have a competition concern if Openreach were to propose to adopt geographic discounting in our pre-existing footprint areas. In our view Ofcom's current stance risks limiting one of the key mechanisms for network competition to grow during the review period. VMO2 sees no lawful basis to treat its network footprint, which is being upgraded to FTTP and seeking to enter the wholesale market, differently to the networks of altnets in Ofcom's analysis.
169. Finally, we note that Ofcom is now signalling that if only one effective and sustainable competitor exists at the end of the period 2026-31 that a different set of SMP conditions may apply⁴². That is the appropriate juncture to consider this circumstance. Otherwise, should Openreach be allowed to geographically target some of the VMO2 footprint from 2026, it could make those areas less attractive for subsequent overbuild by altnets later in this market review period.

⁴¹ Consultation, Vol.3, §9.11

⁴² For example, Vol.4, §1.95

Other commercial terms

170. We strongly support Ofcom's proposals to retain and refine the obligations imposed on Openreach regarding its approach to Other commercial terms. Ofcom's proposals are necessary and proportionate given Openreach has the ability and incentive to seek to constrain the emergence of material and sustainable network competition during the market review period.
171. We agree with the practical changes Ofcom has proposed to make to the process of reviewing such schemes, in light of the experience of Equinox 1 and Equinox 2.
172. We also welcome the additional clarity Ofcom provides in relation to terms that seek to significantly accelerate FTTP migration as well as its views regarding the potential concerns that might arise from terms that are not conditional.

Competition concern and the need for ex ante regulation

173. We continue to strongly agree that ex ante regulation is necessary to address Ofcom's competition concerns. Openreach has the ability and incentive to seek to induce loyalty of its wholesale customers in a way that could damage the development of material and sustainable competition for the long-term.
174. With competitors rolling out network, seeking to attract new customers and in the midst of technology migration activities, it is clear that this market review is a critical juncture that will likely define the long-term evolution of network competition. It is clear that ex post competition law would be insufficient to redress the likely damage that could be inflicted by Openreach on the developing market. It is also clear that wider general SMP remedies are not sufficiently well targeted to address this concern. As a result, Ofcom's proposed remedies are well targeted and proportionate to the concern identified.
175. We agree with Ofcom's proposal to extend the notification period from 90 days to 120 days. Given the experience of Equinox 1 and Equinox 2 this slightly longer time window will give more clarity and certainty to all stakeholders, including Openreach, by reducing the likelihood that the review period needs to be extended at short notice.

Arrangements that deter switching volumes to rivals

176. We continue to agree with Ofcom that it is right to be mindful that competition concerns could arise if Openreach were to introduce commercial arrangements that explicitly or implicitly deter ISPs from switching volumes to rival networks.

177. In the event that Openreach intends to introduce such schemes in the review period, Ofcom is right to expect that Openreach explain its own assessment of the expected impact on its competitors as well as why such schemes are necessary, given Ofcom's proposals in TAR have a wide range of objectives that seek to support Openreach's incentives to rollout network and to transition from legacy networks to FTTP.

Commercial terms that significantly accelerate migration to FTTP

178. Ofcom is entirely correct to recognise that there is a significant risk that Openreach has an incentive to seek to encourage a significant acceleration of the migration of ISP customer bases to FTTP.

179. As Ofcom notes, while other networks are able to compete to win Openreach-based FTTP customers in the future, the barriers to achieve this, all else equal, would be higher than seeking to compete for customers on legacy Openreach services. There would clearly be incremental disruption for end-users in going through multiple changes to their physical connections, which may be off-putting to some customers in a way that either they or their ISP would be incentivised to avoid.

180. We, like Ofcom, recognise that Openreach has legitimate and good faith incentives to migrate customer bases from its legacy network to FTTP to unlock cost savings and to support its FTTP investment case. However, we also agree with Ofcom that these legitimate interests could result in incentive mechanisms to ISPs that raise significant competition concerns. Ofcom is right to recognise that base migration incentives linked to certain time windows are likely to be damaging to the growth of network competition.

181. During the market review period, Openreach's ISPs are likely to have the opportunity to engage with various competing wholesale providers to enable them to migrate customers from Openreach's legacy technology to FTTP. It is likely that these credible opportunities will grow during the market review period, if the anticipated process of market consolidation occurs. If market consolidation does occur this will take time. Equally, it would subsequently take time for those combined entities to engage with and negotiate agreements with ISP as well as make necessary system and operational changes to migrate customers.

182. If Openreach were to seek to aggressively secure surges in migrations early in the period, or over a comparatively short time window, this would likely forestall these opportunities and remove the optionality for ISPs to seek attractive commercial migration deals with Openreach's competitors. This would jeopardise a once in a generation opportunity.

