
Openreach Proposed FTTP Offer starting 1 April 2023

Equinox 2

Non-Confidential version

CONSULTATION:

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1. Overview

In the Wholesale Fixed Telecoms Market Review Statement, we set out a framework to promote investment and competition in gigabit-capable networks. In doing so we recognised a concern that Openreach could set commercial terms that undermine new network build.

To address this concern, we required Openreach to notify commercial terms where the price or other contractual conditions are conditional on the volume and/or range of services purchased. This notification process would allow industry and us to scrutinise the terms before they are introduced, and where necessary allow us to intervene to prevent such terms being introduced.

On 14 December 2022, Openreach notified new pricing arrangements for its Fibre to the Premise ('FTTP') services (the 'Equinox 2 Offer'). The Equinox 2 Offer is a supplemental offer to the Equinox 1 Offer that ISPs can opt into.

In this consultation we have assessed the Equinox 2 Offer and our provisional view is that we should not take any action at this time to prevent the new terms from being introduced.

We have also considered whether the lower prices under the Equinox 2 Offer are likely to act as a barrier to altnet entry and expansion. Having assessed the evidence we have, we do not at this time have *prima facie* concerns that would lead us to investigate this question further.

Finally, we have also considered whether the Equinox 2 Offer is part of an Openreach practice of repeatedly amending its FTTP prices that could act as a barrier to altnet entry and expansion. We currently have limited evidence on this question, and so have commenced gathering information from ISPs and altnets to enable us to decide whether to investigate this matter further.

This consultation closes on 4 March 2023. We intend to publish a final decision, in light of this consultation, by the end of March 2023.

2. Introduction

- 2.1 In the Wholesale Fixed Telecoms Market Review Statement (the ‘WFTMR Statement’) we said that the use of certain commercial terms by Openreach may give rise to competition concerns by deterring new network build by alternative network operators (‘altnets’).¹ We said we would consider proposed commercial terms that may deter altnet build on a case-by-case basis, and where necessary we would intervene to prevent such terms, including using our direction making powers under SMP conditions.
- 2.2 Openreach is required to provide 90 days’ notification of commercial terms where the price or other contractual conditions are conditional on the volume and/or range of services purchased.² We set out the process we expect to follow in Annex 11 of the WFTMR Statement. The relevant legal framework is summarised in Annex 5 of this consultation.
- 2.3 On 1 July 2021, Openreach notified new pricing arrangements for its Fibre to the Premises (‘FTTP’) services that applied from 1 October 2021 (the ‘Equinox 1 Offer’).³ Following our assessment of that offer, we published a Statement on 30 September 2021 setting out our view that the Equinox Offer 1 did not raise competition concerns requiring ex ante intervention.⁴ Therefore, we decided to take no action in relation to this offer at that time.
- 2.4 Our decision to take no action in relation to the Equinox 1 Offer was appealed to the Competition Appeal Tribunal (the ‘Equinox 1 Appeal’) and in July 2022 the Tribunal dismissed the appeal.⁵ Since then we have monitored the impact of the Equinox 1 Offer on ISPs.
- 2.5 On 14 December 2022, Openreach notified new pricing arrangements for its FTTP services that it intends to put in place from 1 April 2023, and on the same day published ACCN OR828 and an associated customer briefing NGA2018/22, which sets out the terms (the ‘Equinox 2 Offer’).⁶
- 2.6 Also, on 14 December 2022, we published an update on our website regarding the Equinox 2 Offer notification and setting out the process we intended to follow to assess it.⁷
- 2.7 In the next section, we set out our understanding of the Equinox 2 Offer in more detail along with our assessment.
- 2.8 This document as a whole, including its annexes, comprises an impact assessment.⁸ We are publishing for consultation our assessment of the Equinox 2 Offer and our proposal not to

¹ [WFTMR Statement](#), 18 March 2021. Our competition concerns and reasoning are set out in Volume 3, Section 7.

² SMP Condition 8.6. This applies in relation to certain of our defined markets, including WLA Area 2 and WLA Area 3.

³ The Equinox 1 Offer was available for acceptance between 1 October 2021 and 30 March 2022 and ends on 30 September 2031.

⁴ Statement on [Openreach Proposed FTTP Offer starting 1 October 2021](#), (the ‘Equinox 1 Statement’), 30 September 2021.

⁵ Competition Appeal Tribunal Judgment [1426/3/3/21 CityFibre Limited v Office of Communications](#)

⁶ Openreach briefing, [NGA2018/22](#)

⁷ [WFTMR website update](#)

⁸ Annex 5 provides more information about impact assessments.

apply any ex ante measures in relation to it, to give stakeholders an opportunity to make representations. In preparing this document, in light of our duties, we have considered citizen and consumer interests, including the impacts on competition and on altnets and ISPs. Ofcom is an evidence-based organisation and welcomes responses to this consultation. Any comments about our assessment of the impact of our proposals should be sent to us by the closing date for this consultation. We will consider all comments before deciding how to proceed.

3. Our assessment

- 3.1 Our assessment is structured as follows:
- a) Summary of the Equinox 2 Offer;
 - b) Ofcom’s policy objectives, in light of its duties;
 - c) Overview of stakeholder’s comments;
 - d) Our consideration of the concerns raised by stakeholders, namely whether any of the following act as a barrier to altnet entry and expansion: (i) the Order Mix Targets; (ii) the forecasting requirements; (iii) lower Openreach FTTP prices and (iv) an Openreach practice of repeatedly amending its FTTP prices; and
 - e) Our provisional conclusions.

Summary of the Equinox 2 Offer

- 3.2 The Equinox 2 Offer is a supplemental amendment to the Equinox 1 Offer, that ISPs can opt into. It augments, and in some places, replaces Equinox 1. It therefore makes sense to first summarise the Equinox 1 Offer and then summarise the Equinox 2 Offer. The summaries below reflect the main aspects and requirements of the offers but omit points of detail.

The Equinox 1 Offer

- 3.3 In essence, the Equinox 1 Offer gives ISPs cheaper prices for Openreach FTTP products, so long as they largely stop making new sales of legacy broadband products where Openreach FTTP is available, and switch to selling mainly FTTP products instead.^{9 10} In particular, ISPs pay discounted prices for Openreach’s FTTP rental and connection services if they meet certain targets for the percentage of new orders they place which are FTTP (we refer to these as the ‘Order Mix Targets’ or ‘OMTs’).¹¹
- 3.4 Only new orders placed with Openreach count towards the OMTs. These typically occur when an ISP signs up a new customer or when an existing customer moves to a different product. Ongoing provision to existing customers does not count. The OMTs are evaluated

⁹ Openreach briefing ([NGA2017/21](#)). On the same day Openreach published [ACCN OR728](#) and an associated customer briefing setting out the terms of the Equinox 1 Offer. An updated version of the Equinox 1 Offer was published on 29 September 2021 reflecting minor clarifications to the terms of the offer ([briefing NGA2019/21](#)). That briefing also notified of an optional separate amendment to the Equinox 1 Offer (to take effect from 1st January 2022). That optional separate amendment is to account for the WLR withdrawal planned in 2025. An updated version of that optional separate amendment was further published on 4 October 2021 ([briefing NGA2021/21](#)).

¹⁰ Legacy broadband refers to both Fibre to the Cabinet (‘FTTC’) and products that solely use a copper connection.

¹¹ In this document we use the term ‘Order Mix’ to refer to the share an ISP’s orders from Openreach that are for FTTP (i.e. disregarding orders from other networks). The percentage is calculated as follows. The denominator is the total volume of an ISP’s new provision and transfer orders in that quarter that are placed with Openreach at premises where FTTP is available (i.e. both legacy and FTTP orders). The numerator is the volume of an ISP’s new provision and transfer orders in that quarter that are placed on Openreach FTTP. Orders to modify speed on the same technology (e.g. a regrade from FTTC 40/10 to FTTC 80/20) and bulk moves between ISPs are not included in this calculation.

- on a quarterly basis and across the whole of the Openreach FTTP footprint (defined as all premises where Openreach FTTP is available to order at the start of that quarter).
- 3.5 Some of the main ISPs purchase access from Openreach that they wholesale to smaller downstream ISPs, who in turn resell services to their retail customers ('ISP Resellers'). The OMTs are calculated using an ISP's orders from both its own retail customer base (including any sub-brands) and from its ISP Resellers.
- 3.6 To qualify for rental discounts ISPs must achieve an Order Mix of at least 80%. The discounted rental prices apply to all the FTTP lines that the ISP purchases from Openreach (not just the orders placed in that quarter). The level of the discount varies by product bandwidth although there is no discount on Openreach's FTTP 40/10 product.¹²
- 3.7 To qualify for the full connection discounts ISPs must achieve an Order Mix of at least 90%. Between 90% and 80%, the level of the connection discount reduces at a constant rate from maximum discount to zero discount.¹³ The discounted connection prices apply to the orders placed in that quarter.
- 3.8 The Equinox 1 Offer also includes an average revenue per user ('ARPU') share mechanism if an ISP's average FTTP rental amount exceeds the specified threshold. The Equinox 1 Offer also places a requirement on ISPs to provide accurate forecasts (within a certain margin of error) of the number of Openreach FTTP orders they expect to place.¹⁴
- 3.9 In the WFTMR Statement, we set out how regulation would transition from legacy to FTTP products where Openreach deploys fibre. The first stage allows Openreach to stop selling new legacy products ('regulatory stop sell'). The second stage entails removing regulatory charge controls from legacy products and retaining only the charge control on the FTTP 40/10 product.¹⁵ The Equinox 1 Offer can be seen as a commercial mechanism to bring forward the regulatory stop sell date. Essentially, Openreach is offering lower FTTP prices if ISPs agree to (largely) stop selling legacy products sooner than would otherwise happen under regulated stop sell. Openreach's commercial rationale for this, is to increase the speed of take-up of FTTP, ultimately supporting its investment in FTTP.

The Equinox 2 Offer

- 3.10 Compared to the Equinox 1 Offer, the main amendments made by the Equinox 2 Offer are:
- a) Lower rental charges, for all FTTP products except 40/10.

¹² When referring to different products, such as FTTP 40/10, the first figure refers to a 40Mbit/s download speed and the second figure refers to a 10Mbit/s upload speed. Products where the upload and download speeds are the same are sometimes referred to as 'symmetric'.

¹³ In October 2022, Openreach issued a formal waiver letter to those ISPs that signed up to the Equinox 1 Offer. That letter gave ISPs notice that Openreach temporarily waive the requirements to achieve the OMTs in a quarter, in order to obtain the benefit of connection discounts in that quarter. The formal waiver applies until 30 June 2023.

¹⁴ In brief, the Equinox 1 Offer requires ISPs to submit, on a rolling monthly basis, forecasts for their Openreach FTTP orders covering the next six months. These forecasts are broken down between 27 areas.

¹⁵ Our decisions in relation to copper retirement are set out in the WFTMR Statement, Volume 3, Section 2.

- b) Lower connection charges, for migrations of existing customers from legacy to FTTP 80/20 and above.
 - c) The introduction of a Failsafe Mechanism, intended to address any risk of ISPs being disincentivised from placing orders with altnets.
- 3.11 However, the OMTs remain the same as the Equinox 1 Offer.
- 3.12 Our analysis shows that the discounted rental charges introduced by the Equinox 2 Offer are between 8% and 15% lower than the Equinox 1 Offer (depending on bandwidth). Under the Equinox 2 Offer, annual price increases for some products are expected to be higher than under the Equinox 1 Offer (with below CPI annual price increases being replaced with CPI increases for certain bandwidths).¹⁶
- 3.13 The Equinox 2 Offer also introduces connection discounts for residential premises in Area 3 (connection discounts under the Equinox 1 Offer only apply to residential premises in Area 2).¹⁷ The connection discounts introduced by the Equinox 2 Offer apply to residential premises in Area 2 or Area 3 when the ISP migrates existing end customers to FTTP product bandwidths that are 80/20 and above (as specified in the offer).¹⁸
- 3.14 The Equinox 2 Offer also introduces a new Failsafe Mechanism. The Failsafe Mechanism is intended to remove any risk of ISPs being disincentivised from placing orders with altnets, e.g. because they are concerned about meeting the OMTs. In practice the Failsafe Mechanism allows ISPs, who are also purchasing services from altnets, to have their performance against the OMTs assessed outside of any overlapping areas. As discussed in further detail below, a third party (the 'Independent Verifier') is responsible for the detailed application of the Failsafe Mechanism. Also, if an ISP's number of orders per premises for legacy services is more than 50% greater in the overlap area than in the rest of the Openreach FTTP footprint, then this may trigger a review and amendment of the Failsafe Mechanism by Openreach (the 'Legacy Cross-Check').
- 3.15 The Equinox 2 Offer amends the terms and conditions of the Equinox 1 Offer regarding FTTP forecasts by specifying that Openreach is entitled to recover compensation, subject to a cap, if the ISP's FTTP forecast is inaccurate and above a certain margin of error. It also amends the definition of bulk moves for the calculation of the percentage of new FTTP orders (by extending the scope of bulk moves not included in the calculation).

Ofcom's policy objectives

- 3.16 Our Strategic Review of Digital Communications in 2016 set out our intention, in light of our duties, to regulate to encourage large-scale deployment of new full-fibre networks

¹⁶ For a detailed description of the Equinox 2 Offer discounts see Annex 6.

¹⁷ Area 2 represents areas (postcode sectors) in which there is, or there is likely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks. Area 3 represents areas (postcode sectors) in which there is not, and there is unlikely to be potential for, material and sustainable competition to BT in the commercial deployment of competing networks (WFTMR Statement, Volume 2, Section 7).

¹⁸ For a detailed description of the Equinox 2 Offer discounts see Annex 6.

both to homes and businesses, drive widespread availability of competing ultrafast broadband services and support the roll out of 5G networks.

- 3.17 In our WFTMR Statement, we stated that we considered the best way to achieve this and deliver these outcomes for consumers is through competition in gigabit-capable networks in as many areas of the UK as possible. Therefore, we wanted to promote investment in such networks by BT and other companies in order to promote network-based competition. We wanted to encourage BT's competitors to build their own networks, rather than relying on network access from Openreach. In areas of the UK where there is unlikely to be material and sustainable competition to BT in the commercial deployment of competing networks, we wanted to promote investment by Openreach and ensure appropriate access to competitors in the interests of consumers. We considered that overall the resulting network competition should benefit consumers in the long term. Having identified that BT has significant market power ('SMP') in various markets, including WLA Area 2 and WLA Area 3, we imposed various ex ante remedies to achieve our objectives.
- 3.18 As set out in Volume 3 Section 7 of the WFTMR Statement, one concern is that Openreach may use commercial terms that undermine new network build which are unlikely to be in the interests of consumers in the long term. We also explained that terms which could induce loyalty are a particular concern because this could deter ISPs from switching demand to new alternative networks, and therefore deprive these network operators of demand. Ultimately this could undermine alternative operators' FTTP investment plans.
- 3.19 Openreach is the only operator with a national network footprint. In order to serve the national market, ISPs must purchase at least some wholesale services from Openreach (i.e. in areas where there is no alternative network). Openreach could design commercial terms which mean ISPs face a significantly higher average charge for services purchased from Openreach if they do not purchase all their services from Openreach. This would undermine the business case for sub-national competitive entry.
- 3.20 As we explain in the WFTMR Statement, alternative operators building new networks face considerable challenges in becoming established and overcoming Openreach's incumbency advantages.¹⁹ For example, Openreach benefits from economies of scale (meaning it has lower unit costs than an entrant); in relation to FTTP, a key advantage comes from Openreach having high existing customer volumes; and it has established relationships with ISPs and some level of system/process integration.
- 3.21 We imposed a requirement on Openreach to provide 90 days' notification of commercial terms where the price or other contractual conditions are conditional on the volume and/or range of services, so that we could consider these terms on a case by case basis. We considered that this requirement struck a balance between the impact on Openreach and its ability to bring offers to the market which ultimately benefit consumers, and the risk that conditional pricing terms could undermine new network build.

¹⁹ WFTMR Statement, Volume 3, paragraphs 7.45-7.46.

3.22 The discounts in the Equinox 2 Offer are conditional on the range of services purchased, in that ISPs are required to purchase a minimum percentage of FTTP for new orders in order to be eligible. As such, our notification process is engaged.

Overview of stakeholders' comments

3.23 Openreach stated that the Equinox 2 Offer provides additional commercial incentives for ISPs to accelerate their adoption of Openreach FTTP. It stated that the Failsafe Mechanism eliminates any theoretical possibility that the OMTs disincentivise ISPs from using altnets.²⁰

3.24 Following the notification of the Equinox 2 Offer, we were contacted by the following: CityFibre, [S&C], Nexfibre, VMO2, INCA and Zzoomm.²¹ These altnets expressed concern about the impact of the Equinox 2 Offer on competition.²²

3.25 Altnet concerns about the Equinox 2 Offer can be grouped into four broad categories. We discuss these theories of harm in turn below:

- a) The OMTs act as a barrier to altnet entry and expansion;
- b) The forecasting requirements act as a barrier to altnet entry and expansion;
- c) Lower Openreach FTTP prices act as a barrier to altnet entry and expansion; and
- d) This offer is part of an Openreach practice of repeatedly amending its FTTP prices that acts as a barrier to altnet entry and expansion.

Do the Order Mix Targets act as a barrier to altnet entry and expansion?

Introduction

3.26 ISPs wishing to offer FTTP on a UK-wide scale have no choice but to purchase access from Openreach in certain areas where infrastructure competition is not feasible and Openreach is the only provider. This could allow Openreach to leverage its position to raise barriers to entry and expansion for altnets in areas where infrastructure competition is feasible. For example, Openreach could make discounts on ISPs' purchases in areas where it is the only provider conditional on ISPs not using altnets in areas where both Openreach and altnets are present. This could exclude altnets even if ISPs found them preferable.²³

²⁰ [Openreach briefing, 14 December 2022](#)

²¹ CityFibre letter, 13 January 2023 and CityFibre submission, 20 January 2023. [S&C] letter, 23 December 2022. Nexfibre letter, 16 January 2023. VMO2 letter, 22 December 2022 and VMO2 meeting slides, 12 January 2023. INCA and Zzoomm submissions, 24 January 2023 and 26 January 2023.

²² We also received a submission on 10 January 2023 from INCA and Zzoomm in relation to the fibre costing model that we used for the WFTMR Statement.

²³ Competitors would need not only to offer a better deal than Openreach for those volumes that switch to them, but they would also need to compensate the ISP for having to pay a higher price for those volumes that they cannot switch away from Openreach.

3.27 Accordingly, we have assessed whether the OMTs act as a barrier to altnet entry and expansion.

Stakeholders' views

3.28 VMO2 stated that an ISP's choice of whether to use an altnet will be heavily influenced by whether this affects the ISP's ability to meet the OMTs. It stated that altnets seek to establish upfront, extended commitments from ISPs. Without these, altnet build plans may not be viable.^{24 25}

3.29 VMO2 was concerned about a particular scenario where Openreach deploys FTTP to an area before an altnet.²⁶ We refer to this below as the 'Future Overlap Scenario'.

3.30 In this particular scenario, the OMTs encourage ISPs to place FTTP orders with Openreach, rather than waiting for altnet deployment. Moreover, VMO2 stated that ISPs are likely to be less willing to migrate customers that are already taking Openreach FTTP to an altnet, due to the cost and inconvenience of doing so.

