Promoting competition and investment in fibre networks: Telecoms Access Review 2026-31

Volume 5: Quality of Service

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Consultation

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Section

1. Overview

1.1 This volume sets out our proposals for regulating quality of service (QoS) in the proposed physical infrastructure, wholesale local access (WLA)[1], leased lines access (LLA)[2] and inter-exchange connectivity (IEC)[3] markets where we have provisionally determined BT as having significant market power (SMP) as set out in Volume 2, and for a transitional period the IEC BT+2 markets we are proposing to deregulate in this review.[4]

What we are proposing – in brief

- An SMP condition which requires BT to comply with any QoS standards, transparency and reporting requirements as Ofcom may direct in relation to each of the above markets where we have provisionally determined that BT has SMP.
- Directions requiring BT to meet minimum QoS standards for certain network access products in WLA Area 3, WLA Area 2, LLA Area 3, LLA Area 2 and regulated IEC markets.
- Directions requiring BT to provide specified service performance information in relation to certain network access products in WLA Area 3, WLA Area 2, LLA Area 3, LLA Area 2, HNR Area and IEC markets and to publish a subset of this information on its website.

1.2 In relation to minimum QoS standards for Openreach's fibre-to-the-cabinet (FTTC) and metallic path facility (MPF) network access products[5] in WLA Area 3 and WLA Area 2, we are proposing to keep the existing obligations on Openreach to comply with minimum standards which apply UK-wide.[6] However, over the 2026-31 review period, we expect volumes of copper-based broadband to fall as customers migrate to better and more reliable full-fibre broadband. We are therefore proposing to take account of this change by no longer requiring Openreach to separately meet these standards in each of its seven management regions.[7] We are however proposing that Openreach will still be required to report on its performance by management region as well as the UK as a whole to provide transparency of its performance.

1.3 We propose to introduce new backstop minimum QoS standards on fibre-to-the-premises (FTTP) in WLA Area 3 from 1 April 2027, as we do not consider that this area is likely to have the potential for material and sustainable network competition and so retail competition will remain reliant on access to Openreach's network. We propose to use the same metrics which we have found effective for regulating legacy copper-based network access products but set at levels adjusted to the specifics of the product and geography. This will require Openreach's performance in installing and repairing FTTP to meet a minimum level in WLA

[1] WLA Area 2 and WLA Area 3.
[2] LLA Area 2, LLA Area 3 and High Network Reach Area (HNR Area).
[3] IEC BT Only and IEC BT+1 exchanges meaning those BT exchanges where there is either just one rival or no rivals present.
[4] i.e., excluding any BT+2 exchanges that have previously been deregulated.
[5] Unless expressed otherwise, in this volume references to FTTC include G.fast, SOGEA and SOGfast and references to MPF include SOTAP i.e., as currently defined in Direction 3 of the QoS Directions.
[6] Excluding the Hull Area so meaning the whole of WLA Area 2 and 3.
[7] The seven management regions are (1) East Anglia, (2) London and South East, (3) Northern England, (4) Northern Ireland, (5) Scotland, (6) Wales and Midlands and (7) Wessex.

Area 3. We are not proposing to set any QoS standards on FTTP in WLA Area 2, where we want to promote network competition. As network competition develops, it will increasingly drive QoS in WLA Area 2. We propose requiring Openreach to report on its performance in installing and repairing FTTP across both areas.

1.4 With regard to LLA Area 3, LLA Area 2 and IEC, we propose to:

- retain existing minimum QoS standards on Openreach's ethernet[8] and dark fibre[9] products and continue not to apply standards on WDM products; and
- retain reporting obligations on all three product types.

1.5 We also propose to continue to impose reporting obligations to monitor service performance in the HNR Area but not to set minimum QoS standards.

1.6 We are not proposing to direct Openreach to comply with any QoS standards, transparency or reporting requirements in the physical infrastructure market.

1.7 Tables 1.1 and 1.2 below summarise the minimum QoS standards we are proposing to set in each of the WLA, LLA and IEC markets.

Table 1.1: WLA minimum QoS standards

Product	Region	Standard	Proposed level
FTTC/MPF	WLA Area 2 and Area 3 combined (from Year 1)	Repair within 2 working days (SML[10]1)	85%
		Repair within 1 working day (SML2)	
		Repair within 7 working days (SML1)	97%
		Repair within 6 working days (SML2)	
		Installations to be completed by the committed date	94%
		Required first available date (FAD)	10 working days
		FAD offered within required FAD	89%
FTTP	WLA Area 3 from Year 2[11]	Repair within 1 working day (SML2)	79%

[8] We define 'relevant ethernet services' in Direction 1 of the draft QoS Directions. In summary, these are Openreach's products called ethernet access direct (EAD), ethernet backhaul direct (EBD) and cablelink.
[9] We define 'dark fibre access' in Direction 1 of the QoS Directions. In summary, this includes dark fibre network access products and cablelinks for both LLA and IEC markets; dark fibre access (DFA) and dark fibre X (DFX).
[10] SML means service maintenance level. Openreach offers a range of SMLs to its wholesale customers. Accessed on 17 January 2025.
[11] Year 2 meaning from the start of the second year of TAR26 i.e., 1 April 2027.