183. Ofcom is right to recognise that Openreach could construct migration offers to create a veil of openness and destination-network neutrality, while in reality this could be largely a charade. If competing agreements are not yet in place to make choices other than Openreach practicable, then offers early in the review period and/or of a time-limited nature would be concerning.
184. We welcome Ofcom explicitly acknowledging this risk, and highlighting the existing notification and review regime is the appropriate vehicle to analyse such schemes. Based on current experience, the migration of customers from copper based voice services to fibre based voice services is going to take a long time. VMO2 would be very sceptical of Openreach migration offers that came into the market at a point where BT still had a large base of voice-only customers on copper (ie, where it is obvious that third party WLA customers are not the binding constraint on the date of copper switch-off).

Arrangements that give preferential treatment targeted at large providers

185. We agree with Ofcom that it would be concerning if Openreach were to seek to introduce commercial terms that gave preferential treatment to certain types of wholesale customer, particularly its largest ISPs. Tying in a small number of key ISP would deprive Openreach's competitors of the scale economies needed to effectively compete and so exert a constraint.
186. While Ofcom notes that existing non-discrimination obligations would prevent undue discrimination, it is important to recognise that there may be certain systematic differences between larger and smaller customers (or differences within its larger customers) which Openreach could seek to exploit in the construction of offers. For example, if Openreach were to target deeper discounts on specific products or services that a subset of its ISPs disproportionately purchase. In our view this would be especially concerning if this were to occur where there is evidence that an ISP is working to establish arrangements with a competitor or is embarking on a process of migrating volumes and Openreach were to introduce schemes which could be seen as actively undermining or dampening such an initiative.

Terms which may have a signalling effect

187. We agree with Ofcom that it is right to be concerned about terms that do not currently impose restrictions on use of rival networks currently, but may do so in the future.

188. It would seem rational that Openreach may be relatively content to see a degree of network competition emerge in a way that may justify its own deregulation, but that it would be incentivised to vigorously compete to avoid credible, material and sustainable competition emerging in a way that would exert a constraint.
189. Given their nature, it is likely to be challenging to explicitly identify this form of signalling. It is possible the effect may result from the sequential nature of offers, whereby the cumulative impact of offers create this signal. As a result, it is likely that Ofcom would need to be mindful of the potential effect and to seek to use its information gathering powers to understand if such hypothetical terms have had an indirect effect on its customers' behaviour, or strategic planning. Equally, Ofcom may need to be mindful of the cumulative impact of various commercial terms during the review period rather, as opposed to reviewing each commercial initiative in isolation.

Terms that are not conditional

190. We welcome Ofcom's new clarification and guidance that it is conceivable that Openreach could propose to introduce commercial terms that do not have the specific features of being conditional on the range and/or volumes of services purchased, yet could still create the same competition concerns as terms that do have these features.
191. Ofcom notes that in such a scenario it could consider using its direction making powers to modify such terms. In our view this is pragmatic and provides helpful clarity for Openreach in the event it were to seek to recreate the effect of a certain form of problematic conditional terms whilst avoiding the specific criteria that would invoke the notification and review regime for those forms of terms.
192. Clearly the OCT notification and review process would not apply in these scenarios. In the event such a scenario were to arise and Ofcom found itself considering whether certain terms had the potential to be problematic; we would encourage Ofcom to consider gathering evidence, whether using formal powers or otherwise, from relevant stakeholders including Openreach's customers and competitors to help inform its considerations.

4. Consultation question responses

193. Below we provide our responses to Ofcom's consultation questions. These should be read in conjunction with our wider response, where applicable, as well as the submissions from the Towerhouse PIA group and UKCTA⁴³, of which VMO2 is a member.

Volume 2, Market definition and SMP assessment

Question 2.1: Do you agree with our provisional conclusion on physical infrastructure product market definition? Please set out your reasons and supporting evidence for your response.

Yes. We agree with Ofcom's provisional conclusion on the physical infrastructure product, incorporating physical infrastructure deployed for and used to support fixed elements of telecoms networks, such as ducts, poles and chambers. We also agree that non-telecoms and wireless infrastructure are correctly identified as weak substitutes and should be excluded, as they are fraught with complexities and offer only a weak indirect constraint at best.

Question 2.2: Do you agree with our provisional conclusion on physical infrastructure geographic market definition? Please set out your reasons and supporting evidence for your response.

Yes. We strongly agree with the proposal to define a single, nationwide geographic market. The ubiquity of Openreach's network is a critical factor, as access seekers require flexibility and optionality in their build plans. A reduction in ubiquity disproportionately reduces efficiency and undermines the ability to compete. [3<].