3.31 VMO2 stated that the Failsafe Mechanism does not address the Future Overlap Scenario, since it only applies to areas where an altnet is actually present.

3.32 [S<] submitted that Ofcom should investigate certain factors that are relevant to whether the Equinox 2 Offer creates a barrier to using altnets. It submitted that: (i) altnet overlap of Openreach's FTTP network is significantly higher than at the time of the Equinox 1 Statement; and (ii) some ISPs have struggled to meet the OMTs and are likely to continue to do so. It also referred to the magnitude of the discounts for ISPs that meet the OMTs. It also considered that Ofcom should assess whether the Failsafe Mechanism is likely to be effective in protecting ISPs' incentives to purchase from altnets.²⁷

3.33 VMO2, Nexfibre, INCA and Zzoomm expressed concerns about the Failsafe Mechanism:

- a) VMO2, INCA and Zzoomm stated that the Failsafe Mechanism is complex to administer and that some aspects (e.g. the definition of the 'Overbuild Area', where altnets overlap Openreach's FTTP footprint) are ambiguous.^{28 29}
- b) Nexfibre, INCA and Zzoomm were concerned that the Independent Verifier is appointed and funded by Openreach and so may not be truly independent.³⁰

²⁴ VMO2 meeting slides, 12 January 2023, slides 3-4.

²⁵ VMO2 also stated that Ofcom established a general presumption against "cliff edge" or "saw-tooth" discounts in 2004. VMO2 meeting slides, 12 January 2023, slide 3.

²⁶ VMO2 meeting slides, 12 January 2023, slide 4 and illustrative example on slide 10.

²⁷ [S<].

²⁸ VMO2 meeting slides, 12 January 2023, slide 5. INCA and Zzoomm submission, 24 January 2023, paragraphs 8.2, 8.4, 17, 22, 24 and 26-30.

²⁹ INCA and Zzoomm also stated that the Independent Verifier will require information from altnets, and thus their support, in order to identify the overbuild area. INCA and Zzoomm submission, 24 January 2023, paragraphs 22-23.

³⁰ Moreover, the definition of the Overbuild Area and the calculation of the Legacy Cross-Check involve the use of some discretion by the Independent Verifier. Nexfibre letter, 16 January 2023, paragraphs 3.1-3.10. INCA and Zzoomm submission, 24 January 2023, paragraphs 8.6, 19-20 and 32-33.

- c) INCA and Zzoomm stated that an ISP's eligibility for discounts is determined at the end of the assessment. They claimed this diminishes ISPs' working capital.³¹
- d) INCA and Zzoomm stated that ISPs can be expected to buy more legacy products in overlap areas as a result of using an altnet. The effectiveness of the Failsafe Mechanism is undermined by Openreach's ability to disapply it when the Legacy Cross-Check is failed.³²
- e) VMO2 presented an illustrative example in which an ISP that only uses Openreach would place a higher proportion of FTTP orders in the Overbuild Area than outside this area. In this example, if the ISP instead chose to place its FTTP orders with an altnet (rather than Openreach) in the Overbuild Area then it would fail to meet the OMTs. This ISP would still be discouraged from using an altnet despite the presence of the Failsafe Mechanism since its Order Mix outside of the Overbuild Area would still be insufficient to meet the OMTs.³³ INCA and Zzoomm also made this point.³⁴
- f) INCA and Zzoomm stated that the operation of the Failsafe Mechanism would provide Openreach with commercially sensitive information on altnets' build.³⁵

Ofcom's analysis

Analytical framework

- 3.34 In the WFTMR Statement we set out the analytical framework we would apply when notified of commercial terms where the price or other contractual conditions are conditional on the volume and/or range of services purchased. We explained that our starting point was that the creation of any barrier to using alternative network operators would only be justified where:
- a) the impact on nascent network competitors is unlikely to be material; and
 - b) the arrangements will generate clear and demonstrable benefits, such as:
 - i) the arrangements are essential to Openreach's business case for fibre roll-out; or
 - ii) the arrangements are necessary to offer more efficient prices that would deliver benefits for consumers.³⁶
- 3.35 When assessing the Equinox 1 Offer we set out that we had followed the approach set out in the WFTMR and our analysis considered up to 3 questions:
- a) **Question 1:** Does the Equinox Offer potentially create a barrier to using altnets?

³¹ INCA and Zzoomm submission, 24 January 2023, paragraphs 8.5 and 18.

³² INCA and Zzoomm submission, 24 January 2023, paragraphs 8.7 and 16.1.

³³ VMO2 meeting slides, 12 January 2023, slides 9 and 11.

³⁴ INCA and Zzoomm submission, 24 January 2023, paragraph 16.2.

³⁵ INCA and Zzoomm submission, 24 January 2023, paragraphs 8.3, 16.3 and 20.

³⁶ [WFTMR statement](#), 18 March 2021, Volume 3, paragraphs 7.154 and 7.160.

- b) **Question 2:** Is the Equinox Offer likely or unlikely to have a material impact on nascent network competitors?
- c) **Question 3:** Is the Equinox Offer likely to generate clear and demonstrable benefits?³⁷
- 3.36 Ground 2 of the Equinox 1 Appeal focused on the meaning of “potentially” in Question 1 of the framework set out above. In its judgment, the Tribunal held that we had not misdirected ourselves by taking into account under Question 1 the likelihood of events happening (or not happening), and that it was appropriate for us to make evaluative judgments about whether there was a realistic possibility of certain outcomes, such that we should be concerned about ISPs not using altnets.³⁸
- 3.37 The Tribunal also stated that in its view the formulation of the analytical framework in the WFTMR was easier to follow than the reformulation in the form of three questions in the Equinox 1 Statement.³⁹
- 3.38 For the purposes of assessing the Equinox 2 Offer, we have taken into account the Tribunal’s comments and sought to balance clarity and consistency in formulating our analytical framework.
- 3.39 As noted in the Tribunal’s judgment, Questions 1 to 3 set out in the Equinox 1 Statement include the same elements as set out in the WFTMR Statement. Under both formulations Ofcom must first determine the extent to which a notified offer might create a barrier for ISPs’ use of altnets. This requires the identification of something which is not just a theoretical possibility, but instead needs to be plausible given the evidence available and based on reasonable underlying assumptions.⁴⁰ While the Tribunal noted that Question 1 might suggest a lower threshold than that set out in the WFTMR, the intended threshold has now been clarified and its appropriateness tested in the Equinox 1 Appeal.
- 3.40 Given this, and in the interests of consistency for stakeholders, we will again use Question 1 as a gating question to assess whether the Equinox 2 Offer potentially creates a barrier to using altnets. When applying the gating question, in line with the Tribunal’s judgment we will consider the likelihood of events happening (or not happening). As noted by the Tribunal, there could be a range of different degrees of plausibility which might arise in particular scenarios.⁴¹ In making our assessment we will ascertain whether scenarios are real enough to justify intervention, bearing in mind our wider duties and responsibilities.
- 3.41 If after applying the gating question we consider that the Equinox 2 Offer does potentially create a barrier to using altnets we will consider paragraphs a) and b) of our analytical framework as set out in the WFTMR Statement and paragraph 3.34 above. As questions 2 and 3 as set out in our assessment of the Equinox 1 Offer were based on these paragraphs in the WFTMR Statement this is not a substantive change of approach, but a clearer formulation of the same test. Commercial terms that have a material detrimental impact

³⁷ Equinox 1 Statement, paragraph 3.60.

³⁸ Competition Appeal Tribunal Judgment [1426/3/3/21 CityFibre Limited v Office of Communications](#), paragraph 147.

³⁹ Competition Appeal Tribunal Judgment [1426/3/3/21 CityFibre Limited v Office of Communications](#), paragraph 143.

⁴⁰ Competition Appeal Tribunal Judgment [1426/3/3/21 CityFibre Limited v Office of Communications](#), paragraph 144.

⁴¹ Competition Appeal Tribunal Judgment [1426/3/3/21 CityFibre Limited v Office of Communications](#), paragraph 147.

on competitive network build are unlikely to be justified. Where the commercial terms constitute some barrier to access seekers using altnets but the effect is unlikely to be material, we consider the purpose and potential benefits of the terms.⁴²

The impact of the OMTs in the Future Overlap Scenario

- 3.42 We first discuss the Future Overlap Scenario set out in paragraphs 3.29-3.31 above.
- 3.43 In the WFTMR Statement, we provided guidance on the types of commercial terms that we might consider to be problematic. We said that Openreach may want to consider different commercial terms as part of a strategy to migrate customers from copper to FTTP and support its FTTP business case. We explained that we may be concerned if such terms deter ISPs from switching to new network builders, but that we would be less likely to be concerned where use of an alternative network does not affect the prices that an ISP pays for Openreach services.⁴³
- 3.44 We consider that VMO2 has a fair opportunity to compete with Openreach in the Future Overlap Scenario, regardless of the OMTs, for the following reasons:
- a) Under this scenario, we are not considering whether ISPs are deterred from switching to using altnets where they are available.⁴⁴
 - b) The Equinox 2 Offer does not contain terms which lock in ISPs, to prevent them switching to using an altnet if one later becomes available.
 - c) Absent the Equinox 2 Offer, the first network to deploy FTTP in an area is likely to enjoy a commercial advantage.⁴⁵ This ‘race to invest’ is an important part of the competitive dynamic in the package of remedies that we imposed in the WFTMR Statement and that was designed to support investment by Openreach and other companies. The Equinox 2 Offer does not tilt the playing field between Openreach and altnets in an anti-competitive manner.
- 3.45 Given these points, VMO2’s concern about the impact of the OMTs in the Future Overlap Scenario is not within scope of the competition concerns we set out in the WFTMR Statement (and which the analytical framework set out in paragraphs 3.34-3.41 above was designed to address). Accordingly, we do not consider the Future Overlap Scenario further as part of our Question 1 assessment in paragraphs 3.47-3.86 below.
- 3.46 In any event, it is unclear whether all the key features of the Future Overlap Scenario are credible, especially as VMO2 has advanced no evidence to support its claims. The scenario assumes that, absent the OMTs, ISPs would prefer to wait for altnet deployment, rather than use Openreach FTTP. However:⁴⁶

⁴² [WFTMR statement](#), 18 March 2021, Volume 3, paragraph 7.160.

⁴³ [WFTMR statement](#), 18 March 2021, Volume 3, paragraph 7.169.

⁴⁴ The impact of the Equinox 2 Offer in areas where altnets are present is discussed in paragraphs 3.47-3.86 below.

⁴⁵ For example, [3<]. VMO2 response dated 24 January 2023 to Ofcom’s information request of 9 January 2023, question 5.

⁴⁶ The appeal of a waiting strategy to an ISP also depends on the number of customers that find the alternative (being served first using Openreach FTTP and then subsequently being migrated to the altnet) unattractive.

- a) An ISP that adopts this waiting strategy risks losing customers to other ISPs that are selling FTTP, including BT.
- b) A waiting strategy is likely to be unappealing if there is a significant delay until the altnet overbuilds Openreach's FTTP network. Further:
 - i) The impact on an ISP's behaviour depends on whether the areas where there is only a brief delay before altnet overbuild occurs represent a significant enough portion of Openreach's FTTP footprint to affect that ISP's ability to meet the OMTs.
 - ii) If the delay before altnet overbuild occurs is short, the number of customers that the ISP serves using Openreach FTTP in the intervening period may be modest.

Approach to Question 1

- 3.47 Applying our analytical framework, and setting aside the Future Overlap Scenario, we first consider whether the OMTs potentially create a barrier to using altnets (i.e. Question 1 above).
- 3.48 Aside from BT, which is under common ownership with Openreach, and VMO2, the largest ISPs are Sky, TalkTalk and Vodafone. These ISPs are key potential customers for altnets. We have thus focused on the impact of the OMTs on these three ISPs.
- 3.49 The design of the OMTs is consistent with Openreach's stated commercial rationale for the Equinox 2 Offer, which is to promote movement of its customer base from legacy products to FTTP.⁴⁷ This ultimately supports its investment in FTTP.
- 3.50 Like the Equinox 1 Offer, the Equinox 2 Offer does not: (i) commit ISPs to purchasing minimum volumes from Openreach; (ii) contain overt loyalty rebates or volume-based discounts; or (iii) otherwise explicitly make the terms of supply of Openreach products contingent on the split of purchases between Openreach and altnets. The rental and connection discounts under the Equinox 2 Offer are subject to the same OMTs as the Equinox 1 Offer, with the addition of the Failsafe Mechanism that is designed to break the link between the OMTs and ISPs' purchases from altnets.
- 3.51 Our review of the Equinox 2 Offer is therefore not an evaluation of a volume commitment or an overt loyalty discount scheme that is directly liable to affect ISPs' incentives to purchase from altnets. Rather, we are evaluating whether the OMTs operate with the indirect effect that obtaining the Equinox 2 discounts is in practice contingent on whether ISPs purchase from altnets.
- 3.52 In theory, in locations where the altnets that provide access to third party ISPs overlap with the Openreach FTTP network, moving volumes from Openreach to altnets could jeopardise an ISP's ability to meet the OMTs if doing so skews the mix of orders that the ISP continues to place with Openreach from FTTP to legacy products. A scenario where this might occur is where an ISP uses an altnet for orders from consumers that prefer FTTP but uses

⁴⁷ Openreach briefing, 14 December 2022, available [here](#).

Openreach's legacy network for orders from consumers that prefer legacy broadband products.

3.53 As an example:

- a) Assume that an ISP purchases only from Openreach and places the following orders within the Openreach FTTP footprint: 100 FTTP orders and 20 legacy orders in those parts of the footprint where no altnet is present; and 10 FTTP orders and two legacy orders in those parts of the footprint where an altnet is also present. The resulting proportion of Openreach orders that are FTTP is 83.3% (i.e. 110/132).
- b) If instead the ISP places the 10 FTTP orders with the altnet where it is available, but continues to place the two legacy orders with Openreach, the proportion of Openreach orders that are FTTP reduces to 82% (i.e. 100/122). We note the ISP would be placing these legacy orders even though there are two FTTP networks available and which the ISP has signed up to use.⁴⁸

3.54 In the Equinox 1 Statement, whilst we recognised this theoretical possibility, we concluded that the OMTs did not create a potential barrier to using altnets.⁴⁹ As noted above, we have monitored ISPs' performance against the OMTs in the intervening period.

3.55 To address the concern of a potential impact on altnets, Openreach has introduced the Failsafe Mechanism in the Equinox 2 Offer. The Failsafe Mechanism is intended to remove any risk of ISPs being disincentivised from placing orders with altnets, e.g. because they are concerned about the impact of using an altnet on meeting the OMTs. In practice the Failsafe Mechanism allows ISPs, who are also purchasing services from altnets, to have their performance against the OMTs assessed outside of any overlapping areas. In the above example, if the ISP chose to activate the Failsafe Mechanism, its OMT performance would be calculated only for the non-overlap area. Its order mix would therefore be assessed as 83.3%, rather than 82%.

3.56 For the Equinox 2 Offer, our assessment of Question 1 is focused on:

- a) The likelihood that the operation of the OMTs, absent the Failsafe Mechanism, has the indirect effect that obtaining the Equinox 2 Offer discounts is in practice contingent on whether ISPs purchase from altnets; and if so
- b) The likelihood that the Failsafe Mechanism is not sufficient to mitigate the impact of potential links between the OMTs and whether ISPs' purchase from altnets.

3.57 We consider these topics in turn below.⁵⁰

⁴⁸ It also assumes that the ISP is unable to convince any of the customers placing a legacy order to instead take the altnet's FTTP.

⁴⁹ Equinox 1 Statement, paragraphs 3.76-3.88.

⁵⁰ VMO2 referred to our view in 2004 that certain types of discount scheme should be presumed to be unduly discriminatory (the '2004 Statement'). This presumption was due to the complexity of applying a price-cost test. However, our framework for assessing the OMTs reflects the WFTMR Statement, which did not specify such a presumption. In any event, it is not appropriate to rely on such a presumption given that we have carried out an evidence-based assessment of the OMTs. Finally, it is unclear whether the 2004 Statement was referring to targets of the kind specified in the OMTs. It

Likelihood that using an altnet determines whether the OMTs are met

- 3.58 The discounts if the OMTs are met are substantial. For example, using Sky, TalkTalk and Vodafone's profile of subscribers in January 2023, we estimate that the average rental discounts are around [X]% – [X]% compared to Openreach's list prices. Using Openreach's profile of connections in January 2023, we estimate that the average connection charge discounts are around [X]%. See Annex 6 for further details.
- 3.59 We thus expect ISPs to be strongly motivated to meet the OMTs. As explained above, different targets apply to receive the rental discounts (80%) and connection discounts (90% for the full discounts, with a partial discount for ISPs with an Order Mix between 80% and 90%). We anticipate that the relative importance of the rental discounts (and thus meeting the 80% OMT) will rise over time, as ISPs' base of Openreach FTTP subscribers grows.⁵¹
- 3.60 Given the scale of the discounts available under the Equinox 2 Offer, ISPs could be deterred from moving volumes from Openreach to altnets if this jeopardised meeting the OMTs. Whether this is in fact the case depends on (i) the extent of network overlap; and (ii) ISPs' performance against the OMTs.
- 3.61 On (i), if an ISP were to use an altnet rather than purchase FTTP from Openreach, then the size of any potential impact on its Order Mix depends on extent of the overlap between the altnet and Openreach's FTTP network. As set out in Annex 7, current overlap is material and we expect it to continue to grow:
- It is reasonable to assume that approximately 15% of Openreach's FTTP network is likely to be overlapped by altnets that provide wholesale access to the main third party ISPs during the first year or so of the Equinox 2 Offer.
 - While there is a great deal of uncertainty, we consider it is reasonable to assume that approximately 25% of Openreach's FTTP network is overlapped by altnets that provide wholesale access to the main third party ISPs two to three years after the Equinox 2 Offer comes into effect.
 - The estimate in the previous paragraph excludes overlap with VMO2 and Nexfibre, neither of which currently supply third party ISPs. If one of the main ISPs began using VMO2 and Nexfibre's networks then overlap of Openreach's FTTP network would be significantly higher, particularly if that ISP would use VMO2's cable network. In this scenario, overlap figures could be above 60%. We discuss this 'high overlap' scenario separately below.

refers to "saw tooth discounts [sic] schemes based on aggregate expenditure (where, for example, a customer spending more than £1 million receives a discount on all expenditure, including the first £1 million)[...]". The OMTs are not based on an ISP's aggregate expenditure. BT's pricing of Services for Business Customers, Ofcom, 27 May 2004, paragraph 4.16, available [here](#).

⁵¹ While Openreach temporarily waived the requirements to achieve the OMTs in order to obtain the connection discounts, this only applies for the first quarter of the Equinox 2 Offer (i.e. until 30 June 2023). Given ISPs' expected performance, as discussed below, we do not think this waiver affects our provisional conclusions.