Product	Region	Standard	Proposed level
		Repair within 11 working days (SML2)	96%
		Installations to be completed by the committed date	91%
		Required FAD	18 working days
		FAD offered within required FAD	90%

Table 1.2 LLA Area 2 and Area 3 and IEC minimum QoS standards from Year 1

Standard	Proposed level
Mean time to provide (MTTP)	No more than 38 working days
Upper percentile limit for provisions	No more than 4.5% of orders older than 133 working days
Certainty: Percentage of orders completed on or before the initial contractual delivery date (iCDD)	86%
Certainty cross-link: Maximum mean period for the iCDD	No more than 53 working days
Faults repaired within the service level agreement (SLA)	94%

1.8 In addition to these proposals, our proposed network access obligations also include specific requirements on Openreach which are relevant to QoS, as follows:

- relevant reference offers must include specified service level agreements (SLAs) and provisions to compensate its customers where it fails to deliver to those SLAs (referred to as service level guarantees or SLGs); and
- no undue discrimination (e.g., to favour BT brands and businesses over other wholesale customers) which includes in relation to the QoS it provides.

1.9 These proposals are set out in Volume 3, Section 4.

2. Our approach to QoS regulation

2.1 In this section we set out our overall approach to QoS regulation.

2.2 We consider the need for QoS regulation where we find SMP, the tools for regulating QoS, as well as our proposal to continue to impose a specific QoS SMP condition allowing us to direct specific standards and transparency obligations on BT.

2.3 We also describe the objectives we consider in deciding on proposals for making directions.

The need for QoS regulation

2.4 We consider that the best means of delivering appropriate levels of QoS is through competition between networks. We believe that competing gigabit networks will deliver much better services for UK consumers in terms of speed and reliability.

2.5 While network competition should drive QoS for consumers in the long term, it will take time for this competition to become established. Therefore, there is a need to provide adequate protection to consumers and existing models of competition in the short term.

2.6 We have also identified areas of the UK where there is not, and there is unlikely to be potential for, material and sustainable competition to BT in the commercial deployment of networks. In these areas, we seek to promote competition based on access to BT's network.

2.7 We have provisionally found that BT has SMP in several wholesale fixed telecoms markets as set out in Volume 2. One of the consequences of SMP is that absent regulation, Openreach may not receive market signals from customers switching to alternatives and thus lacks incentives to innovate and deliver the QoS customers require. The negative effects on customers of inadequate QoS delivered by Openreach could include a greater number of faults, slow resolution of those faults and frustration resulting from long delays to the installation of fixed services such as broadband and voice.

2.8 Inadequate QoS by Openreach can also undermine the effective functioning of the network access remedies due to the negative impacts this can have on downstream competition by, among other things, adversely affecting switching behaviour. For example, long or uncertain waiting times for an installation may discourage switching with consequent implications for retail competition. In addition, there is the potential for discrimination if Openreach were to provide BT's downstream divisions with better QoS than it provides to other telecoms providers.

2.9 We therefore propose that, to address the competition problems described above, QoS regulation is needed in the markets we have provisionally found BT to have SMP. Imposing QoS regulation, in conjunction with our other proposed remedies, contributes to getting and keeping UK homes and businesses connected. Access to high-quality, reliable and secure networks is central to all aspects of our digital lives and a key driver of economic growth.

Tools for QoS regulation

2.10 We propose to continue using four tools to encourage Openreach to provide an appropriate level of QoS. These are:

a) **QoS standards**, which provide a higher degree of certainty over the minimum aggregate level of service that Openreach will achieve.
b) **Transparency measures**, such as reporting on key performance indicators (KPIs), which make it easier to identify discrimination and monitor compliance with the standards and can also help us to identify emerging issues during the review period. Requiring Openreach to publish certain KPIs also provides an incentive for Openreach to avoid any reputational harm that could arise from poor service performance.
c) **Non-discrimination remedies,** which ensure that Openreach provides the same QoS to other wholesale customers that it delivers for BT's downstream divisions.
d) **SLAs/SLGs,** which ensure that Openreach's wholesale customers receive compensation for individual failures by Openreach to provide the service levels it contractually commits to deliver.

2.11 The QoS standards are a minimum service level to be met or surpassed by Openreach rather than a target to achieve.[12] Given that the penalties for non-compliance with minimum QoS standards can be significant, it is incumbent upon us to ensure that they are appropriate and proportionate.[13] However, Ofcom decides on a case-by-case basis whether to investigate instances of suspected non-compliance and can take into account the impact of uniquely difficult circumstances where appropriate, as was the case during the coronavirus pandemic.[14]

2.12 While not part of our SMP regulation, the BT and Openreach Commitments are also relevant to Openreach's QoS. The current structure of Openreach Limited is a product of the BT and Openreach commitments.[15] These commitments were, in turn, an outcome of our 2016 Strategic Review of Digital Communications in which we sought, among other things, increased independence of Openreach from BT.[16] As well as commitments to treat all of its customers equally, they also include remuneration incentives on the Openreach CEO and Executive for high quality of service delivery. We monitor Openreach and BT's compliance with its commitments.[17]

2.13 This volume sets out our proposals for QoS standards and transparency measures. The other two tools (remedying discrimination and SLAs/SLGs) are discussed in Volume 3, Section 4.