Question 2.3: Do you agree with our provisional conclusion on the application of the three criteria test to the physical infrastructure market? Please set out your reasons and supporting evidence for your response.

Yes. The market clearly exhibits high and non-transitory barriers to entry, a conclusion reinforced by our own increasing use of PIA over time. The market is not tending towards effective competition, as switching costs for existing networks are prohibitive and the prospect

⁴³ UK Competitive Telecommunications Association

of new competitive infrastructure emerging is remote. Competition law alone would be insufficient, as the growth in network competition would not have been possible without the ex ante intervention that specified the PIA product and provided long-term certainty for investors.

Question 2.4: Do you agree with our provisional finding on SMP in the physical infrastructure market? Please set out your reasons and supporting evidence for your response.

Yes. We agree with the finding that BT has SMP. Constraints from direct competition, indirect competition, potential entry, expansion, or supply-side substitution are not sufficient to constrain BT. Equally, countervailing buyer power is not an effective constraint given high switching costs.

Question 2.5: Do you agree with our provisional conclusions on product market definition for WLA? Please set out your reasons and supporting evidence for your response.

Yes. We agree with the proposal to define a single focal product for the WLA market. The material economies of scope in FTTP network deployment mean there is no clear and consistent distinction between different speed tiers or product features. Wireless technologies and leased lines are correctly identified as weak substitutes and sit outside the relevant market.

Question 2.6: Do you agree with our provisional conclusions on geographic market definition for the wholesale local access market? Please set out your reasons and supporting evidence for your response.

Yes, we agree with the proposed Area 2/3 geographic market definitions and support the analytical approach. We welcome the recognition that market consolidation is a foreseeable and material feature of the review period and support the cautious approach of not pre-judging outcomes. The analysis correctly identifies that while VMO2 is a material constraint, other altnets are at a more nascent stage and may become a constraint through growth and/or as a result of consolidation. This provides vital long-term certainty for investors.

We would also reiterate our views expressed in pre-consultation submissions regarding the importance of, and factors that impact on, the materiality and sustainability of competition, which we believe are broadly reflected in Ofcom's analytical approach to these markets in TAR.

Question 2.7: Do you agree with our provisional conclusion on the application of the three criteria test to the wholesale local access market? Please set out your reasons and supporting evidence for your response.

Yes. The WLA market exhibits high and non-transitory barriers to entry, including the high costs of customer acquisition and connection. We strongly agree that the market is not yet tending towards effective competition; it is premature to assume current trends will continue, and absent regulation, BT would have the ability and incentive to undermine nascent competition. Consequently, *ex post* competition law would be insufficient to redress the likely irreversible damage inflicted by Openreach on the developing market.

Question 2.8: Do you agree with our provisional findings on SMP in the wholesale local access market? Please set out your reasons and supporting evidence for your response.

Yes. For the reasons set out in the preceding questions, we agree with the provisional conclusion to define the WLA market by Area 2 and Area 3 as proposed.

Question 2.9: Do you agree with our provisional conclusions on product market definition for leased lines? Please set out your reasons and supporting evidence.

Yes. We agree with defining a single Leased Line Access (LLA) product market encompassing Ethernet, WDM, and dark fibre, given the potential for supply-side substitution. We also agree that emerging Ethernet-over-PON services should be included, while business-grade broadband and various wireless/satellite technologies are correctly excluded as they are not close substitutes.

Question 2.10: Do you agree with our provisional conclusions on geographic market definition for the leased line access market? Please set out your reasons and supporting evidence for your response.

We have concerns with Ofcom's provisional conclusions. While we welcome the analytical framework, the approach to identifying competitors in the LLA market appears inconsistent with the WLA market analysis, potentially placing insufficient weight on the prospect for consolidation to introduce or strengthen LLA competition. This tension in methodologies may result in a mis-specified and overly broad Area 3, which could undermine the very emergence of competition it seeks to foster. In the LLA we encourage Ofcom to adopt a similar approach to applying its analytical framework as it has in the WLA.

Question 2.11: Do you agree with our provisional conclusion on the application of the three criteria test to the leased line access market? Please set out your reasons and supporting evidence for your response.

Question 2.12: Do you agree with our provisional findings on SMP in the leased line access market? Please set out your reasons and supporting evidence for your response.

VMO2 has no comments on these questions at this time.

Question 2.13: Do you agree with our provisional conclusions on product market definition for the inter-exchange connectivity market? Please set out your reasons and supporting evidence.

Yes. We agree with the proposal for a single product market for IEC and that it remains distinct from the LLA market, given the services' different purposes and the differing set of potential suppliers.