- d) Looking beyond the next two or three years, we anticipate further growth in the proportion of Openreach's FTTP network that is served by altnets that provide wholesale access to the main third party ISPs.
- 3.62 On (ii), if an ISP is comfortably exceeding the OMTs, then placing orders with altnets is unlikely to jeopardise meeting the OMTs, notwithstanding the levels of network overlap.⁵²
- 3.63 As a result of the Equinox 1 Offer, ISPs have begun limiting the circumstances in which they supply Openreach legacy products in areas where Openreach FTTP is available. In Annex 8, we assess the likely future performance of the main third party ISPs against the OMTs in the future, taking account of the extent to which they have been meeting the OMTs under the Equinox 1 Offer, which we have been monitoring. In summary, our assessment (based on information provided by these ISPs and Openreach) is that:
- a) Sky [X].
 - b) TalkTalk [X].
 - c) Vodafone [X].
- 3.64 Accordingly, we consider that [X] would not potentially be deterred from using altnets other than VMO2 and Nexfibre as a result of the OMTs, even if the Failsafe Mechanism was not in place. This is because placing orders with these altnets is unlikely to jeopardise meeting the OMTs. However, this is not the case for all ISPs. We consider that [X] where using an altnet potentially affects the discounts received by [X] (absent the Failsafe Mechanism).⁵³
- 3.65 Provided an ISP is comfortably exceeding the OMTs, then it is unlikely to be deterred from making use of a mixture of cable and FTTP from VMO2 and Nexfibre for a significant proportion of its orders, notwithstanding the higher overlap.⁵⁴ It is possible that [X] will be in this position, particularly as we expect that: (i) an ISP is unlikely to switch all its FTTP orders from Openreach to altnets in such a large overlap area; and (ii) the time it would take to reach and implement such an agreement may give the ISP a future opportunity to improve its Order Mix.⁵⁵ However, this is not certain, so even [X] might face difficulties in meeting the OMTs as a result of shifting large numbers of orders to VMO2 cable and altnet FTTP, absent the Failsafe Mechanism. It is more likely that [X] might face these difficulties.

⁵² The examples in Tables A8.1 and A8.2 in Annex 8 illustrate this.

⁵³ In the Equinox 1 Statement, we expected ISPs to surpass the OMTs in the medium term but that some ISPs may struggle to hit these targets in the first 12-24 months i.e. in the period to October 2022 or October 2023 (see paragraphs 3.78(c)-(d)). In the light of ISPs' practical experience now that the Equinox 1 Offer is in place, [X]. We now also consider in more detail the scenario where an ISP begins using VMO2 network. This scenario results in higher overlap than the figures set out in Annex 4 of the Equinox 1 Statement.

⁵⁴ While a high proportion of Openreach's FTTP footprint is likely to be overlapped by VMO2 or Nexfibre, an ISP may not divert all its FTTP orders in this overlap area away from Openreach. For example, the ISP may prefer to use multiple suppliers, in order to strengthen its hand in future commercial negotiations and avoid being too reliant on one network. As shown by the illustrative calculations in Annex 8, this means the impact on an ISP's Order Mix is smaller than overlap figures alone might suggest.

⁵⁵ In addition to the time needed for VMO2 were to reach an agreement with an ISP, it would take months to set the practical arrangements (e.g. changes to sales and support systems and networks).

3.66 The Equinox 2 Offer expires in 2031. Looking this far ahead is inherently uncertain. There is likely to be further growth in overlap by this time. However, there are also opportunities for further improvements in ISPs' performance against the OMTs, both as a result of measures they take and due to the growth in regulatory stop sell and other regulatory changes related to the retirement of Openreach's legacy copper network. Where an ISP pursues a strategy of almost entirely ending sales of Openreach legacy products in areas where Openreach FTTP is available then, notwithstanding the expected growth in overlap, using an altnet should not jeopardise its ability to meet the OMTs. However, where an ISP chooses not to pursue such a strategy, there is uncertainty about whether using an altnet might affect its ability to meet the OMTs even in the very long term (absent the Failsafe Mechanism).

Impact of the Failsafe Mechanism

3.67 In principle, the Failsafe Mechanism should break the link between the OMTs and use of altnets in overlapping areas, and thus remove any competition concern. This is because for ISPs who activate the Failsafe Mechanism, performance against the OMTs will be assessed in the Openreach FTTP footprint outside of the overlap area.

3.68 We understand that the Failsafe Mechanism can be applied to exclude overlap areas where an ISP uses either FTTP or cable from an altnet.⁵⁶

3.69 To assess whether the Failsafe Mechanism in fact addresses any risk that ISPs are deterred from using altnets we have considered: (i) its practical workability; (ii) its acceptability to ISPs; and (iii) the likelihood that the Failsafe Mechanism is amended in the future.

Practical workability of the Failsafe Mechanism

3.70 In principle, if an ISP believes that applying the Failsafe Mechanism is unworkable in practice (e.g. because overlap areas cannot be identified or are incorrectly identified), then this mechanism will provide little comfort to an ISP that is considering using an altnet.

3.71 A number of steps need to be taken by the requesting ISP, Openreach and the Independent Verifier to activate and complete the Failsafe Mechanism process.^{57 58} We recognise that the exercise may be relatively complex and may require the exercise of some judgment by the Independent Verifier. However, we anticipate that sophisticated entities such as the main ISPs and Openreach should be capable of complying with these steps. Indeed, the Failsafe Mechanism contains similar requirements to those already contained in other Openreach discount contracts (e.g. GEA volume agreement) that are

⁵⁶ Equinox 2 Offer, Appendix 1, paragraph 9.1 states that the Failsafe Mechanism can be applied to Eligible Service. Clause 1.1 defines Eligible Services as including fixed access broadband services provided over technologies capable of delivering similar or greater speeds as Openreach's standard GEA-FTTP service.

⁵⁷ If an ISP wanted to invoke the Failsafe Mechanism, it would need to be able to identify the overlap area where it is using an altnet for services that qualify for the Failsafe Mechanism, and to present this data and evidence to the Independent Verifier. The ISP may also need to supply other information that the Independent Verifier may require. The completion of the Failsafe Mechanism process also relies on the submission of various information and data held by Openreach to the Independent Verifier.

⁵⁸ INCA and Zoomm stated that the Independent Verifier will need significant data input from altnets. This is not correct. The contract terms envisage all data being provided by Openreach and the ISP.

already in effect.⁵⁹ Consequently, we do not consider that ISPs will consider that applying the Failsafe Mechanism is unworkable in practice.

- 3.72 Some altnets expressed concerns that the Independent Verifier might not be truly independent. However, it is a contractual requirement that the Independent Verifier be independent and a third party to both the ISP and Openreach.⁶⁰ INCA and Zzoomm submitted that the definition of the overlap area in the contract is too vague to be fit for purpose, and that it falls to be determined by the Independent Verifier. As noted above, we recognise that there is likely to be an element of judgment in how the Independent Verifier carries out its duties, but we would expect it to act in a fair and reasonable manner in doing so. The contract terms also require Openreach to ensure that its instructions to the Independent Verifier require it to carry out the process accurately, fairly and to the best of its abilities.⁶¹

Acceptability of the Failsafe Mechanism to ISPs

- 3.73 In principle, if the Failsafe Mechanism was too onerous or otherwise unacceptable to ISPs, then this mechanism will provide little comfort to an ISP that is considering using an altnet.
- 3.74 We do not consider that this is the case. While applying the Failsafe Mechanism relies on the ISP submitting data that is likely to be confidential, the Equinox 2 Offer contains safeguards that prevent Openreach from accessing this information. It envisages that the Independent Verifier will handle the information in confidence, enter into a non-disclosure agreement on the ISP's request, and present to Openreach only the result of the recalculation of the OMT performance along with the results of the calculation of legacy order rates for the overlap and non-overlap areas.
- 3.75 More generally, and as noted above, the Failsafe Mechanism is similar to provisions already contained in other Openreach discount contracts (e.g. GEA volume agreement) that are already in effect. This indicates that ISPs are likely to regard these contractual safeguards as adequate and acceptable.⁶²

Risk of future amendment of the Failsafe Mechanism

- 3.76 If an ISP's rate of orders for legacy services per premises in the overlap area is more than 50% greater than in the rest of the Openreach FTTP footprint (the 'Legacy Cross-Check') then this may trigger a review and amendment of the Failsafe Mechanism by Openreach. This could potentially result in the Failsafe Mechanism being modified or removed in future

⁵⁹ Special Offer GEA Volume Agreement between BT Plc and [redacted] dated [redacted]. We are not aware of any complaints made by ISPs in relation to these verification processes or that any significant concerns have been raised.

⁶⁰ Equinox 2 Offer, clause 1.1.

⁶¹ Equinox 2 Offer, Appendix 1, paragraph 9.9 and Appendix 4.

⁶² If an ISP receives larger discounts as a result of the Failsafe Mechanism, it only does so once that process is complete (Equinox 2 Offer, Appendix 1, paragraph 9.5). INCA and Zzoomm stated that the ISP does not receive any interest on those delayed discounts and that its working capital is harmed. We do not consider that this means that the Failsafe Mechanism is likely to be unacceptable to ISPs. In particular, we doubt that any delays are likely to be long enough for these impacts to be material. In particular, Openreach is required to instruct the Independent Verifier within 5 working days of receiving notice that the ISP that it intends to invoke its right to use the Failsafe Mechanism (Equinox 2 Offer, Appendix 1, paragraph 9.9). ISPs and Openreach are also required to cooperate with the Independent Verifier including responding to requests for information in a timely fashion (Equinox 2 Offer, Appendix 1, paragraph 9.11).

assessment periods.⁶³ Any such amendments to the Equinox 2 Offer would be required to be notified to Ofcom under the 90 days notification requirement.

- 3.77 In principle, if an ISP were concerned that the Failsafe Mechanism might be curtailed in the future, then this might deter it from using an altnet.⁶⁴
- 3.78 The design of the Legacy Cross-Check is consistent with Openreach's stated rationale. The purpose of the Equinox 2 Offer is to offer cheaper prices for FTTP to compensate ISPs for limiting their orders of legacy products. The Legacy Cross-Check is intended to guard against the risk that an ISP could use the Failsafe Mechanism as a way to continue pushing sales of legacy broadband products in those parts of the Openreach FTTP footprint where an altnet happens to be available (for example, if it perceives that there are gains from continuing to offer legacy Openreach products to new customers).
- 3.79 However, we would be concerned if natural variation in legacy sales within the Openreach FTTP footprint meant that an ISP could inadvertently fail the Legacy Cross-Check, even when the ISP adopts the same sales practices for legacy products across the whole of the Openreach FTTP footprint. If this were the case, this could affect ISPs' incentives to use an altnet.
- 3.80 We have assessed how likely it is that an ISP's legacy orders per premises in the overlap area is more than 50% greater than in the non-overlap area, due to the natural variation in the sales of legacy services within the Openreach FTTP footprint. To do this, we have looked at the variation in existing legacy orders across the Openreach FTTP footprint.⁶⁵
- a) As explained above, Sky, TalkTalk and Vodafone are key potential customers of altnets. For [redacted], we examined the frequency with which orders for legacy services in a randomly assigned subset of Openreach exchange areas would produce a legacy order rate per Openreach FTTP premises that is more than 50% greater than in the remaining Openreach exchange areas. We found no instances of exceeding the 50% tolerance for a plausible range of randomisation parameters.
 - b) To estimate the potential impact of activating the Failsafe Mechanism if an ISP used a mixture of cable and FTTP from VMO2 and Nexfibre in the future, we examined orders for legacy services in exchange areas likely to be located in Area 2 (which proxies the overlap area in this scenario) and compared the legacy order rate per Openreach FTTP premises to the rest of the Openreach FTTP footprint for [redacted]. We found that for a plausible range of parameters the rate of orders for legacy services in the former area is either lower or well within the 50% tolerance of the latter area.

⁶³ Equinox 2 Offer, Appendix 1, paragraph 9.10(a).

⁶⁴ INCA and Zzoomm stated that ISPs can be expected to buy more legacy products in overbuild areas as a result of using an altnet. Given that the Legacy Cross-Check is assessed using legacy orders per premise (rather than the Order Mix), it is not clear why this would be the case. Indeed, insofar as using an altnet allows an ISP to offer lower FTTP prices in overlap areas (e.g. through special promotions in those areas), then this might convert additional customers to FTTP. Legacy orders per premise might thus be lower in overlap areas.

⁶⁵ Full details are set out in Annex 9.

3.81 Consequently, we consider that natural variation of legacy sales within Openreach's FTTP footprint is very unlikely to result in an ISP inadvertently failing the Legacy Cross-Check.

Other stakeholder comments on the Failsafe Mechanism

3.82 VMO2, INCA and Zzoomm referred to a theoretical situation in which the Failsafe Mechanism would be undermined. This occurs if an ISP that only uses Openreach would place a materially higher proportion of FTTP orders in the Overbuild Area than outside this area. This possibility only undermines the effectiveness of the Failsafe Mechanism if: (i) an ISP that only uses Openreach is unable to achieve the OMT in some areas, but can in others; and (ii) these correlate with overlap and non-overlap areas. It is unclear whether this is plausible in practice. ISPs' sales systems and practices are likely to significantly influence whether a customer takes FTTP and it is not obvious why these would lead to significant differences in an ISP's mix of orders between areas. As explained in Annex 8, the difficulties [§<] apply across the Openreach FTTP footprint, rather than being specific to certain areas.

3.83 INCA and Zzoomm also expressed concern that the Failsafe Mechanism exposes confidential information on altnet build to Openreach. This is not correct. Information on the overlap area is only submitted to the Independent Verifier.⁶⁶

Provisional conclusion in relation to Question 1

3.84 In summary, our provisional analysis above is as follows:

- a) The discounts if the OMT are met are substantial so ISPs are likely to be strongly incentivised to meet them. Therefore, the OMTs could deter ISPs from moving volumes from Openreach to altnets if doing so jeopardised meeting these targets.
- b) We cannot rule out the possibility that in the future placing orders with an altnet could jeopardise some ISPs' ability to hit the OMTs, absent the Failsafe Mechanism. [§<]. Also, given the high overlap of the Openreach FTTP footprint by VMO2, ISPs might face difficulties in meeting the OMTs as a result of shifting large numbers of orders to VMO2 cable and altnet FTTP.
- c) However, in the event an ISP finds itself in this position, it can activate the Failsafe Mechanism, and have its performance against OMTs assessed for Openreach's FTTP footprint outside the overlap area. Therefore, ISPs' performance against the OMTs should not ultimately be affected by whether they use an altnet.
- d) The Failsafe Mechanism is in our view practically workable and we expect it to be acceptable to ISPs. We also do not consider that the Legacy Cross-Check raises any concerns.

3.85 In the light of the above analysis, we provisionally conclude that the OMTs do not create a potential barrier to using altnets. Given this provisional conclusion, it is not necessary to consider Questions 2 and 3 in our analytical framework.

⁶⁶ Equinox 2 Offer, Appendix 4, paragraphs 1 and 2.

- 3.86 We cannot rule out the possibility that our assessment above is overtaken by changing circumstances in the future (for example, because the Failsafe Mechanism not working as we expect it to). If this were to happen, it would be open to us to intervene to prevent terms which create a barrier to using altnets, including through our direction making powers under SMP Conditions.

Do the forecasting requirements act as a barrier to altnet entry and expansion?

Stakeholders' views

- 3.87 An altnet [redacted] stated that Openreach's forecasting requirements cause significant difficulties for certain ISPs and require ISPs to dedicate considerable time and resource to developing and meeting forecasts. It said that this diverts ISPs from integrating with altnets such as [redacted].⁶⁷

Ofcom's approach

- 3.88 The purpose of the forecasting requirements in the Equinox 1 Offer was to help Openreach plan capacity and resources for the purposes of meeting service level agreements (e.g. with respect to engineer appointment availability). We concluded that those forecasting requirements did not create a potential barrier to using altnets.⁶⁸
- 3.89 The Equinox 2 Offer makes some changes to the detail of how the forecasting requirements operate. However, those requirements apply regardless of whether or not an ISP uses an altnet. Moreover, [redacted].⁶⁹
- 3.90 More generally, we previously rejected an argument that the Equinox 1 Offer encouraged ISPs to redirect their resources to prioritise integrating their systems and processes with Openreach's systems, rather than altnets' systems. ISPs have a strong incentive to prioritise Openreach regardless.⁷⁰
- 3.91 Our provisional view is thus that the forecasting requirements do not raise a potential barrier to using altnets.

⁶⁷ [redacted].

⁶⁸ Equinox 1 Statement, paragraphs 3.93-3.96.

⁶⁹ [redacted].

⁷⁰ Equinox 1 Statement, paragraphs 3.97.

Do lower Openreach FTTP prices act as a barrier to altnet entry and expansion?

Stakeholders' views

- 3.92 In the WFTMR Statement, we imposed a charge control on Openreach's FTTP 40/10 rental price.⁷¹ [X], [X], VMO2, Nexfibre, INCA and Zzoomm have highlighted that, under the Equinox 2 Offer, Openreach's prices for some faster FTTP products are below its price for FTTP 40/10. [X] noted that, in the Equinox 1 Statement, Ofcom used the FTTP 40/10 price as a benchmark to verify that Openreach's FTTP prices allow altnets to recover their efficiently incurred costs. [X] and VMO2 were concerned that allowing Openreach to price below this benchmark will discourage altnets from deploying FTTP.⁷²
- 3.93 INCA and Zzoomm submitted various detailed criticisms of the model of the costs of deploying a fibre network used in the WFTMR Statement (the '2021 Cost Model').⁷³
- 3.94 Nexfibre and VMO2 were concerned that the Equinox 2 Offer would harm altnet investment, ultimately resulting in consumer detriment. They said that the Equinox 2 Offer lowered prices in the short term but increased them more quickly over time. Nexfibre was concerned that the Equinox 2 prices may be below Openreach's costs.⁷⁴
- 3.95 INCA and Zzoomm said that Openreach's rental charges for faster FTTP products generally rise slower than CPI. They said that Ofcom should assess whether this means that these products are priced below a reasonably efficient operator's costs.⁷⁵
- 3.96 INCA and Zzoomm considered that the Equinox 2 Offer is likely to harm competition in Area 3 (where there had been more altnet build than expected) as well as in Area 2. They considered that Ofcom should consider these two areas separately as they were identified as distinct markets in the WFTMR Statement.⁷⁶
- 3.97 In its response to our information request, [X].⁷⁷

Ofcom's analysis

Background

- 3.98 As discussed above, the 90 days' notification requirement is for commercial terms where the price or other contractual conditions are conditional on the volume and/or range of

⁷¹ This charge control applies where a legacy FTTC 40/10 service is not available. FTTC 40/10 and FTTP 40/10 are sometimes referred to as 'anchor products' since the terms on which these are supplied help anchor (i.e. constrain) the terms on which other Openreach products are supplied. WFTMR Statement, Volume 4, Table 1.1 and 2.1.

⁷² [X]. [X] letter, 23 December 2022. VMO2 meeting slides, 12 January 2023, slide 2. Nexfibre letter, 16 January 2023, paragraphs 4.8-4.9. INCA and Zzoomm, 26 January 2023 price levels submission, paragraphs 7(a) and 23.

⁷³ INCA and Zzoomm, 10 January 2023 submission.

⁷⁴ VMO2 meeting slides, 12 January 2023, slide 2. Nexfibre letter, 16 January 2023, paragraphs 1.6.3, 1.7 and 4.1-4.7. [X].

⁷⁵ INCA and Zzoomm, 26 January 2023 price levels submission, paragraph 7(b).

⁷⁶ INCA and Zzoomm, 26 January 2023 geographic markets submission, paragraphs 5-6 and 14-20. Similarly the INCA and Zzoomm, 26 January 2023 price levels submission refers to altnets' costs in each of Area 2 and Area 3 (see paragraph 7).

⁷⁷ [X] response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1(b).

services purchased. It is not intended to address general concerns about low wholesale prices.⁷⁸

- 3.99 We have nonetheless considered whether the level of Openreach's prices under the Equinox 2 Offer raises prima facie concerns that would lead us to decide to investigate them in further detail (albeit not bounded by the 90 day process).
- 3.100 In considering this, we have had in mind our approach to pricing regulation in the WFTMR Statement. That approach supported our overarching strategic objectives as follows:
- a) In Area 2 we aimed to promote competition and investment in gigabit-capable networks by Openreach and other operators. We considered that there was potential for material and sustainable competition to Openreach in Area 2.⁷⁹
 - b) In Area 3 we did not believe that commercial deployment of gigabit-capable networks would result in material and sustainable competition to Openreach. Our aim was to promote investment in gigabit-capable networks by Openreach.⁸⁰
- 3.101 In the WFTMR Statement:
- a) We set a price ceiling for Openreach's FTTC 40/10 and FTTP 40/10 products but decided not to charge control Openreach's higher speed products.⁸¹
 - b) We checked that the level of the price ceiling was consistent with our own estimate of the price that an entrant operator would need to charge in order to recover its efficiently incurred costs. These costs were presented as a range to reflect variations in certain key modelling assumptions. The FTTP 40/10 price ceiling was above the entrant operator cost range. We thus considered that our approach to price regulation in Area 2 was consistent with our objective of promoting full-fibre investment by rivals to Openreach.⁸²
 - c) We decided to prohibit Openreach from offering geographic discounts.
 - d) We did not impose a minimum FTTP price (i.e. a price floor) for Openreach. One reason for not introducing a price floor was that we did not want to introduce regulation which would deny consumers the benefits of emerging competition.⁸³
- 3.102 The WFTMR Statement sets out our decisions on the regulation of various fixed telecoms markets for the period to March 2026. On the basis of that statement, networks have invested significant sums. Ofcom recognises the importance of providing a predictable, stable regulatory environment. Thus, potentially revisiting the decisions taken in that statement is not something we would do lightly.

⁷⁸ We took the same approach in the Equinox 1 Statement. See Equinox 1 Statement, paragraphs 3.40-3.47.

⁷⁹ WFTMR Statement, Volume 4 paragraphs 1.1-1.13. WFTMR Statement, Volume 1 paragraph 2.47.

⁸⁰ WFTMR Statement, Vol.4, paragraphs 2.7-2.10.

⁸¹ WFTMR Statement, Vol.4, Table 1.1 and 2.1.

⁸² WFTMR Statement, Vol.4, paragraphs 1.36-1.38.

⁸³ WFTMR Statement, Vol.3, paragraph 7.76 and paragraph A12.103.

Comparison with Openreach's FTTP 40/10 price

- 3.103 Under the Equinox 2 Offer, Openreach's discounted rental charges for FTTP 55/10, FTTP 80/20 and FTTP 115/20 are lower than the rental charge for the FTTP 40/10 product. As explained above, some altnets were concerned that this indicates that the Equinox 2 Offer prices are unduly low. We do not consider this to be a relevant test. Rather, we consider the relevant question to be the extent to which altnets in Area 2 could profitably compete against Openreach's average FTTP price under the Equinox 2 Offer. Given our policy objectives, as set out in the WFTMR, we consider it is appropriate to assess the costs of a efficient altnet in Area 2, rather than an altnet located in Area 3.^{84 85}
- 3.104 In particular:
- a) Openreach's FTTP 40/10 price does not indicate the threshold below which an altnet in Area 2 is unable to profitably to compete;⁸⁶ and
 - b) Networks can be used to supply a range of FTTP products. We thus consider that it is more relevant to focus on Openreach's average price across its portfolio of FTTP products, rather than focusing on its charges for a particular speed.⁸⁷
- 3.105 Accordingly, in the subsections below we have compared: (i) Openreach's average FTTP price against an estimate of an altnet's costs derived from the 2021 Cost Model; and (ii) Openreach's portfolio of FTTP prices against prevailing altnet prices and offers.

Comparison with the 2021 Cost Model

- 3.106 As explained in paragraph 3.48, Sky, TalkTalk and Vodafone are key potential customers for altnets. As explained in Annex 6, given their current subscriber base, we estimate that these ISPs would pay Openreach an average FTTP rental charge of £[<] to £[<] if the Equinox 2 Offer discounts are applied. Openreach as a whole would earn an average FTTP rental charge of £[<] (this figure also reflects sales to other ISPs, including BT).
- 3.107 For the purposes of the prima facie exercise described above, we consider that these estimates are a reasonable guide to the average revenue that an altnet could earn if it were to match the Equinox 2 Offer prices. We recognise that the blend of FTTP products that customers take, and thus the average revenue, is likely to change over time. However,

⁸⁴ We recognise that FTTP build costs vary across geographic locations and expect them to be typically lower in Area 2 than in Area 3. However, in the WFTMR Statement we did not pursue an approach of setting higher wholesale FTTP prices in Area 3, given our conclusion that material and sustainable competition to Openreach in Area 3 was unlikely. As a result, we do not consider that it is problematic that the Equinox 2 Offer sets the same rental charges in Area 2 and Area 3. We adopted the same position in the Equinox 1 Statement at paragraphs 3.45-3.47.

⁸⁵ In any event, even if we had incorrectly categorised a location as being in Area 3 rather than in Area 2 (as claimed by INCA and Zzoomm), this would not affect our assessment. In this scenario, the costs we have modelled (i.e. those of an altnet in Area 2) would apply to an altnet that was building in that miscategorised location. INCA and Zzoomm, 26 January 2023 geographic markets submission, paragraph 17.

⁸⁶ In contrast, as explained in the Equinox 1 Statement at paragraphs 3.43-3.44, we consider that if Openreach's FTTP prices are at or above this level then this is an indicator that such an altnet is able to profitably compete.

⁸⁷ In any event, while the rental charges for Openreach's faster FTTP products (FTTP 550/75 and above) rise by less than CPI inflation, this is from a higher starting point (e.g. the 2023/24 price for FTTP 550/75 is £19.30). Thus, even if we focused just on the prices of these products as suggested by INCA and Zzoomm, they would lie above the range generated by the 2021 Cost Model.

if customers in the future will generally prefer faster products then this will tend to increase Openreach's average rental revenue, although the impact on its real (inflation adjusted) revenue may be somewhat mitigated by factors such as the way individual product prices change over time.^{88 89} This would imply that future real rental revenues might be higher than the figures set out in the preceding paragraph.

- 3.108 In the WFTMR Statement, we estimated the following range for the unit costs/month of a FTTP entrant in Area 2: £9.53-£13.67 (2020/21 prices).
- 3.109 We have indexed our cost range with inflation to express it in 2023/24 prices, so that it is comparable with the prices set out in the Equinox 2 Offer.⁹⁰ Using our preferred CPI metric, the cost range expressed in a consistent manner as Openreach 2023/24 prices is £11.10-£15.93. Therefore, Openreach's average FTTP price under Equinox 2 is above the top end of the estimated range for the unit cost of an efficient FTTP entrant in Area 2.
- 3.110 When considering the results of the 2021 Cost Model, we have taken the following considerations into account.
- a) As explained in Annex 10, we have not sought to revisit the cost and modelling assumptions that we used in the WFTMR Statement and we have not attempted to gather further evidence in order to recalibrate the model.
 - b) The range of costs in the WFTMR Statement is fairly wide. The upper end is over 40% higher than the lower end. While it was not necessary to seek to identify a more precise cost range for the WFTMR Statement, a more in depth reassessment of costs might result in a narrower range.
 - c) We do not consider the comparison of Openreach's prices with our estimated range of costs to be a bright line test. Given the wide range of costs, we are looking at where Openreach's prices sit relative to range: are they at (or above) the top of the range, in the middle, or at the bottom of the range.⁹¹

Comparison with altnet prices

- 3.111 Below we compare the key features of Openreach's FTTP prices and the prices offered by CityFibre, [3<] and VMO2. We then set out some further observations.
- 3.112 ISPs consider whether customers are profitable over the lifetime of their subscription. Connection discounts generally have a more limited overall impact since they are one off charges, whereas rental charges are ongoing and form a greater proportion of total price

⁸⁸ Under the Equinox 2 Offer, Openreach's rental charges for slower FTTP products generally rise in line with CPI but those for faster products (FTTP 550/75 and above) rise by CPI-1.25%. Also, if an ISP begins selling more expensive Openreach FTTP products, it is more likely to qualify for the ARPU share mechanism. See Annex 6 for further details.

⁸⁹ [3<]. Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 13.

⁹⁰ We have also amended our assumed connection charge, to reflect the lowest connection charge under the Equinox 2 Offer. This model is discussed in further detail in Annex 10.

⁹¹ Moreover, as explained in Annex 10, given the recent fluctuations in CPI experienced in the UK, the precise choice of inflation metric could affect the cost range when it is expressed in 2023/24 prices. Indeed, it is possible that average FTTP prices could lie at the top end of the cost range generated by some inflation metrics.

over a customer lifetime than connection charges.⁹² Therefore, our comparison focuses on rental charges.

CityFibre

3.113 CityFibre currently supplies FTTP to TalkTalk and Vodafone. [REDACTED].⁹³ CityFibre said that [REDACTED].⁹⁴

3.114 [REDACTED].⁹⁵

3.115 Thus, under the Equinox 2 Offer, [REDACTED].

[REDACTED]

3.116 [REDACTED].⁹⁶

3.117 As a result of the Equinox 2 Offer, [REDACTED]. In January 2023, [REDACTED].⁹⁷ [REDACTED].⁹⁸

VMO2

3.118 VMO2 [REDACTED].⁹⁹ [REDACTED].¹⁰⁰

3.119 [REDACTED]. However, for the main ISPs, Openreach's FTTP rental charges under the Equinox 2 Offer are around [REDACTED]% – [REDACTED]% lower than under the Equinox 1 Offer.¹⁰¹ [REDACTED].

Further Ofcom observations

3.120 One limitation of making inferences from altnets' current prices is that there may be scope for them to reduce them further, in response to the Equinox 2 Offer.

3.121 We also recognise that altnets face considerable challenges in becoming established and overcoming Openreach's incumbency advantages. For example, ISPs incur a cost when dealing with multiple network operators, which means that altnets are likely to need to offer terms that are at least as attractive as Openreach's to win business.¹⁰² On the other hand, ISPs may see value in having ongoing increased competition to Openreach, and may be prepared to invest to achieve this.

3.122 CityFibre is the largest new entrant network and is deploying FTTP to a significant number of premises, in competition with Openreach and VMO2. We thus place particular weight on evidence relating to its position. CityFibre [REDACTED]. Since it already supplies TalkTalk and

⁹² In the Equinox 1 Statement, our modelling assumed an average customer lifetime of 5 years. This reflected ISPs' expectations, which ranged from [REDACTED] months. We see no reason why this figure would have materially changed since we published that statement. Equinox 1 Statement, paragraph A2.11.

⁹³ CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1 and Annex 1, pricing tab. [REDACTED].

⁹⁴ CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

⁹⁵ CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

⁹⁶ [REDACTED] response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

⁹⁷ Ofcom calculations using subscriber figures from Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 12.

⁹⁸ See Annex 6 for further details.

⁹⁹ VMO2 response dated 24 January 2023 to Ofcom's information request of 9 January 2023, question 1.

¹⁰⁰ [REDACTED]. VMO2 response dated 24 January 2023 to Ofcom's information request of 9 January 2023, question 2.

¹⁰¹ Ofcom calculations using subscriber figures for January 2023. See Annex 6 for further details.

¹⁰² WFTMR Statement, Volume 3, paragraphs 7.45-7.46.

Vodafone, we would expect some of the costs that these ISPs face in integrating their sales systems and processes with CityFibre to already have been sunk. [REDACTED].

3.123 [REDACTED].

Summary

3.124 As explained above, we have considered whether the level of Openreach's prices under the Equinox 2 Offer raises prima facie concerns that would lead us to decide to investigate them in further detail. In considering this, we have had in mind whether the Equinox 2 Offer prices may be set at a level that prevents material and sustainable competition to Openreach emerging in Area 2.

3.125 Openreach's average FTTP price under Equinox 2 is both above the estimated efficient entrant operator cost range [REDACTED]. Given this, the level of the Equinox 2 prices does not raise prima facie concerns that would lead us to decide to investigate them in further detail. We recognise that altnets may be able to further reduce their prices in response to the Equinox 2 Offer. [REDACTED].

3.126 Having assessed this evidence in the round, we do not at this time have prima facie concerns that would lead us to decide to investigate the level of the Equinox 2 prices in further detail.

Is the Equinox 2 Offer part of an Openreach practice of repeatedly amending its FTTP prices that could act as a barrier to altnet entry and expansion?

Stakeholders' views

3.127 VMO2 submitted that the Equinox 1 Offer and Equinox 2 Offer are part of a series of offers that are calibrated to create uncertainty for ISPs and, as a result, deter them from committing meaningful volumes to altnets. VMO2 considered that Ofcom should examine the effects of this overarching exclusionary strategy. VMO2 considered that Ofcom is not required to conclude any investigation of this strategy within the '90 day' process.¹⁰³

3.128 Nexfibre expressed similar concerns and suggested that Ofcom investigate under the Competition Act.¹⁰⁴

3.129 [REDACTED] expressed similar concerns about Openreach's conduct [REDACTED].¹⁰⁵

Ofcom's approach

3.130 This competition concern is wider than the specific terms of the Equinox 2 Offer. For example, it also depends on the impact that Openreach's previous conduct has had on

¹⁰³ VMO2 letter 22 December 2022.

¹⁰⁴ Nexfibre letter, 16 January 2023, paragraphs 1.6.1 and 2.1-2.8.

¹⁰⁵ [REDACTED].

ISPs' incentives to commit volumes to altnets and the impact that the potential for future changes to Openreach's FTTP pricing could have.

- 3.131 As discussed above, the 90 days' notification requirement is for commercial terms where the price or other contractual conditions are conditional on the volume and/or range of services purchased. It is not intended to address general concerns about Openreach's prices and related practices or behaviour.
- 3.132 As with the low pricing concern outlined above, we have nonetheless considered whether the submissions by stakeholders raise prima facie concerns that would lead us to decide to further investigate the issues raised (albeit not bounded by the 90 day process).
- 3.133 We consider that contemporaneous documents from ISPs and altnets could provide evidence on whether Openreach's pricing conduct (including the pattern of FTTP price amendments and how prices may change in the future) is creating uncertainty for ISPs, such that they are being deterred from using altnets. At present, we have a limited amount of this type of contemporaneous evidence available to us and are seeking further evidence to enable us to reach a view on whether to investigate this matter further.
- 3.134 We have already commenced gathering information on this using our formal information gathering powers and will notify stakeholders of our proposed course of action as promptly as possible.

Provisional conclusion

- 3.135 Our provisional view is that we should take no action at this time to prevent the Equinox 2 Offer terms from being introduced.
- 3.136 In reaching our provisional view, we have considered the impact on competition. For the reasons set out above, we do not consider that the Equinox 2 Offer will have a material adverse impact on competition. We have considered the impact on different stakeholders:
- a) Citizens and consumers: Our provisional conclusion is that the Equinox 2 Offer is consistent with promoting investment in gigabit-capable networks by Openreach and other operators and promoting network-based competition, ultimately delivering better consumer outcomes.
 - b) Altnets: As a result of the Equinox 2 Offer, altnets are likely to face stronger competition from Openreach. However, we provisionally conclude that the OMTs and forecasting requirements do not create a potential barrier to using altnets. Our provisional conclusion is therefore that the Equinox 2 Offer is consistent with network-based competition.
 - c) ISPs: We consider that ISPs are likely to benefit from network-based competition. As explained above, we provisionally conclude that ISPs will continue to be free to use altnets where they wish to do so.

d) Openreach: We consider that not preventing Openreach from introducing the Equinox 2 Offer allows it to engage in network-based competition, without compromising our objective of promoting investment in gigabit-capable networks.

3.137 In reaching our provisional view, we have had regard to our duties under sections 3 and 4 of the Communications Act 2003. We have also had regard to the UK Government's Statement of Strategic Priorities (as referred in Annex 5 below).

Consultation questions

Question 1: Do you agree with our assessment of the Equinox 2 Offer as set out above?

Question 2: Do you have any other comments on the matters set out in this document?

Please provide evidence in support of your views.

A1. Responding to this consultation

How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 4 March 2023.
- A1.2 You can [download a response form](#) from the Ofcom website. You can return this by email or post to the address provided in the response form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to wftmr@ofcom.org.uk, as an attachment in Microsoft Word format, together with the [cover sheet](#).
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation:
- Networks and Communications
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:
- send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files; or
 - upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.
- A1.6 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)
- A1.7 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt of a response submitted to us by email.
- A1.8 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.9 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 4. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.10 If you want to discuss the issues and questions raised in this consultation, please email to wftmr@ofcom.org.uk

Confidentiality

- A1.11 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish responses on [the Ofcom website](#) at regular intervals during and after the consultation period.
- A1.12 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.13 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.14 To fulfil our pre-disclosure duty, we may share a copy of your response with the relevant government department before we publish it on our website. This is the Department for Business, Energy and Industrial Strategy (BEIS) for postal matters, and the Department for Culture, Media and Sport (DCMS) for all other matters.
- A1.15 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further in our [Terms of Use](#).

Next steps

- A1.16 Following this consultation period, Ofcom plans to publish a statement in March 2023.
- A1.17 If you wish, you can [register to receive mail updates](#) alerting you to new Ofcom publications.

Ofcom's consultation processes

- A1.18 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.19 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.20 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:

Corporation Secretary
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA
Email: corporationsecretary@ofcom.org.uk

A2. Ofcom's consultation principles

Ofcom has seven principles that it follows for every public written consultation:

Before the consultation

- A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

- A2.2 We will be clear about whom we are consulting, why, on what questions and for how long.
- A2.3 We will make the consultation document as short and simple as possible, with an overview of no more than two pages. We will try to make it as easy as possible for people to give us a written response.
- A2.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.
- A2.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.
- A2.6 If we are not able to follow any of these seven principles, we will explain why.

After the consultation

- A2.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish the responses on our website at regular intervals during and after the consultation period. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

A3. Consultation coversheet

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing

Name/contact details/job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts? _____

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom aims to publish responses at regular intervals during and after the consultation period. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

A4. Consultation questions

Question 1: Do you agree with our assessment of the Equinox 2 Offer as set out above?

Question 2: Do you have any other comments on the matters set out in this document?

Please provide evidence in support of your views.

A5. Legal Framework

90 days' notification process

- A5.1 At the conclusion of our Wholesale Fixed Telecoms Market Review (WFTMR), we set SMP conditions on BT which took effect from 1 April 2021. SMP Condition 8 relates to the notification of charges, terms and conditions by BT. In particular, it requires BT to notify us and industry if it proposes to amend the charges, terms and conditions on which it provides regulated network access.
- A5.2 SMP Condition 8.6 applies in relation to certain of the markets we defined in the WFTMR Statement, including WLA Area 2 and WLA Area 3. It requires BT to give not less than 90 days' notice of any amendment involving new or existing network access where the price or other contractual conditions are conditional on the volume and/or range of services purchased.