Question 2.14: Do you agree with our provisional conclusions on geographic market definition for the inter-exchange connectivity market? Please set out your reasons and supporting evidence.

Yes. We agree with defining each BT exchange as a separate geographic market and see little practical benefit in a more complex route-by-route approach.

Question 2.15: Do you agree with our provisional conclusion on the application of the three criteria test to the wholesale inter-exchange connectivity market? Please set out your reasons and supporting evidence for your response.

Yes. The market has high and non-transitory barriers to entry, which will likely be compounded by the exchange closure programme. The market is not tending towards effective competition, and competition law is insufficient given that IEC is a critical input where BT could do significant competitive harm.

Question 2.16: Do you agree with our provisional conclusions that BT has SMP at BT Only exchanges and BT+1 exchanges, but not at BT+2 exchanges for the wholesale IEC market? Please set out your reasons and supporting evidence.

VMO2 has no comments on these questions at this time.

Volume 3, Non-pricing remedies

Question 3.1: Do you agree with our proposed approach to supporting copper retirement? Please set out your reasons and supporting evidence for your response.

Broadly, yes. We agree with not defining a third threshold at this stage, allowing Openreach operational flexibility to deal with the long-tail of hard-to-reach premises. However, the copper retirement programme presents a significant risk of anti-competitive behaviour. We would like to see more specific monitoring of Openreach's strategy to ensure it does not target areas to lock-in customers where altnet choice is limited.

We would also be sceptical about the justification for early, forced migration offers to ISPs, which appear designed to reduce contestability rather than solve genuine customer engagement challenges.

Copper retirement is likely to be a long and complex programme of work and Ofcom should continue to analyse the intended approach as it develops, cognisant of the potential impacts on end users, wholesale customers as well as Openreach's rivals.

Question 3.2: What are your views in relation to our initial thinking on how we might identify excluded premises? Please set out your reasons and supporting evidence for your response.

VMO2 has no comments on these questions at this time.

Question 3.3: Do you agree with our proposed approach to exchange exit? Please set out your reasons and supporting evidence for your response.

Yes. While we recognise the desire to allow commercial negotiations to find solutions, we urge Ofcom to monitor these closely and stand ready to help shape discussions to avoid issues escalating into counterproductive formal disputes.

We also highlight our support for the views expressed in the response submitted by UKCTA.

Question 3.4: Do you agree with our proposed general remedies? Please set out your reasons and supporting evidence for your response.

Yes.

Question 3.5: Do you agree with our proposed specific remedies in the PIA market? Please set out your reasons and supporting evidence for your response.

Yes. Retaining PIA as a specific network access remedy is vital for network-based competition. We agree with the continued obligations for Network Adjustments and ancillary services.

Crucially, we strongly support the view that PIA processes must not act as a barrier to market consolidation. Openreach must review its processes, such as novation, to ensure they are smooth and efficient and do not inadvertently stymie transactions.

We welcome the consideration of longer contract lengths to provide greater certainty to investors and Ofcom should be mindful that existing contract lengths are another example of Openreach's inherent incumbency advantage. As noted in response to Q3.3, we would also highlight our strong support for comments provided in the UKCTA submission. We would encourage Ofcom to provide as much long-term clarity as possible with regard to the availability and intended form of PIA, in the context of its broader strategy for regulating relevant markets.

Question 3.6: Do you agree with our proposed specific remedies in the WLA markets? Please set out your reasons and supporting evidence for your response.

VMO2 has no comments on these questions at this time.

Question 3.7: Do you agree with our proposed specific remedies in the LLA markets? Please set out your reasons and supporting evidence for your response.

We agree with not requiring DFA in LLA Area 2, as this would undermine the growth of competition. However, this is conditional on the geographic market being correctly defined. We are concerned that if LLA Area 3 is mis-specified and drawn too broadly (as per our response to Q2.10), the availability of a DFA remedy in those potentially misclassified geographies may undermine the ability for material and sustainable competition to develop, creating a self-fulfilling prophecy.

Question 3.8: Do you agree with our proposed specific remedies in the IEC markets? Please set out your reasons and supporting evidence for your response.

VMO2 has no comments on these questions at this time.

Question 3.9: Do you agree with our proposed approach to geographic discounts and other commercial terms? Please set out your reasons and supporting evidence for your response.

Yes, we strongly support the proposed remedies. The presumptive prohibition on geographic discounts is critical, and we welcome its extension to connection charges and Openreach retail inducements.

However, we disagree with any suggestion that Ofcom would be less concerned about discounting in VMO2's existing footprint. Not only might this have an impact on other rival networks, our significant investment in overlaying our entire network with FTTP means these areas should have the same protections as new altnet builds, otherwise our ability to enter the wholesale market and strengthen competition could be undermined.

We also strongly support the refined obligations on other commercial terms (including the extended notification period) which are necessary to prevent Openreach from using its commercial freedom to foreclose nascent competition. Especially during this vital review period, Ofcom is right to be mindful of the potential harm to competition that could be done if Openreach sought to introduce mechanisms that significantly accelerated migration to FTTP.

Volume 4, Pricing Remedies

Question 4.1: Do you agree with our proposed approach in WLA Area 2? Please set out your reasons and supporting evidence for your response.

VMO2 broadly supports Ofcom's approach, building on the foundations established in WFTMR, of combining pricing continuity and pricing flexibility to incentivise investment and ensuring an opportunity for Openreach to recover its reasonably incurred costs.

Question 4.2: Do you agree with our proposed approach in WLA Area 3? Please set out your reasons and supporting evidence for your response.

VMO2 broadly supports Ofcom's approach, building on the foundations established in WFTMR, of combining pricing continuity and pricing flexibility to incentivise investment and ensuring an opportunity for Openreach to recover its reasonably incurred costs.

Question 4.3: Do you agree with our proposals for charge controlling LLA services in LLA Area 2 and LLA Area 3 and not introducing a charge control on LLA services in the HNR Area? Please set out your reasons and supporting evidence for your response.

Question 4.4: Do you agree with our proposals for charge controlling in the IEC markets? Please set out your reasons and supporting evidence for your response.

Question 4.5: Do you agree with our proposals for charge controlling in the PIA market? Please set out your reasons and supporting evidence for your response.

Question 4.6: Do you agree with our proposed approach for ancillaries? Please set out your reasons and supporting evidence for your response.

Question 4.7: Do you agree with our proposals on charge control design? Please set out your reasons and supporting evidence for your response.

Question 4.8: Do you have any comments on the drafting (non substantive) amendments to the charge control conditions described above and set out in Volume 7?

VM02 has no comments on these questions at this time.

Volume 5, Quality of Service

Question 5.1: Do you agree with our proposal to retain a QoS SMP condition in all wholesale fixed telecoms markets in which we provisionally determine that BT has SMP and where we propose to apply transitional arrangements? Please set out your reasons and supporting evidence for your response.

Question 5.2: Do you agree with our proposals for QoS regulation in WLA markets for this review period? Please set out your reasons and supporting evidence for your response.

Question 5.3: Do you agree with our proposal to keep the same QoS regulations in place for LLA and IEC markets for this review period? Please set out your reasons and supporting evidence for your response.

VM02 has no material comments on these questions at this time. However, we welcome Ofcom's decision to review its approach to Quality of Service ("QoS") conditions as part of TAR, rather than part way through the WFTMR control period, as previously considered in 2023.

Question 5.4: Do you agree with our proposal not to impose specific QoS standards or transparency requirements in the physical infrastructure market? Please set out your reasons and supporting evidence for your response.

Yes, we broadly agree with Ofcom's proposals and underlying rationale, given the complexities of comparing Openreach's own use of its physical infrastructure with that of PIA CPs' use (and the services offered by Openreach to facilitate this). Voluntary KPIs do provide reasonable and pragmatic mechanism for transparency, whilst also allowing flexibility for these measures to evolve as required.

Volume 6, Regulatory financial reporting

Question 6.1: Do you agree with our proposal to retain the accounting separation and cost accounting remedies on each of the proposed SMP markets? Please set out your reasons and supporting evidence for your response.

Yes.

Question 6.2: Do you agree with our proposals in relation to the published performance schedules set out in Section 4? Please set out your reasons and supporting evidence for your response.

Question 6.3: Do you agree with our proposals in relation to the preparation and assurance of the RFS set out in Section 5? Please set out your reasons and supporting evidence for your response.

Question 6.4: To what extent do you think it is necessary to require BT to publish in the reconciliation report the impact on current year figures of each methodology change reported in the CCN (which includes the impact of each change on prior year figures)?

Question 6.5: Do you agree with our proposals in relation to information provided to Ofcom set out in Section 6? Please set out your reasons and supporting evidence for your response.

VMO2 has no comments on these questions at this time.

Annex 21, Impact Assessments

Question A21.1: Do you agree with our assessment of the potential impacts on specific groups of persons? Please provide reasons for your response, with any supporting evidence.

Question A21.2: Do you agree with our assessment of the potential impacts on Welsh language? Please provide reasons for your response, with any supporting evidence.

VMO2 has no comments on these questions at this time.