Directions in relation to network access

- A5.3 SMP Condition 1.3 requires BT (amongst other things) to provide network access on such terms, conditions and charges as we may from time to time direct. SMP Condition 7.16 also requires BT to make such modifications to the Reference Offer as Ofcom may direct from time to time. In addition, SMP Conditions 1.10 and 7.18 require BT to comply with any direction we may make under the corresponding condition.
- A5.4 If an SMP condition has effect by reference to a direction given by us, and we are proposing to give a direction that affects the operation of that condition, then section 49 of the Communications Act 2003 (the Act) applies. Section 49(2) states that we must not give the direction unless we are satisfied that to do so is:
- objectively justifiable in relation to the networks, services or facilities to which it relates;
 - not such as to unduly discriminate against particular persons, or a particular description of persons;
 - proportionate to what it is intended to achieve; and
 - in relation to what it is intended to achieve, transparent.

Ofcom's general duties

Section 3 of the Act

- A5.5 Under the Act, our principal duty in carrying out our functions is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition.

- A5.6 In doing so, we are required to secure a number of specific objectives and to have regard to a number of matters set out in section 3 of the Act.
- A5.7 In performing our duties, we are also required to have regard to a range of other considerations, as appear to us to be relevant in the circumstances. For the purpose of this consultation, we consider that a number of such considerations are relevant, in particular:
- the desirability of promoting competition in relevant markets;
 - the desirability of encouraging investment and innovation in relevant markets; and
 - the desirability of encouraging the availability and use of high-speed data transfer services throughout the UK.
- A5.8 We are also required to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, as well as to the interest of consumers in respect of choice, price, quality of service and value for money.
- A5.9 However, we have a wide measure of discretion in balancing our statutory duties and objectives. In doing so, we take account of all relevant considerations, including responses received during our consultation process, in reaching our conclusions.

Section 4 of the Act

- A5.10 Section 4 of the Act requires us, when carrying out our functions in relation to telecoms, to act in accordance with six requirements for regulation which are in summary:
- to promote competition in the provision of electronic communications networks and services, associated facilities and the supply of directories;
 - to promote the interests of all members of the public in the United Kingdom;
 - to take account of the desirability of Ofcom's carrying out of its functions in a manner which, so far as practicable, does not favour one form of or means of providing electronic communications networks, services or associated facilities over another (i.e. to be technologically neutral);
 - to encourage, to such extent as Ofcom considers appropriate the provision of network access and service interoperability for the purpose of securing: efficient and sustainable competition; efficient investment and innovation; and the maximum benefit for customers of telecoms providers and of persons who make associated facilities available;
 - to encourage compliance with certain standards in order to facilitate service interoperability, end-to-end connectivity, and secure freedom of choice for the customers of telecoms providers; and

- to promote connectivity and access to very high capacity networks¹⁰⁶ by members of the public and businesses in the United Kingdom.

A5.11 We consider that the first, second, third, fourth and sixth of those requirements are of particular relevance to the matters under review and that no conflict arises in this regard with those specific objectives in section 3 of the Act that we consider are particularly relevant in this context.

UK Government's Statement of Strategic Priorities

A5.12 Under section 2B(2) of the Act, when exercising our functions relating to telecoms, we are required to have regard to the UK Government's Statement of Strategic Priorities ('SSP').¹⁰⁷ The SSP for telecommunications, the management of radio spectrum, and postal services was designated on 29 October 2019, having been laid in draft before Parliament on 18 July 2019.

Impact assessment

A5.13 Section 7 of the Act provides that where we are proposing to do anything for the purposes of, or in connection with, the carrying out of our functions, and it appears to us that the proposal is important¹⁰⁸, then we are required to carry out and publish an assessment of the likely impact of implementing the proposal, or a statement setting out our reasons for thinking that it is unnecessary to carry out such an assessment. Where we publish such an assessment, stakeholders must have an opportunity to make representations to us about the proposal to which the assessment relates.

A5.14 Whether or not a proposal is 'important' within the meaning of the Act will often be open to debate. However, because impact assessments form part of good policy making, we carry them out in relation to the great majority of our policy decisions.

A5.15 For further information about our approach to impact assessments, see the guidelines 'Better policy making: Ofcom's approach to impact assessments' on our website.¹⁰⁹

Equality impact assessment

A5.16 Section 149 of the Equality Act 2010 (the 2010 Act) imposes a duty on us, when carrying out our functions, to have due regard to the need to eliminate discrimination, harassment, victimisation and other prohibited conduct related to the following protected

¹⁰⁶ A "very high capacity network" is set out in the Act as meaning "an electronic communications network which—
(a) consists wholly of optical fibre elements at least up to the distribution point at the serving location; or
(b) is capable of delivering, under usual peak-time conditions, network performance that, in OFCOM's opinion, is similar, in terms of available downlink and uplink bandwidth, resilience, error-related parameters and latency and its variation, to the network performance of a network falling within paragraph (a)."

¹⁰⁷ <https://www.gov.uk/government/publications/statement-of-strategic-priorities>

¹⁰⁸ A proposal is 'important' if its implementation would be likely to do one or more of the following: (i) involve a major change in Ofcom's activities; (ii) have a significant impact on persons carrying on businesses operating in markets Ofcom regulates; or (iii) have a significant impact on the general public in the UK or a part of the UK.

¹⁰⁹ An overview and link to the guidelines can be found on our [Policies and Guidelines webpage](#).

characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation. The 2010 Act also requires us to have due regard to the need to advance equality of opportunity and foster good relations between persons who share specified protected characteristics and persons who do not.

- A5.17 Section 75 of the Northern Ireland Act 1998 (the 1998 Act) also imposes a duty on us, when carrying out our functions relating to Northern Ireland, to have due regard to the need to promote equality of opportunity and regard to the desirability of promoting good relations across a range of categories outlined in the 1998 Act. Ofcom's Revised Northern Ireland Equality Scheme explains how we comply with our statutory duties under the 1998 Act.
- A5.18 To help us comply with our duties under the 2010 Act and the 1998 Act, we assess the potential impact of our decisions on persons sharing protected characteristics and in particular whether they may discriminate against such persons or impact on equality of opportunity or good relations.
- A5.19 In Annex 23 of the WFTMR Statement we considered how different groups in society engage with communications services. In particular, we referred to market research we had conducted that enabled us to assess the potential impact of future regulation on certain equality groups, particularly older consumers.¹¹⁰ While our research identified differences in take-up and use of fixed line services by different groups within society, we explained that we did not consider that our wholesale regulation is likely to have a disproportionate impact on any of the equality groups, as our regulation is aimed at promoting competition and investment across the range of services that rely on WLA. Therefore, we considered that our regulatory interventions would further the aim of advancing equality of opportunity between different groups in society by furthering the interests of all consumers that use retail services reliant on WLA.
- A5.20 We consider that the approach set out in this document is consistent with the position set out in Annex 23 of the WFTMR Statement.

¹¹⁰ Ofcom, 2020. [Affordability of Communication Services](#).

A6. The Equinox 2 Offer discounts

Introduction

Purpose

- A6.1 The Equinox 2 Offer gives additional discounts to ISPs on rental and connection charges, conditional on meeting the OMTs. This annex looks at the scale of the Equinox 2 Offer discounts compared with the standard list price and compared with the Equinox 1 Offer prices.
- A6.2 Our analysis shows that the Equinox 2 Offer provides discounts of up to 42% for rental charges and up to 75% for connection charges compared with Openreach's standard list prices. However, the average value of the rental and connection discounts varies depending on the mix of products purchased by an ISP.

Rental discounts

Main rental discounts

- A6.3 Table A6.1 shows Openreach's standard list price, the Equinox 1 Offer price and the Equinox 2 Offer price for each FTTP product speed.

Table A6.1: Comparison of monthly rental charges under Equinox 2 and Equinox 1 as of 1 April 2023

FTTP speed	Standard list price	Equinox 1 Offer price	Equinox 2 Offer price	Equinox 2 vs. list price	Equinox 2 vs. Equinox 1
40/10	£16.09	£16.09	£16.09	0%	0%
55/10	£19.62	£16.91	£15.50	-21%	-8%
80/20	£20.19	£16.91	£15.50	-23%	-8%
115/20	£20.19	£17.66	£15.80	-22%	-11%
160/30	£24.71	£18.32	£16.20	-34%	-12%
220/30	£24.86	£20.36	£17.30	-30%	-15%
330/50	£28.37	£21.49	£18.30	-35%	-15%
550/75	£31.87	£22.62	£19.30	-39%	-15%
1000/115	£36.55	£24.88	£21.30	-42%	-14%
1200/120*	£34.90	N/A	£22.30	-36%	N/A
1800/120*	£39.90	N/A	£29.30	-25%	N/A

Source: Openreach FTTP standard price list, Equinox 1 Offer price list and Equinox 2 Offer price list.

*Openreach are currently piloting speeds 1200/120M & 1800/120M. [3]. Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 16.

- A6.4 The Equinox 2 Offer includes two new products, 1200/120M and 1800/120M. These products are currently being piloted by Openreach and are not included in the Equinox 1 Offer. The pilot period is scheduled to end on 1 April 2023.^{111 112}
- A6.5 Different indexation rules apply for Equinox 1 and Equinox 2. These are summarised in Table A6.2.

Table A6.2: Equinox 1 and Equinox 2 Indexation rules

FTTP speed	Equinox 1 Offer indexation	Equinox 2 Offer indexation
40/10	Per List Price	Per List Price
55/10	Price of 40/10M + £0.84*	CPI or 0% whichever is highest
80/20	Price of 40/10M + £0.84*	CPI or 0% whichever is highest
115/20	Price of 40/10M + £1.57*	CPI or 0% whichever is highest
160/30	CPI-1.25% or 0% whichever is higher	CPI or 0% whichever is highest
220/30	CPI-1.25% or 0% whichever is higher	CPI or 0% whichever is highest
330/50	CPI-1.25% or 0% whichever is higher	CPI or 0% whichever is highest
550/75	CPI-1.25% or 0% whichever is higher	CPI-1.25% or 0% whichever is highest
1000/115	CPI-1.25% or 0% whichever is higher	CPI-1.25% or 0% whichever is highest
1200/120	N/A	CPI-1.25% or 0% whichever is highest
1800/120	N/A	CPI-1.25% or 0% whichever is highest

Source: Equinox 1 Offer price list and Equinox 2 Offer price list.

*This is valid until 30 September 2026. From 1 April 2028 indexation is subject to the terms and conditions of the offer.

- A6.6 Under the Equinox 1 Offer, Openreach reserves the right to review prices in the period between 1 October 2026 and 30 September 2027. Following this review Openreach has the option to increase rental prices by up to £1.50/month and connection charges by up to £20, after giving 6 months' notice. Indexation continues thereafter.
- A6.7 Under the Equinox 2 Offer, Openreach is reducing the amount that it can potentially increase rental prices, from £1.50 to £1, and increasing the notice period, from 6 months to 12 months.

FTTP 550/75 product 12-month offer

- A6.8 As in the Equinox 1 Offer, an additional rental discount is applied to orders for the FTTP 550/75 product placed before 30 September 2026, provided the ISP is meeting the 80% OMT. Where new-to-network customers take the FTTP 550/75 product, the price is set at Openreach's FTTP 160/30 price for the first 12 months before reverting to the usual FTTP 550/75 rental price.

¹¹¹ Source: [Pricing manager \(openreach.co.uk\)](https://openreach.co.uk/pricing-manager)

¹¹² Details on the pilot scheme can be found here: [NGA2012/22 \(openreach.co.uk\)](https://openreach.co.uk/nga2012/22)

ARPU share mechanism

- A6.9 The offers also include an ARPU share mechanism if the ISP's average rental amount per Openreach FTTP consumer exceeds a certain threshold.¹¹³ The ISP will receive 50% of the amount that its ARPU exceeds the threshold. ISPs are only eligible for this if they meet the 80% OMT.
- A6.10 Under the Equinox 1 Offer, the ARPU share threshold is £18.92 (as of 1 April 2023) and indexed by CPI-2% or 0%, whichever is higher. Openreach also reserves the right to increase the ARPU share threshold by up to £1.50 on 30 September 2026, which would reduce the value of this discount.
- A6.11 Under the Equinox 2 Offer, the ARPU share threshold is reduced to £16.95 and indexed by CPI or 0%, whichever is higher. Openreach also reserves the right to increase the ARPU share threshold by up to £1 on 30 September 2026.
- A6.12 Only speeds of FTTP 220/30 and above are priced higher than the ARPU share threshold (see Table A6.2). Therefore, to qualify for the ARPU share mechanism an ISP would need to be purchasing a product mix that is weighted towards the higher speed products. [X].

Connection discounts

- A6.13 Under the Equinox 2 Offer, connection discounts are available to ISPs on new FTTP connections to residential premises in Area 2 and Area 3.
- A6.14 The FTTP standard list price of £114.78 for a connection applies across the entire UK.¹¹⁴
- A6.15 The Equinox 1 Offer provides a connection discount to existing Openreach customers in Area 2, charging £57.88. An additional discount is offered to customers in Area 2 that are new to the Openreach network, charging £28.94. No discounts are offered in Area 3.¹¹⁵
- A6.16 The Equinox 2 Offer introduces further connection discounts. In Area 3, a discount is available for FTTP 80/20 and faster (reducing the connection charge to £78.00). In Area 2, Equinox 2 introduces additional connection discounts to an ISP's existing customers that move from an Openreach legacy product to an Openreach FTTP 80/20 or faster product (reducing the connection charge to £28.00).¹¹⁶
- A6.17 A full connection discount is applied where the 90% OMT is met. For each 1% below the 90% OMT, the connection discount reduces by 10%. If an ISP is at or below the 80% OMT then there are no connection discounts and the standard list price applies.

¹¹³ 'ARPU' is defined by Openreach as 'the average rental amounts per End User of the Primary Service' in [the Equinox 1 Offer, schedule 1, paragraph 16.5](#).

¹¹⁴ Source: Openreach [FTTP standard price list](#)

¹¹⁵ Source: Openreach, [Equinox 1 Offer price list](#)

¹¹⁶ Source: Openreach, [Equinox 2 Offer price list](#)

Average value of discounts

A6.18 We have calculated the average rental discounts under the Equinox 1 Offer and the Equinox 2 Offer that the main ISPs are achieving, based on their actual product mix in January 2023.¹¹⁷

A6.19 Table A6.3 below shows the average rental charge under the three pricing schemes for all ISPs collectively and for Sky, TalkTalk, Vodafone separately.

Table A6.3: Average value of rental charge discounts

	All ISPs	Sky	TalkTalk	Vodafone	Openreach forecast – all ISPs
	January 2023 actuals				2023/24 forecast
FTTP standard list price	£[X]	£[X]	£[X]	£[X]	£[X]
Equinox 1 Pricing	£[X]	£[X]	£[X]	£[X]	£[X]
Discount from list prices	-[X]%	-[X]%	-[X]%	-[X]%	-[X]%
Equinox 2 pricing	£[X]	£[X]	£[X]	£[X]	£[X]
Discount from list prices	-[X]%	-[X]%	-[X]%	-[X]%	-[X]%
Discount from Equinox 1	-[X]%	-[X]%	-[X]%	-[X]%	-[X]%

Source: Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 11, 12 and 13.

A6.20 The average value of discounts depends on an ISP's product mix. The discounts increase as the product mix moves towards the higher speed products.

A6.21 We have also estimated the average connection charge, for all ISPs collectively. The results for this are shown in Table A6.4.¹¹⁸ Compared with the standard list prices, the Equinox 1 Offer provides an average connection discount of [X]%, whereas the Equinox 2 Offer provides an average connection discount of [X]%.¹¹⁹

¹¹⁷ Subscriber figures are taken from Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 11 and 12. Subscriber figures include sub-brands and sales to ISP Resellers.

¹¹⁸ Calculated using Openreach's published pricing schemes and Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 14 and 15. Pricing sources: [FTTP standard price list](#), [Equinox 1 Offer](#), [Equinox 2 Offer](#).

¹¹⁹ [X].

Table A6.4: Average value of connection charge discounts

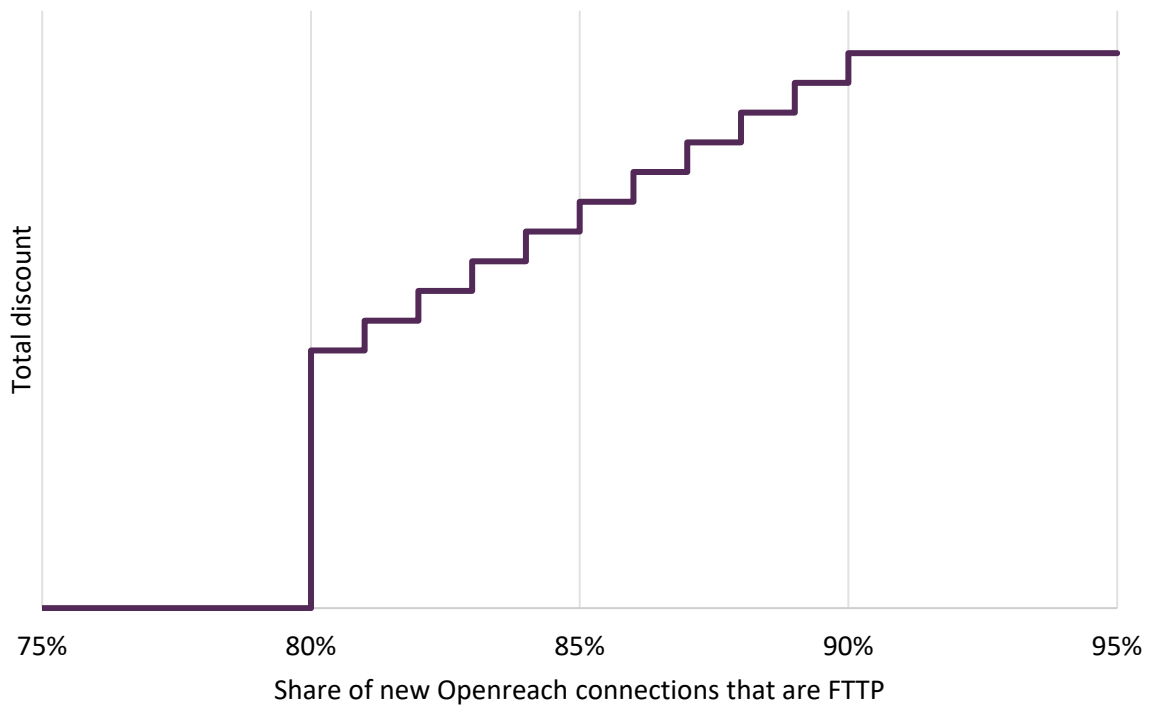
	Openreach		
	Latest quarter	Full year	2023/24 forecast
FTTP standard list price	£[]]	£[]]	£[]]%
Equinox 1 Pricing	£[]]	£[]]	£[]]%
Discount from list prices	-[]]%	-[]]%	-[]]%
Equinox 2 pricing	£[]]	£[]]	£[]]
Discount from list prices	-[]]%	-[]]%	-[]]%
Discount from Equinox 1	-[]]%	-[]]%	-[]]%

Source: Openreach response dated 17 January 2023 to Ofcom’s information request of 9 January 2023, question 14 and 15.

Combined impact of rental and connection discounts

- A6.22 Ultimately, it is the total monetary value of the discounts that determines the incentives for an ISP to meet the OMTs.
- A6.23 The full rental discounts are achieved once an ISP meets the 80% OMT. From 80% to 90% the value of the discount increases more gradually due mainly to the graded connection discounts. Beyond 90% there are no further discounts. This is illustrated in Figure A6.5.
- A6.24 If an ISP’s goal is to maximise their discount, they will aim to achieve an OMT above 90%. There is a particularly strong incentive to meet the 80% OMT to avoid the loss of all rental discounts.

Figure A6.5: Illustration of the shape of average Equinix discounts depending on an ISPs' Order Mix



- A6.25 For an ISP that consistently meets the OMTs, the actual total discount that an ISP qualifies for will depend on many factors, including its product mix and average customer lifetime.
- A6.26 As an ISP increasingly uses FTTP, the relative importance of rental discounts increases (since those discounts are applied to a larger base of FTTP subscribers) and the relative importance of connection discounts decreases.

A7. Altnet overlap of Openreach's FTTP footprint

Introduction

- A7.1 In this annex, we outline evidence on the proportion of Openreach's FTTP footprint where altnets that could credibly provide wholesale access to the main third party ISPs are likely to be present.
- A7.2 Compliance with the OMTs is measured by reference to Openreach's FTTP footprint (leaving aside the case where the Failsafe Mechanism is engaged). If an ISP were to use an altnet, rather than purchasing FTTP from Openreach, then the size of any potential impact on its Order Mix depends on the extent of the overlap between the altnet and Openreach. For example, if that altnet is only present in a tiny fraction of the Openreach FTTP footprint then any potential impact on the overall Order Mix is likely to be small.
- A7.3 Below we first provide an overview of stakeholders' views. Second, we discuss the key altnets for the purposes of our analysis. Third, we set out evidence on overlap in 2022 and in 2025. Finally, we explain the inferences we have drawn from this evidence.

Stakeholders' views

- A7.4 We requested information from Openreach on current and future overlap:
- One piece of Openreach analysis suggests that, around the end of 2022, CityFibre FTTP was available at approximately [X]% of the premises in Openreach's FTTP footprint. VMO2 services (either cable or FTTP) were available at approximately [X]% of premises in Openreach's FTTP footprint.¹²⁰
 - A different piece of Openreach analysis estimated that the proportion of its FTTP network where altnets are present would grow over time. The proportion where VMO2 is present was predicted to rise from [X]% in 2022/23 to [Y]% in 2025/26. The proportion where CityFibre is present was predicted to rise from [X]% in 2022/23 to [X]% in 2025/26.¹²¹
- A7.5 We also requested information from CityFibre, VMO2 and Nexfibre on overlap:
- CityFibre estimated that in Q4 2022 it was present at approximately [X]% of the premises in Openreach's FTTP footprint. It forecast that this proportion would increase, rising to approximately [X]% of Openreach's FTTP footprint in Q4 2025.¹²²

¹²⁰ These estimates were constructed using data from September 2022 and January 2023. Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 6.

¹²¹ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 8.

¹²² CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 5 and 6 (labelled 4 and 5 in the response).

- b) VMO2 estimated that in November 2022 around [X] of the premises passed by its network were also passed by Openreach FTTP. It expects this figure to increase to around [X] by the end of 2025.^{123 124}
- c) Nexfibre estimated that Openreach FTTP would be also available at over [X] of the [X] premises that it ultimately expects to reach with its network. It expects [X] proportion of the [X] premises that it plans to reach by the end of 2026 to be passed by Openreach FTTP.¹²⁵ This would equate to around [X] premises.^{126 127}

Key altnets for our analysis

- A7.6 Numerous operators are currently building FTTP networks in the UK. However, as explained above, we are interested in overlap by altnets that provide wholesale access to the main third party ISPs. Our calculations have also focused on altnets with a material footprint, given that small altnets will only account for a tiny fraction of Openreach's FTTP footprint, even in an extreme case where they entirely lie within that footprint.
- A7.7 When considering the first year or so of the Equinox 2 Offer, we have thus focused on overlap by:¹²⁸
- a) CityFibre, since it currently supplies FTTP to TalkTalk and Vodafone;¹²⁹ and
 - b) [X].¹³⁰
- A7.8 VMO2 operates the largest fixed network other than Openreach.¹³¹ While VMO2 currently does not supply third party ISPs, it is possible that it may begin to do so in the future.¹³² However, even if VMO2 were to reach an agreement with an ISP, we expect that it would take months to establish the practical arrangements e.g. changes to sales and support systems and networks. We have thus not taken VMO2 into account when assessing overlap of Openreach's FTTP network during the first year or so of the Equinox 2 Offer. However,

¹²³ Ofcom calculations: [X]. We did not ask VMO2 to express this as a percentage of Openreach's FTTP footprint, since it would have required VMO2 to estimate the number of premises that Openreach will pass. VMO2 response dated 24 January 2023 to Ofcom's information request of 9 January 2023, questions 3 and 4.

¹²⁴ The extent of overlap also depends on the extent to which networks overbuild each other. [X]. VMO2 response dated 24 January 2023 to Ofcom's information request of 9 January 2023, questions 5 and 6.

¹²⁵ Nexfibre response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹²⁶ Ofcom calculation: [X].

¹²⁷ [X]. Nexfibre response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 4.

¹²⁸ Freedom Fibre also supplies [X] FTTP to TalkTalk (TalkTalk response dated 19 January 2023 to Ofcom's information request of 9 January 2023, question 11). Freedom Fibre is not included in our Connected Nations data set. We understand that Freedom Fibre's network is small and thus this omission is unlikely to materially affect our overlap estimates.

¹²⁹ In November 2022, CityFibre agreed terms to provide its ISP customers with access to toob's FTTP network – see press release available [here](#). However, toob's network is considerably smaller than CityFibre's network. For example, using the Connected Nations data discussed below, in March 2025 toob's planned network would be around [X]% to [X]% of the size of CityFibre's planned network (passing [X] premises compared to [X] premises or [X] premises compared to [X] premises, depending on whether plans without financial approval are excluded). Thus, we have not included toob in the figures calculated below since, given the scale of its network, its omission is unlikely to materially affect our overlap estimates.

¹³⁰ [X] response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

¹³¹ In September 2022, VMO2's network passed [X] premises of which [X] were passed with FTTP. Ofcom analysis using Connected Nations data.

¹³² [X].

as discussed later in this annex, we do take VMO2 into account when considering overlap further in the future.

- A7.9 Nexfibre is a joint venture established in December 2022 between Liberty Global and Telefónica (owners of VMO2) and InfraVia Capital Partners. It is seeking to deploy FTTP to 5m premises by 2026, with the potential to subsequently expand further. VMO2 will be an anchor tenant but Nexfibre is also seeking to attract other ISPs.¹³³ [§].¹³⁴ Thus, similar to our treatment of VMO2, we have taken Nexfibre into account when considering overlap further in the future.
- A7.10 We recognise that other altnets may seek to supply the main ISPs. However, as discussed in the WFTMR Statement, it may be challenging for new entrants – particularly smaller altnets – to do so. In particular, ISPs incur additional costs from using multiple networks (e.g. systems integration).¹³⁵ Moreover, taking one or two additional small altnets into account (even if they were relevant) is unlikely to materially affect our figures. We have thus not included other altnets in our calculations, although we do take them into account in our overall conclusions.¹³⁶ ¹³⁷

Overlap of Openreach’s FTTP network during 2022

Methodology

- A7.11 Ofcom’s Connected Nations reports measure the availability of broadband services in the UK, including the roll out of FTTP networks.¹³⁸ We have used the data set underpinning these reports to estimate overlap in 2022. We consider that this data set represents the best available information. In particular, it uses detailed data from over 50 fixed networks, gathered using Ofcom’s statutory powers, which has been processed by Ofcom to ensure it is consistent and comparable between networks. Also, our methodology has been published, allowing us to make improvements over time in response to stakeholder comments.
- A7.12 Ofcom’s methodology is set out in full in the Connected Nations 2022 Report. In summary:

¹³³ 29 July 2022 press release, available [here](#). Nexfibre response dated 17 January 2023 to Ofcom’s information request of 9 January 2023, question 3.

¹³⁴ Nexfibre response dated 17 January 2023 to Ofcom’s information request of 9 January 2023, questions 1 and 2.

¹³⁵ WFTMR Statement, Volume 2, paragraphs 8.60-8.71.

¹³⁶ We also considered whether to calculate overlap figures including [§] but decided not to do so. In March 2022, it told us that it planned to pass [§] premises by the end of March 2025, which would make it the second largest FTTP network in the UK after Openreach. However, if we exclude plans where financial approval had not yet been obtained then this figure falls very significantly, to [§] premises. Moreover, in March 2022 it planned to pass just under [§] premises by September 2022. However, the Connected Nations data on actual deployment in September 2022 indicated that [§] passed just over [§] premises, which is considerably less than planned. As a result, we doubt that build on the scale planned in March 2022 will actually occur.

¹³⁷ [§]. Sky and Vodafone responses dated 16 January 2023 to Ofcom’s information request of 9 January 2023, questions 4 and 12 respectively.

¹³⁸ The most recent report is *Connected Nations 2022: UK Report*, 15 December 2022 available [here](#) (the ‘Connected Nations 2022 Report’). The methodology is set out in an annex available [here](#). In addition, Ofcom also publishes two smaller updates each year, in the autumn and spring.

- a) Ofcom identifies a comprehensive database of residential and commercial premises in the UK where a broadband service may be delivered.¹³⁹
- b) Three times a year, Ofcom gathers data from fixed networks on each address where services are available.¹⁴⁰ This address-level data is processed and matched to our database of premises, to create a data set that lists the services and operators present at each of those premises.^{141 142}

Overlap by CityFibre and [X]

A7.13 Table A7.1 below sets out Ofcom's estimate of overlap in 2022 using the Connected Nations data set. The first block of figures looks at overlap of Openreach's FTTP network by CityFibre, the second block looks at overlap by [X] and the final block looks at overlap by *either* of these networks. By way of comparison, in the Equinox 1 Statement, Ofcom estimated that CityFibre was available in approximately [X]% of the Openreach FTTP footprint in July 2021.¹⁴³

¹³⁹ This starts from a more extensive list of addresses, properties and land areas. This leaves a premise base of approximately 31.7m. Connected Nations 2022 Report, Annex 1, Figure 1.

¹⁴⁰ A full list is set out in Connected Nations 2022 Report, paragraph A3.3.

¹⁴¹ The address matching process is described in Connected Nations 2022 Report, paragraphs A1.17-A1.22.

¹⁴² As a result, some premises where a network identifies FTTP as being available are not included in the final data set that we have used to estimate network build and overlap. In particular, the original data provided by Openreach for September 2022 lists FTTP as being available at [X] premises but this falls to [X] if we only look at those premises used for our Connected Nations analysis. For example, we have excluded instances where there are multiple individual premises with a single address (e.g. individual rooms or flats in retirement housing or student accommodation) which accounts for approximately [X] premises in Openreach's original data. As another example, the Connected Nations data set also excludes planned or demolished premises, premises that are under construction and premises that are vacant. These account for approximately [X] premises in Openreach's original data.

¹⁴³ This estimate did not use Connected Nations data. Equinox 1 Statement, paragraph A4.7.

Table A7.1: Overlap of Openreach's FTTP network by CityFibre and [redacted] (2022)

	January 2022	May 2022	September 2022
Openreach FTTP: premises passed	[redacted]	[redacted]	[redacted]
CityFibre: premises passed	[redacted]	[redacted]	[redacted]
- Premises passed by both Openreach FTTP and CityFibre	[redacted]	[redacted]	[redacted]
- Overlap with CityFibre as % of Openreach FTTP footprint	[redacted]%	[redacted]%	[redacted]%
[redacted]: premises passed	[redacted]	[redacted]	[redacted]
- Premises passed by both Openreach FTTP and [redacted]	[redacted]	[redacted]	[redacted]
- Overlap with [redacted] as % of Openreach FTTP footprint	[redacted]%	[redacted]%	[redacted]%
- Premises passed by Openreach FTTP and either CityFibre or [redacted]	[redacted]	[redacted]	[redacted]
- Overlap with either CityFibre or [redacted] as % of Openreach FTTP footprint	[redacted]%	[redacted]%	[redacted]%

Source: Ofcom analysis using Connected Nations data. Premises passed rounded to nearest 1,000. Includes residential and business premises.

A7.14 Slight differences between our estimates of overlap in 2022 and those provided by networks are to be expected, particularly as stakeholders will not be using the same methodology as us. We observe the following differences between our estimates and those provided by networks:

- Our September 2022 figure for overlap with CityFibre is [redacted]% estimate Openreach gave for the end of 2022 and appears [redacted] with Openreach's [redacted]% estimate for 2022/23 [redacted].¹⁴⁴
- Our September 2022 figures for premises passed and overlap significantly differ from CityFibre's estimates for Q4 2022.¹⁴⁵ Given the trends we observe in 2022, this is unlikely just to be due to the difference in the dates used. The reason for this difference is not clear to us.

A7.15 However, as explained above, we consider that the Connected Nations data set represents the best available information on overlap.

Estimate of overlap of Openreach's FTTP network in 2025

Methodology

A7.16 The Connected Nations 2022 Report relates to existing, rather than future, network deployment. However, in 2022 Ofcom published a supplementary report on planned

¹⁴⁴ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 6 and 8.

¹⁴⁵ [redacted]. CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 5 and 6 (labelled questions 4 and 5 in the response).

network deployment and we have used this dataset to estimate overlap of Openreach's FTTP network several years after the Equinox 2 Offer comes into effect.¹⁴⁶

- A7.17 As explained below, there are considerable uncertainties about future overlap. Notwithstanding the limitations, we consider that this data set currently represents the best available information. In particular, it uses detailed data gathered from 39 fixed networks using Ofcom's statutory powers and which has been processed by Ofcom to ensure it is consistent and comparable between networks. Our approach is also consistent with the approach in Connected Nations to existing network build.
- A7.18 Ofcom's methodology is set out in full in the Planned Development 2022 Report. In summary:
- a) Ofcom gathered data from 39 fixed networks on each address where they plan, as of March 2022, to deploy FTTP (and equivalent technologies) in the next three years.^{147 148}
 - b) The addresses were matched against the list of premises used for the Connected Nations Autumn 2022 update, which formed the basis of the analysis.
- A7.19 We recognise that the precise details of build plans will change. To check whether the March 2022 plans are still a reasonable tool for assessing future overlap, we asked Openreach, CityFibre, [redacted] and VMO2 whether there had been any significant changes since they submitted this data in March 2022.¹⁴⁹
- a) Openreach said that [redacted].¹⁵⁰
 - b) CityFibre said that [redacted].¹⁵¹ We also asked CityFibre to explain the relationship between the plans for 2025 it submitted in March 2022 and a separate submission it sent to Ofcom in June 2022. CityFibre said that [redacted].¹⁵²
 - c) [redacted].¹⁵³
 - d) VMO2 said that [redacted].¹⁵⁴

¹⁴⁶ *Connected Nations: Supplementary report on Planned Network Deployments 2022*, 29 November 2022, available [here](#) (the 'Planned Deployment 2022 Report'). The methodology is set out in section 4.

¹⁴⁷ This assessment omits planned network build by public authorities. Some networks provided plans extending beyond this three year timeframe. We have not used these longer term plans to avoid inconsistencies with networks that did not do so.

¹⁴⁸ Ofcom also used data on existing cable network deployment.

¹⁴⁹ Some altnets claimed that the introduction of the Equinox 2 Offer would reduce the number of premises that they pass. For the purposes of our overlap analysis, we have not taken any such effects into account. This assumption is conservative, since the OMTs are more likely to be problematic when overlap is greater. [redacted].

¹⁵⁰ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 9.

¹⁵¹ CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 9 (labelled 8 in the response).

¹⁵² CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 10 (unlabelled in the response).

¹⁵³ [redacted] response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 4.

¹⁵⁴ VMO2 response dated 24 January 2023 to Ofcom's information request of 9 January 2023, questions 7 and 8.

- A7.20 In the light of these responses, we have assessed VMO2 and Nexfibre jointly, rather than attempting to distinguish between them.¹⁵⁵ We have done so using the plans that VMO2 submitted in March 2022.¹⁵⁶
- A7.21 To reflect the uncertainties around whether build plans will come to fruition, Ofcom divided them into three categories: (i) Category 1, where detailed planning and/or deployment were in progress; (ii) Category 2, where financial approval had been obtained; and (iii) Category 3, where financial approval had not yet been obtained.¹⁵⁷

Overlap of Openreach's FTTP network by CityFibre and [redacted]

- A7.22 Due to limitations in the underlying data, we have assessed overlap of Openreach's FTTP network by CityFibre and [redacted] as of 31 March 2025.¹⁵⁸
- A7.23 Ofcom's estimates are set out in Table A7.2 below.
- a) The first column of figures excludes plans where financial approval had not yet been obtained, as of March 2022 when this data was collected. The second column of figures includes all the build plans submitted by these networks.¹⁵⁹
 - b) The first block of figures looks at overlap with CityFibre, the second block looks at overlap with [redacted] and the final block looks at overlap with either of these networks.

¹⁵⁵ This is also consistent with [redacted]. Nexfibre response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2.

¹⁵⁶ [redacted]

¹⁵⁷ Of the total number of new connections planned by 31 March 2025, just over a third were in Category 3 (10.6m connections) with the remainder (12.5m and 6.4m) in Categories 1 and 2. Planned Deployment 2022 Report, Table 4.

¹⁵⁸ [redacted]. For these premises we assigned the end of that window as the completion date. [redacted]. For these premises, we assumed the completion date was 31 March 2025 i.e. the end of the three year period about which we had requested information.

¹⁵⁹ Using the terminology from the Planned Deployment 2022 Report, the first column includes Category 1 and 2 plans but excludes Category 3 plans. The second column includes all three of these categories.

Table A7.2: Overlap of Openreach's FTTP network by CityFibre and [X] (31 March 2025)

	Excl. plans w/o financial approval	All plans
Openreach FTTP: premises passed	[X]	[X]
CityFibre: premises passed	[X]	[X]
- Premises passed by both Openreach FTTP and CityFibre	[X]	[X]
- Overlap with CityFibre as % of Openreach FTTP footprint	[X]%	[X]%
[X]: premises passed	[X]	[X]
- Premises passed by both Openreach FTTP and [X]	[X]	[X]
- Overlap with [X] as % of Openreach FTTP footprint	[X]%	[X]%
- Premises passed by Openreach FTTP and either CityFibre or [X]	[X]	[X]
- Overlap with either CityFibre or [X] as % of Openreach FTTP footprint	[X]%	[X]%

Source: Ofcom analysis using Connected Nations data. Premises passed rounded to nearest 1,000. Includes residential and business premises.

- A7.24 Differences between our estimates of future overlap and those provided by networks are to be expected, particularly as they will have less visibility of their rivals' build plans. However, as explained above, we consider that the Connected Nations data set currently represents the best available information on overlap.
- Our March 2025 figures for overlap with Cityfibre are [X] than Openreach's estimate of [X]% in 2025/26 (which is a later date, meaning further growth might be expected).¹⁶⁰
 - Our March 2025 figures for premises passed and overlap significantly differ from CityFibre's estimates for Q4 2024.¹⁶¹ As noted above, CityFibre said that [X], which may explain this difference.¹⁶²

Overlap by VMO2 and Nexfibre

A7.25 VMO2 provided estimates for the number of premises that it would pass by 31 December 2024, so we have assessed overlap for this date.¹⁶³

A7.26 VMO2's cable network is capable of delivering broadband speeds as high as 1Gbit/s. In principle, an ISP might just use VMO2's FTTP network to supply high speed broadband; however, it might also use VMO2's cable network. We thus present figures in relation to

¹⁶⁰ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 8.

¹⁶¹ Taking all plans into account, [X]. CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 5 and 6 (labelled 4 and 5 in the response).

¹⁶² CityFibre response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 10 (unlabelled in the response).

¹⁶³ This differs from the 31 March 2025 date used for CityFibre and [X].

overlap (i) by VMO2 and Nexfibre’s FTTP networks; and (ii) figures that also include VMO2’s cable network.¹⁶⁴

A7.27 Ofcom’s estimates are set out in Table A7.3 below. We set out figures including and excluding plans where financial approval had not yet been obtained, as of March 2022.

Table A7.3: Overlap of Openreach’s FTTP network by VMO2 and Nexfibre (31 December 2024)

	Excl. plans w/o financial approval	All plans
Openreach FTTP: premises passed	[X]	[X]
VMO2 and Nexfibre FTTP: premises passed	[X]	[X]
- Premises passed by both Openreach FTTP and FTTP from either VMO2 or Nexfibre	[X]	[X]
- Overlap with VMO2 or Nexfibre FTTP as % of Openreach FTTP footprint	[X]%	[X]%
VMO2 and Nexfibre: premises passed	[X]	[X]
- Premises passed by both Openreach FTTP and either VMO2 or Nexfibre	[X]	[X]
- Overlap with VMO2 or Nexfibre as % of Openreach FTTP footprint	[X]%	[X]%

Source: Ofcom analysis using Connected Nations data. Premises passed rounded to nearest 1,000. Includes residential and business premises.

A7.28 As explained above, differences between our estimates of future overlap and those provided by networks are to be expected. Our overlap figures including the VMO2 cable network are [X] to Openreach’s estimate of [X]% in 2025/26.¹⁶⁵ Adding together VMO2’s estimate that [X] of its premises will be overlapped by Openreach FTTP by the end of 2025 and Nexfibre’s overlap estimate of [X] of the premises it plans to reach by the end of 2026 gives a total of [X].¹⁶⁶ This is [X] to our overlap estimates of [X] premises (noting that these figures relate to different dates).

Ofcom inferences and provisional view

A7.29 Estimating future build and overlap is subject to considerable uncertainties. Networks’ plans may not come to fruition or may be subject to changes and delays. However, we expect the proportion of Openreach’s FTTP footprint overlapped by altnets that could credibly provide wholesale access to the main third party ISPs to grow over time.

A7.30 We have considered the likely overlap of Openreach’s FTTP network during the first year or so of the Equinix 2 Offer (i.e. the period of approximately 12 months, starting from April 2023). For this assessment, we have focused on CityFibre and [X].

A7.31 Extrapolating from the overlap figures for 2022 (which grew from [X]% of Openreach’s FTTP network in January 2022 to [X]% in September 2022), alongside the March 2025

¹⁶⁴ The data on VMO2’s cable network relates to the end of April 2022.

¹⁶⁵ Openreach response dated 17 January 2023 to Ofcom’s information request of 9 January 2023, question 8.

¹⁶⁶ VMO2 response dated 24 January 2023 to Ofcom’s information request of 9 January 2023, question 4. Nexfibre response dated 17 January 2023 to Ofcom’s information request of 9 January 2023, question 3.

estimates of [X]% to [X]%, suggests overlap could currently be in the region of 10%. This evidence also suggests that it is reasonable to assume that approximately 15% of Openreach's FTTP network could be overlapped by these networks by April 2024.

- A7.32 Therefore, for the purposes of our analysis, we think it is reasonable to assume that approximately 15% of Openreach's FTTP network could be overlapped by altnets that provide wholesale access to the main third party ISPs during the first year or so of the Equinox 2 Offer.
- A7.33 Our Connected Nations data suggests that the proportion of Openreach's FTTP footprint which overlaps with CityFibre and/or [X] will continue to grow, and by March 2025 it may be approaching [X]% of Openreach's FTTP footprint. In addition, FTTP built by other altnets may be used to supply the main third party ISPs because:
- a) CityFibre and/or [X] reach agreements to supply their ISP customers with access to other altnets' FTTP;¹⁶⁷
 - b) Consolidation occurs, for example with CityFibre and/or [X] acquiring the assets of other altnets; and/or
 - c) Other altnets reach their own agreements to supply FTTP to these ISPs, either separately or through a common wholesale platform.
- A7.34 While there is a great deal of uncertainty, we consider it is reasonable to assume that, two to three years after the Equinox 2 Offer comes into effect, approximately 25% of Openreach's FTTP network could be overlapped by altnets that provide wholesale access to the main third party ISPs, excluding any overlap with VMO2 and Nexfibre.
- A7.35 If VMO2 and Nexfibre were also to begin supplying the main ISPs then overlap of Openreach's FTTP network would be significantly higher than the figure of 25% assumed in the preceding paragraph, particularly if ISPs also make use of VMO2's cable network.¹⁶⁸ In this scenario, overlap figures could be above 60%.
- A7.36 Looking even further into the future, we would expect overlap to continue to grow.
- a) Networks expect to continue building FTTP. For example, Openreach intends to pass 25m premises with FTTP by December 2026 and CityFibre's current plan is to pass over [X] premises.¹⁶⁹ If these plans are realised and assuming Openreach overbuilds almost all of CityFibre's network then overlap would be in the region of [X].
 - b) More of the networks that overlap Openreach's FTTP footprint may be used to supply third party ISPs, for example due to consolidation and/or cooperation agreements between altnets.

¹⁶⁷ As illustrated by the agreement between CityFibre and too described in footnote 129.

¹⁶⁸ [X].

¹⁶⁹ See for example Openreach press release, 12 December 2022, available [here](#). CityFibre response to response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 10 (unlabelled in the response).

A7.37 Looking beyond the next two to three years, we thus anticipate further growth in the proportion of Openreach's FTTP footprint that is served by altnets that provide wholesale access to the main third party ISPs.

A8. ISPs' performance against the OMTs

Introduction

- A8.1 This Annex sets out our provisional views on the likely future performance of the main third party ISPs (Sky, TalkTalk and Vodafone) against the OMTs. This sheds light on whether using an altnet is likely to jeopardise their ability to meet the OMTs (absent the Failsafe Mechanism).
- A8.2 Our assessment uses evidence on historical performance under the Equinox 1 Offer which we have been monitoring, ISPs' current sales practices, the challenges they have told us they face in meeting the OMTs and their use of altnets.

The interrelationship between an ISP's performance and network overlap

- A8.3 If an ISP were to use an altnet, rather than just purchase FTTP from Openreach, then the scale of any potential impact on its Order Mix depends on the extent of the overlap between the altnet and Openreach's FTTP network.
- A8.4 Tables A8.1 and A8.2 give an indicative sense of the possible scale of this impact. These figures are not intended to be forecasts or predictions. Rather they are intended to provide context when interpreting the evidence on ISPs' performance later in this Annex, in order to understand whether using an altnet is likely to jeopardise an ISP's ability to meet the OMTs (absent the Failsafe Mechanism).
- A8.5 For simplicity, these calculations assume that if an ISP only uses Openreach then either 92% or 95% of its orders are for FTTP.
- When using an altnet, we assume the extreme case where the ISP continues to use Openreach's legacy products in the overlap areas in exactly the same way that it would have done if the altnet was not present, i.e. it simply moves Openreach FTTP orders to the altnet and makes no attempt to make greater use of the altnet.
 - The ISP is assumed to switch Openreach FTTP orders to an altnet that covers either 15%, 25% or 60% of the Openreach FTTP footprint.
 - In the high overlap (60%) scenario, which could relate to a situation where the ISP is using cable from VMO2 as well as altnet FTTP, we assume that only half or three quarters of orders in the overlap area are switched.¹⁷⁰
 - We have calculated what the ISP's Order Mix would be after diverting these orders to the altnet as well as the percentage point (ppt) change compared to the position if it placed all orders with Openreach.

¹⁷⁰ For example, because the ISP wants to use multiple suppliers in this large area, in order to strengthen its position when negotiating with them in the future.

Table A8.1: Indicative impact of using an altnet on an ISP that would have a 92% Order Mix if it only used Openreach

Overlap of Openreach's FTTP footprint	15%	25%	60%	
Share of Openreach FTTP orders switched to the altnet	All	All	Half	Three quarters
Openreach Order Mix if an altnet is used	90.7%	89.6%	89.0%	86.3%
Change in Order Mix	-1.3ppt	-2.4ppt	-3.0ppt	-5.7ppt

Source: Ofcom calculations.

Table A8.2: Indicative impact of using an altnet on an ISP that would have a 95% Order Mix if it only used Openreach

Overlap of Openreach's FTTP footprint	15%	25%	60%	
Share of Openreach FTTP orders switched to the altnet	All	All	Half	Three quarters
Openreach Order Mix if an altnet is used	94.2%	93.4%	93.0%	91.3%
Change in Order Mix	-0.8ppt	-1.6ppt	-2.0ppt	-3.7ppt

Source: Ofcom calculations.

Regulatory stop sell

- A8.6 As a result of the Equinox 1 Offer, ISPs have begun limiting the circumstances in which they supply Openreach legacy products in areas where Openreach FTTP is available. In addition to ISPs' sales practices, the transition of regulation from legacy copper to full fibre is also relevant to their future performance against the OMTs.
- A8.7 In the WFTMR Statement, we set out a staged approach for how regulation would transition from copper to full fibre services in exchange areas where fibre is built. The first stage allows Openreach to stop selling new legacy services ('regulatory stop sell') and can apply when Openreach makes ultrafast services available to 75% of premises in the exchange area and provides at least 12 months' notice prior to implementation.¹⁷¹
- A8.8 Openreach said that 368 exchange areas, representing just over [3<] premises where Openreach FTTP is available, were within an active 'stop sell' area as of 11 January 2023 ([3<] of Openreach FTTP footprint). These figures will rise over the coming years.¹⁷²

¹⁷¹ Openreach describes its implementation of the regulatory stop sell on its website page on Wholesale Line Rental (WLR) Stop sell: <https://www.openreach.co.uk/cportal/products/the-all-ip-programme/stopsell-updates>

¹⁷² Regulatory stop sell is expected to become active in an additional 46 exchange areas in February 2023. This will increase the number of premises where Openreach FTTP is available that are covered by regulatory stop sell to [3<]. There will also be 298 exchange areas under notice of stop-sell in February 2023. Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 4 and 5, and subsequent clarification, dated 1 February 2023.

A8.9 We previously found that, where the regulatory stop sell is in place, very few orders for legacy services are placed at premises where FTTP is available.¹⁷³ Thus, as the extent of the regulatory stop sell rises over time, this will tend to reduce orders for legacy products. Moreover, after regulatory stop sell is introduced, there is then a second stage of regulatory transition. In exchanges where ultrafast coverage is complete, and where a minimum of two years has elapsed since the stop sell, the charge control on the anchor legacy service can be withdrawn and only the FTTP charge control would then apply. In the future, this potentially provides an additional impetus to use FTTP in these areas.

Sky

Sky's historical performance

A8.10 Figure A8.3 below shows monthly data on Sky's Order Mix for the period October 2021 to December 2022.¹⁷⁴ This shows that [redacted]. Sky said that, since the introduction of the Equinox 1 Offer, it has [redacted].¹⁷⁵

Figure A8.3: Sky's Openreach FTTP orders as a proportion of all Openreach orders (October 2021 to December 2022) [Chart is confidential]

Source: Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 2 and 3.

Sky's sales practices

A8.11 Where FTTP is available, Sky said that it currently [redacted].¹⁷⁶

A8.12 [redacted].¹⁷⁷

Sky's order mix in the future

A8.13 Sky said that [redacted].¹⁷⁸

A8.14 Sky said that [redacted].¹⁷⁹

A8.15 Our provisional view, based on Sky's historic performance, the impact of regulatory stop sell and the other evidence set out above, is that [redacted].

¹⁷³ Equinox 1 Statement, paragraph A3.9.

¹⁷⁴ Under the Equinox 1 Offer, orders that are cancelled within a month of the end of a Contract Quarter are excluded when assessing compliance with the OMT. Openreach provided figures that reflect cancellations up until 10 January 2023, so the figures for the final quarter of 2022 are not yet finalised. Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 2 and 3. Sky also provided a chart showing its Order Mix. [redacted]. Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

¹⁷⁵ Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 1.

¹⁷⁶ Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2(a).

¹⁷⁷ Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 2(a).

¹⁷⁸ Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 2(b).

¹⁷⁹ Sky response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 3.

TalkTalk

TalkTalk's historical performance

A8.16 Figure A8.4 below shows monthly data on TalkTalk's Order Mix for the period April 2022 to December 2022.^{180 181} Data from TalkTalk should have better visibility of the breakdown of orders between its consumer business, its wholesale business (which supplies ISP Resellers) and its enterprise business.¹⁸² We also obtained order data from Openreach.¹⁸³ [X].

A8.17 This shows that [X].¹⁸⁴

Figure A8.4: TalkTalk's Openreach FTTP orders as a proportion of all Openreach orders (April 2022 to December 2022) [Chart is confidential]

Source: TalkTalk response dated 19 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2. [X].

A8.18 TalkTalk told us that [X].¹⁸⁵ It said that, in Q3 of the Equinox 1 Offer (April-June 2022), [X].¹⁸⁶ [X].¹⁸⁷

A8.19 TalkTalk also noted that, in Q5 of the Equinox 1 Offer (October-December 2022), it was projected to [X]

A8.20 [X]

A8.21 [X].¹⁸⁸

TalkTalk's sales practices

A8.22 We understand that [X].¹⁸⁹

A8.23 TalkTalk told us that [X].¹⁹⁰ We understand that [X].¹⁹¹ TalkTalk also has [X].¹⁹²

A8.24 TalkTalk also stated that [X].¹⁹³

A8.25 In relation to TalkTalk's wholesale business, [X].¹⁹⁴

¹⁸⁰ We anticipate that the issue in relation to cancelled orders set out in footnote 174 also applies to this data.

¹⁸¹ TalkTalk response dated 19 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2.

¹⁸² This is relevant since the experience and prospects of these different business divisions need not be the same.

¹⁸³ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 2 and 3.
¹⁸⁴ [X].

¹⁸⁵ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁸⁶ The Equinox 1 Offer [X].

¹⁸⁷ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁸⁸ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁸⁹ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁹⁰ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁹¹ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, questions 3 and 6.

¹⁹² TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 6.

¹⁹³ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁹⁴ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, questions 3 and 5.

TalkTalk's views on the achievability of the OMTs

A8.26 TalkTalk said that:¹⁹⁵

- a) [REDACTED].
- b) [REDACTED].
- c) [REDACTED].
- d) [REDACTED].

A8.27 TalkTalk also said that [REDACTED].¹⁹⁶

TalkTalk's order mix in the future

A8.28 Overall, [REDACTED].¹⁹⁷

A8.29 In relation to its consumer business, TalkTalk has told us that [REDACTED].¹⁹⁸

A8.30 In relation to its wholesale business, TalkTalk outlined [REDACTED]:

1. [REDACTED]
2. [REDACTED]
3. [REDACTED].¹⁹⁹

A8.31 TalkTalk also noted that [REDACTED].²⁰⁰

A8.32 TalkTalk said that it [REDACTED].

A8.33 Our provisional view, based on TalkTalk's historical performance, the impact of regulatory stop sell and the material we gathered in autumn 2022 and January 2023, is that [REDACTED].

TalkTalk's use of altnets

A8.34 TalkTalk currently purchases FTTP from CityFibre and Freedom Fibre.²⁰¹

A8.35 Given [REDACTED] the OMTs set out in the Equinox 1 Offer, we intend to consider whether there is evidence that TalkTalk is being deterred from placing orders with CityFibre. We have not yet been able to do this given TalkTalk's delays in providing us with information but intend to do so before issuing our final statement.²⁰²

¹⁹⁵ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, questions 3 and 4.

¹⁹⁶ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 3.

¹⁹⁷ For example, [REDACTED]. Equinox 1 Statement, paragraphs A3.20(b). We understand that [REDACTED]. TalkTalk response of 27 January to Ofcom's information request of 9 January 2023, question 5b.

¹⁹⁸ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 4.

¹⁹⁹ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 5.

²⁰⁰ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, question 6.

²⁰¹ TalkTalk response dated 19 January 2023 to Ofcom's information request of 9 January 2023, question 11. [REDACTED].

²⁰² One possibility is testing whether orders per premise passed differs significantly for CityFibre as compared to Openreach FTTP. While TalkTalk did provide us with order data, this differed from material previously provided in autumn 2022. This is a matter we intend to explore with TalkTalk. TalkTalk response dated 19 January 2023 to Ofcom's information

A8.36 TalkTalk said that [REDACTED].²⁰³

Vodafone

Vodafone's historical performance

A8.37 Figure A8.5 below shows monthly data on Vodafone's Order Mix for the period March 2022 to November 2022.²⁰⁴ Data from Vodafone should have better visibility of the breakdown of orders between its consumer business, its wholesale business (which supplies ISP Resellers) and its enterprise business. We also obtained order data from Openreach.²⁰⁵ [REDACTED].

A8.38 The chart shows that [REDACTED].

Figure A8.5: Vodafone's Openreach FTTP orders as a proportion of all Openreach orders (March 2022 to November 2022) [Chart is confidential]

Source: Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2. EBU and CBU refer to Vodafone's enterprise and consumer business units respectively.

Vodafone's sales practices

A8.39 Vodafone's consumer business accounted for approximately [REDACTED]% of its Openreach orders in the period March 2022 to November 2022. Its wholesale business accounted for approximately [REDACTED]% and its enterprise business accounted for the remaining [REDACTED]%.²⁰⁶

A8.40 Vodafone said that [REDACTED].²⁰⁷

A8.41 Vodafone said that [REDACTED].²⁰⁸

A8.42 Vodafone said that [REDACTED].²⁰⁹

A8.43 Vodafone said that it has had to address a number of issues to meet the OMTs in the Equinox 1 Offer:²¹⁰

a) [REDACTED].

b) [REDACTED].

c) [REDACTED].

request of 9 January 2023, question 11. TalkTalk response dated 7 September 2022 to Ofcom's information request of 17 August 2022, question 5.

²⁰³ TalkTalk response of 27 January 2023 to Ofcom's information request of 9 January 2023, questions 4, 9 and 10.

²⁰⁴ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, questions 1 and 2.

²⁰⁵ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, questions 2 and 3.

²⁰⁶ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 2.

²⁰⁷ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 4 and question 7.

²⁰⁸ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 5.

²⁰⁹ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 6.

²¹⁰ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 3.

Vodafone's order mix in the future

A8.44 Vodafone [redacted]. Further, Vodafone said that [redacted].

A8.45 Our provisional view, based on Vodafone's historic performance, the impact of regulatory stop sell and the other evidence set out above, is that [redacted].

Vodafone's use of altnets

A8.46 Vodafone currently purchases FTTP from CityFibre.

A8.47 We have considered whether there is evidence that Vodafone is currently being deterred from placing orders with CityFibre. [redacted].²¹¹

A8.48 Vodafone said that [redacted].²¹²

A8.49 We intend to consider these matters further before issuing our final statement. [redacted]

²¹¹ Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 9.

²¹² Vodafone response dated 16 January 2023 to Ofcom's information request of 9 January 2023, question 9.

A9. Legacy Cross-Check

Introduction

- A9.1 If an ISP's rate of orders for legacy services per premises in the overlap area is more than 50% greater than in the rest of the Openreach FTTP footprint (the 'Legacy Cross-Check') then this may trigger a review and amendment of the Failsafe Mechanism by Openreach. This cross-check is done each time an ISP activates the Failsafe Mechanism.
- A9.2 There is likely to be some natural variation in legacy sales within the Openreach FTTP footprint. We have therefore assessed the risk that variations in legacy sales within the Openreach FTTP footprint mean that an ISP could inadvertently fail the Legacy Cross-Check, even when the ISP adopts the same sales practices for legacy products across the whole of the Openreach FTTP footprint.
- A9.3 This annex is structured as follows:
- a) First, we describe Openreach's own analysis which it used to validate the 50% tolerance in the legacy order rate per premises.
 - b) Second, we describe how we amended Openreach's analysis to align with our assessment of the proportion of Openreach's FTTP network overlapping with altnets.
- A9.4 Both Openreach's and our analysis use data on the variation in existing legacy orders across the Openreach FTTP footprint to assess how likely it is that an ISP's legacy orders per premises in the overlap area is more than 50% greater than in the non-overlap area.

Openreach's analysis

- A9.5 Openreach's analysis involved splitting its FTTP footprint into an assumed overlap area and an assumed non-overlap area, and comparing the legacy order rate per premises in each area. Openreach carried out its analysis using two different approaches.²¹³
- A9.6 Under the first approach, Openreach randomly assigned exchange areas to an overlap area or non-overlap area. Exchange areas where legacy stop-sell had been activated, and exchange areas that it assessed were covered by CityFibre were excluded from this analysis.²¹⁴ The probability that any one of these exchange areas was assigned to the overlap category was set at 5% or 10% (roughly approximating 5% or 10% overlap of the Openreach FTTP footprint by altnets). It then compared the legacy order rate per premises in the overlap and non-overlap areas. For this analysis, Openreach used data on the number of orders for legacy services placed by [X] in April-June 2022 in each exchange area. Openreach repeated this exercise a number of times to understand how often each

²¹³ Openreach response dated 17 January 2023 to Ofcom's information request of 9 January 2023, question 1.

²¹⁴ Openreach excluded exchange areas that it assessed were covered by CityFibre to avoid the results being driven by factors specific to CityFibre's presence in those areas.

random assignment would produce a legacy order rate per premises in the overlap area that is more than 50% greater than in the non-overlap area.

- A9.7 Under the second approach, Openreach assigned exchange areas to an overlap area or non-overlap area based on its assessment of where its FTTP footprint overlapped with the CityFibre footprint.²¹⁵ It then compared the legacy order rate per premises in the overlap and non-overlap areas. For this analysis, Openreach used data about orders for legacy services for premises within its FTTP footprint in October until mid-December 2022.
- A9.8 The first piece of analysis showed that the difference between the legacy order rate per premises in a randomly assigned overlap area and non-overlap area tends to be within the 50% tolerance.²¹⁶ The second piece of analysis showed that the difference between the legacy order rate per premises in (i) areas assessed as overlapping with CityFibre's footprint; compared to (ii) all remaining areas, is within the 50% tolerance.

Ofcom's analysis

- A9.9 We have reviewed the modelling provided by Openreach and amended it to align with our assessment of the proportion of Openreach's FTTP network overlapping with altnets. We also tested the sensitivity of the results with respect to the key parameters of the model to ensure that our results are driven by the underlying sales and footprint data rather than the selection of parameter values. Also, where the model relies on randomisation, we repeated the random assignment and generated the results over a larger number of iterations to provide an informative view of the statistical distribution of the results. This is detailed in the following paragraphs.
- A9.10 We recognise there are some limitations to this analysis. First, there is uncertainty about the extent and location of future overlap of the Openreach FTTP footprint by altnets. We proceeded using the best information available to us and sought to address this uncertainty by testing a range of plausible probabilistic scenarios. Second, the analysis relies on historical data about orders for legacy services over a limited period in the past year. While the overall volume of orders for legacy services is likely to decline, we have not identified anything to suggest a systematic material shift in its geographic distribution (which is the relevant factor in the Legacy Cross-Check).
- A9.11 We have run Openreach's first approach for [§<], with several amendments. We repeated the random assignment of exchange areas into the overlap and non-overlap categories 100,000 times. We also tested both a 15% and a 25% probability of an exchange area being assigned to the overlap area (roughly approximating 15% and 25% overlap respectively).²¹⁷ There were no instances in our 100,000 iterations where the 50% threshold was exceeded.
- A9.12 We recognise that the approach above is a simplification as it assumes that every exchange area has the same probability of being assigned as an overlap area. We have therefore

²¹⁵ Openreach identified exchange areas as overlapping with CityFibre's footprint if more than 50% of orders in the exchange area were for premises that, according to its assessment, were covered by CityFibre.

²¹⁶ Openreach's model captures the results of ten iterations of such random assignment, but can be iterated manually.

²¹⁷ This is consistent with our position on overlap in Annex 7.

done some further sensitivity testing to understand the robustness of our results. We have restricted the assignment to the overlap category only to exchange areas likely to be located within Area 2,²¹⁸ where altnets are most likely to build, and for these exchange areas used a higher probability of being assigned as an overlap area.²¹⁹ This again resulted in no instances in our 100,000 iterations where the 50% threshold was exceeded.

- A9.13 If VMO2 and Nexfibre were also to begin supplying the main ISPs then overlap of Openreach's FTTP network would be significantly higher than 25%, and could be above 60%. To assess this scenario, we compared the legacy order rate, for each of [X], in (i) an area comprising of all exchange areas likely to be located within Area 2 with (ii) the rest of Openreach's FTTP footprint. In all cases, the legacy order rate in the former area was either lower than in the latter or was higher but well within the 50% tolerance.
- A9.14 We have also run Openreach's second approach and tested the sensitivity of results to different assumptions about exchange areas that overlap with CityFibre footprint.²²⁰ In all scenarios, legacy order rate in the assumed overlap areas was either lower than in the assumed non-overlap areas or higher but well within the 50% tolerance for each of [X].
- A9.15 Based on our own analysis, we consider it very unlikely that an ISP would fail the Legacy Cross-Check due to the natural variation of legacy orders.

²¹⁸ We sought to identify these based on the proportion of orders in the exchange area that were for premises in Area 2. As Openreach's April to June 2022 dataset it did not contain information about the location of premises for which orders were made, we relied on Openreach's interim data for October until mid-December 2022. We have tested scenarios where an exchange area would be categorised as located in Area 2 if more than a) 25%, b) 50% or c) 75% of orders within the exchange area were for premises in Area 2.

²¹⁹ We used a probability between 30% and 50%, which is double the probability we used when considering the full Openreach FTTP footprint.

²²⁰ We have tested scenarios where an exchange area would be categorised as overlapping with CityFibre footprint if more than a) 25%, b) 50% or c) 75% of orders within the exchange area were for premises assessed by Openreach as covered by CityFibre.

A10. Wholesale costs

Introduction

- A10.1 For the WFTMR, we developed a bottom-up cost model for deploying a fibre network (the ‘2021 Cost Model’). Amongst other objectives, this model allowed us to verify that our charge controls for Area 2 are consistent with our policy objective of promoting investment in gigabit-capable networks by other telecoms providers.
- A10.2 We first discuss the relevance of the 2021 Cost Model to our assessment of the Equinox 2 Offer. We then discuss various, more detailed modelling assumptions which stakeholders have commented on. Finally, we present the results of our model.

The relevance of the 2021 Cost Model to our assessment of the Equinox 2 Offer

- A10.3 As discussed in Section 3, although concerns about low pricing are outside the scope of the 90-day process, we have nonetheless considered whether the level of Openreach’s prices under the Equinox 2 Offer raises *prima facie* concerns that would lead us to decide to investigate them in further detail.
- A10.4 We consider it appropriate to use the 2021 Cost Model as part of this exercise. We use the estimate of altnet costs from the model as an indication of whether an altnet could profitably match the discounted prices in the Equinox 2 Offer.²²¹
- A10.5 In our WFTMR Statement, we estimated a range for an entrant’s costs, reflecting variations in certain key modelling assumptions, as well as the different business plans.²²² For the purposes of the WFTMR Statement, it was not necessary to settle on a precise estimate of entrant costs. Our range for costs was relatively wide, with the upper end being over 40% higher than the lower end.
- A10.6 Some stakeholders have argued that the 2021 Cost Model is unsuitable for considering the level of prices under the Equinox 2 Offer and that we should gather new evidence to update the model to reflect developments since the WFTMR Statement was published in March 2021. However:
- a) The 2021 Cost Model reflects the outcome of a detailed assessment and evidence gathering process, taking into account stakeholder comments, during the WFTMR. We calibrated the model using information from operators in connection with their business plans, cost modelling and forecasts.

²²¹ The argument that altnets are likely to need to offer terms that are more attractive than Openreach’s is considered in section 3.

²²² We estimated that the entrant operator would have to charge between £9.53 and £13.67 per month (in 2020/21 prices) in order to recover its efficiently incurred costs over the modelled period. WFTMR Statement, Annex 15, paragraph A15.85.

- b) Only selecting a sub-group of input assumptions to update (such as those raised in the altnet submissions discussed below or a selection of cost and volume assumptions based on what specific entrants have currently achieved) could result in a biased estimate of costs and/or risks introducing inconsistency into the model.
- c) Re-opening the model and assessing all the significant assumptions would require a significant amount of time and work, including a more extensive data request and collection exercise. We thus consider that it would be inappropriate and disproportionate for the purposes of the exercise we are conducting, which is to consider whether the level of prices under the Equinox 2 Offer raises prima facie concerns for us. Rather, such an exercise (or conducting a fresh calibration exercise) would be something that we would consider as part of any subsequent, more in depth assessment.

Further detail on our modelling assumptions

A10.7 Give our view on the relevance of the 2021 Cost Model, as explained above, we do not consider that it is necessary for us to engage with the more detailed points raised by stakeholders. However, for completeness, below we provide a further explanation of this model and our response to these more detailed points.

Our base case and estimation of a range for altnet costs

A10.8 In summary, the 2021 Cost Model estimates average costs per fibre subscriber for different network scale, configuration, and geographic deployments. It does so over a long horizon (up to 2056/57). It accounts for the time that it takes a network to build out (including planning) and then gain a subscriber base. Costs and volumes are discounted over time to produce a flat annuity in real (2019/20) terms, which can then be inflated to reflect prices in different years.

A10.9 We make the following assumptions in relation to the entrant's network under our base case scenario:

- **Scale of deployment:** we assume the entrant rolls out to five million premises by 2025/26.
- **Take-up:** we assume that for a given tranche of deployment the entrant achieves a take-up of 33% of the premises that tranche covers by year 3 of that deployment, and it does not get any higher.
- **Duct reusage:** we assume that 43% of the entrant's network (excluding final drop) is built using Openreach's physical infrastructure. We consider this to be conservative since some business plans and forecasts suggest that this could be as high as 70%.
- **WACC:** we use a pre-tax nominal other UK telecoms ('OUKT') WACC of 7.8%. We also made some conservative adjustments to the asset lives which have a similar impact as increasing WACC to 8.3%.

- **Opex and overheads:** to model general network opex (such as repairs, power, and maintenance) as well as business overheads we assume these costs are equivalent to 3% of the Gross Replacement Cost in each year, once the network rollout is complete.^{223 224}

A10.10 Recognising the uncertainty around some cost and volume assumptions as well as the different business plans of altnets, we derived a range of costs by adjusting some of the key parameters. Specifically, we adjusted the scale of deployment, take-up, and duct reuse and combined these changes into scenarios that we think represents the overall uncertainty around unit costs for different operators.²²⁵

Stakeholders' views and responses

A10.11 Following the notification of the Equinox 2 Offer, INCA and Zzoomm submitted observations on our modelling.²²⁶

A10.12 A full description of the 2021 Cost Model is given in Annex 15 of the WFTMR Statement. Further, most of the points being raised by stakeholders were addressed in the WFTMR Statement.

A10.13 Below we comment further on the following specific aspects of the modelling: (i) network elements in scope; (ii) use of exchange areas for the deployment unit; (iii) use of a 'scorched earth' approach; (iv) WACC and asset lives; and (v) take-up.

Network elements in scope

A10.14 The scope of the 2021 Cost Model and why we consider this to be relevant when making comparisons with Openreach's wholesale access products is discussed in Annex 15 of the WFTMR Statement, paragraphs A15.14 to A15.18.

Use of exchange areas for the deployment unit

A10.15 The sequencing of network build in our 2021 Cost Model and why we consider the use of exchange areas for the deployment unit provides a good approximation is discussed in Annex 15 of the WFTMR Statement, paragraphs A15.39 to A15.47.

Use of a 'scorched earth' approach

A10.16 INCA and Zzoomm argued that our 2021 Cost Model overstates the cost savings from a 'scorched earth' approach (i.e. an altnet designing its network topology as it sees fit). This

²²³ We allow for a higher percentage in the initial years of rollout as suggested by the information we received from operators.

²²⁴ For operating costs, a few elements are explicitly modelled (e.g. PIA and cumulo) whilst other elements (e.g. repair and maintenance) is captured within a bundled 'other opex' category. This other opex category is then estimated based on the cumulative capex, i.e. the repair, maintenance, power, and general management costs are proportionate to the size of the network.

²²⁵ WFTMR Statement, Annex 15, paragraphs A15.83-A15.84.

²²⁶ INCA and Zzoomm submission, 10 January 2023.

is because the ability for an entrant to optimise its network routing will be constrained when using Openreach's physical infrastructure.²²⁷

A10.17 Our reasons for using a scorched earth approach for assessing an entrant's costs are discussed in Annex 15 of the WFTMR Statement, paragraphs A15.21 to A15.22. We recognised that altnets may wish to deviate from Openreach's network architecture. To allow for this, the 2021 Cost Model assumes a lower duct reuse in the entrant scenarios (roughly 40-50% compared to 60% for Openreach).²²⁸ We would generally expect an efficient operator would only choose an alternative architecture that results in higher costs if those higher costs could be compensated by greater revenues.

WACC and asset lives

A10.18 INCA and Zzoomm argued that FTTP services are higher risk and proposed that Ofcom should analyse the impact that this could have on the cost of capital. Furthermore, they argued that Ofcom has not demonstrated why it considers that the cost of capital for an altnet could or should be the same as that for Openreach. They also considered that the assumed corporation tax of 19% was not forward looking given the end of the super-deduction in March 2023 and an anticipated increase in tax. INCA and Zzoomm also argued that the risk-free rate will have changed since 2020/21.²²⁹

A10.19 As explained above, we made some conservative adjustments to the asset lives which have a similar impact as increasing the WACC. INCA and Zzoomm considered our adjustment to asset lives to be inappropriate for reflecting the greater risk faced by entrants. However, they argued that using shorter lives was appropriate due to the advent of new technologies (i.e. that the asset lives adjustment should be applied even if the WACC is increased).²³⁰

A10.20 We consider that the assumptions in the model are appropriate for the purposes of considering whether the level of Openreach's prices under the Equinox 2 Offer raises *prima facie* concerns, for the reasons set out below.

A10.21 The difference in risk between Openreach and altnets suggested by stakeholders relates to non-systematic risks, e.g. lower take-up, and we have captured these in other assumptions.

A10.22 In the WFTMR Statement, we considered that assuming the 19% corporation tax throughout the modelled period was appropriate, as over the short-term we expected this to overstate tax (i.e. during the super-deduction period) but potentially understate tax if it was increased to 25% from 2023/4. We have not seen any evidence to suggest that the corporation tax would not revert to around 19% in the long-term, noting that the increase to 25% is expected to be a short-term measure.

²²⁷ INCA and Zzoomm submission, 10 January 2023, pages 1-2.

²²⁸ The impact of assuming lower duct reuse than Openreach (increasing costs) more than outweighs the impact of using a scorched earth approach (reducing costs compared to using a scorched node approach).

²²⁹ INCA and Zzoomm submission, 10 January 2023, pages 6-7.

²³⁰ INCA and Zzoomm submission, 10 January 2023, pages 7.

A10.23 When conducting our entrant cost cross-check we assumed a shorter asset life of 7 years for electronic equipment and 10 years for passive equipment (compared to 10 and 20 years respectively for Openreach).²³¹ This was to ensure a more conservative cost range for the entrant as the Openreach asset lives were consistent with the assumed cost trends. We consider that this conservative approach to asset life creates a contingency for entrants that can be traded-off against other parameters, such as a higher WACC, if a higher WACC was deemed necessary.

A10.24 As stated in the 2021 WFTMR Statement, we agree that FTTP is higher risk than copper and FTTC. However, we also recognised that there are potentially greater revenue opportunities with FTTP, e.g. the ability to set higher prices for premium very high bandwidth services, that would limit how much higher an FTTP WACC would be.

Take up

A10.25 INCA and Zzoomm argued that the take-up profiles used in the 2021 Cost Model are unreasonable and that it would take at least 7 years for an entrant to achieve its long-run take-up and that 10 years would be a more appropriate assumption.²³²

A10.26 In our 2021 Cost Model, we made assumptions about the long-run take-up level and profile that we believe are consistent with what an efficient entrant could achieve over the model's time horizon and compatible with a potential market outcome where there are two to three operators competing in Area 2.

The results of Ofcom's model

A10.27 As explained above, we use the estimate of altnet costs from the 2021 Cost Model as an indication of whether an altnet could profitably match the discounted prices in the Equinox 2 Offer.

A10.28 In order to compare the outputs of our 2021 Cost Model with the Equinox 2 prices, the outputs and prices need to be consistent:

- a) The range in the WFTMR Statement was expressed in 2020/21 prices, whereas the Equinox 2 Offer prices would apply from 1 April 2023. We have indexed the outputs of the 2021 Cost Model to be consistent with Openreach 2023/24 prices. We have used the prior year October 12-month CPI figures to inflate costs for each year. We recognise that in an environment where CPI is fluctuating the choice of CPI figure used could impact the calculated range. However, the October 12-month CPI is our preferred metric in this case, as it is consistent with the way in which Openreach indexes its prices and our regulatory regime.^{233 234}

²³¹ This was equivalent to increasing the WACC to 8.3% (i.e. by 50bp).

²³² INCA and Zzoomm submission, 10 January 2023, pages 3-6.

²³³ Under paragraph 7 of Appendix 1 to the Equinox 2 Offer CPI is defined as for CPI for the previous 12 months, as measured on 31 October in each calendar year.

²³⁴ CPI is defined in our legal instruments as "the amount of the change in the Consumer Prices Index in the period

- b) The range in the WFTMR Statement assumed that operators recover a proportion of their costs upfront in the form of a one-off connection charge.²³⁵ We have adjusted the assumed cost recovery from connection charges from £27 to £28.²³⁶ This has an insignificant (<1%) impact.

A10.29 The updated cost range is set out in Table A10.1 below.

Table A10.1: FTTP Entrant Cost Range (£ per month)

	2021 WFTMR Statement (2020/21 prices)	Update for Equinox 2 (Openreach 2023/24 prices)
Low	£9.53	£11.10
High	£13.67	£15.93

Source: Ofcom calculations.

A10.30 These ranges reflect both variations in certain key modelling assumptions, as well as the different business plans.

of twelve months ending on 31 October immediately before the beginning of the Relevant Year, expressed as a percentage (rounded to one decimal place) of that Consumer Prices Index as at the beginning of that first mentioned period". WFTMR Statement, Volume 7.

²³⁵ WFTMR Statement, Annex 15, A15.79.

²³⁶ This is the lowest connection charge in the Equinox 2 Offer. We recognise that it is possible that connection charges could be set even higher but consider it appropriate as a modelling simplification to simply assume £28 and recognise that this could slightly overstate the costs that need to be recovered from monthly rental charges.