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[12] Openreach faces an asymmetric risk; that is the risk of events causing a decline in quality but not a similar possibility of external events increasing quality. Therefore, to meet minimum QoS standards, Openreach will need to, on average, maintain the QoS it delivers above the standards in normal circumstances, otherwise it runs the risk of failing to meet them.
[13] In 2017, we fined BT £42m for breaking our regulations by failing to pay other telecoms companies proper compensation when leased line services were not installed on time. BT also agreed to refund its customers around £300m.
[14] We have recently published new enforcement guidelines. Ofcom. 31 January 2025. Regulatory Enforcement Guidelines for investigations.
[15] Commitments of BT Plc and Openreach Limited to Ofcom – Issue 7. Accessed on 21 January 2025.
[16] Ofcom. 2016. Initial conclusions from the Strategic Review of Digital Communications.
[17] Through our Openreach Monitoring Unit.

Proposal for a QoS SMP condition

2.14 To enable us to address our competition concerns, we propose to retain an SMP condition requiring BT to comply with any QoS standard and reporting requirement we direct in relation to network access that it provides in each of the markets in which we provisionally find that BT has SMP i.e., relevant physical infrastructure, WLA, LLA and IEC markets.

2.15 We consider that it is appropriate and proportionate to re-impose this SMP condition on BT in the above markets. This gives us the means to intervene to remedy the harms to competition and consumers that can arise from Openreach providing an inadequate level of service performance.

2.16 This proposal includes transitional arrangements for postcode sectors which have been reclassified from LLA Area 3 to LLA Area 2 and the HNR Area. As discussed in Volume 3 Section 7, we have provisionally reclassified 432 postcode sectors from LLA Area 3 to LLA Area 2 or HNR Area. For the reasons given in Volume 3 Section 7, we propose to require Openreach to continue to provide existing DFA circuits in these reclassified postcode sectors for a period of five years.

2.17 As discussed in Volume 3 Section 8, we have also provisionally reclassified some BT IEC exchanges as BT+2 and are proposing to deregulate these. For the reasons given in Volume 3 Section 8 we propose to require Openreach to continue the supply of (i) existing active leased lines for IEC from these deregulated exchanges for a transitional period of 12 months and (ii) existing DFX from these exchanges. Our provisional view in relation to DFX is that a longer transitional arrangement is likely to be necessary, for example 2-3 years.[18]

2.18 We consider it is necessary for QoS requirements to be imposed for a transitional period for these services to ensure that consumers still receive an appropriate level of QoS, and Ofcom and industry can continue to have visibility of the level of QoS being delivered, throughout the transition period. Otherwise, Openreach would, subject to its contractual obligations with telecoms providers, be able to lower the QoS provided for these circuits.

Consultation question

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

2.19 Whether we should exercise the power provided by the SMP condition to direct BT to comply with minimum QoS standards and / or transparency obligations is a matter of regulatory judgement. We set out below the objectives we have in mind when considering making this judgement.

[18] We are inviting further evidence and views from stakeholders to enable us to reach a final decision on the time period.

Alignment with our objectives

2.20 In determining an appropriate and proportionate package of QoS regulation, we propose to exercise our discretion in favour of an approach that aligns with the proposed TAR26 objectives set out in Volume 3, Section 1.

2.21 In summary, for markets downstream of physical infrastructure, we differentiate between places where material and sustainable network competition is viable, and places where such competition is unlikely to emerge:

a) where there is likely to be the potential for material and sustainable competition, our objective is to promote investment and competition in networks by Openreach and other telecoms providers, and to provide adequate protection to consumers and existing models of downstream competition in the short term; and
b) where material and sustainable competition is unlikely, to promote investment in networks by Openreach, to promote competition based on access to Openreach's networks and to protect consumers.

2.22 In considering these objectives, we are mindful that there is a risk of regulatory interventions undermining the development of network competition, and a risk of regulatory failure, e.g., setting QoS standards too high. For example, if we required Openreach to provide a higher level of QoS than consumers are willing to pay for, this would be inefficient, because the cost of providing this increased quality would still need to be paid for by Openreach and is therefore likely to lead to higher prices for consumers or lower network investment.

2.23 In the following sections, we consider whether to change our approach given:

- market developments since 2021;
- those developments we may expect over the review period; and
- our proposed objectives for this review.

3. QoS regulation in WLA markets

3.1 This section sets out our proposals relating specifically to QoS regulation in those WLA markets where we provisionally find that BT has SMP.[19]

3.2 For the reasons set out in Section 2 of this volume, we are proposing to continue to impose an SMP condition requiring BT to comply with all such QoS requirements as we may direct in relation to network access provided by BT and to publish information about the QoS it provides as we may direct.

3.3 In WLA markets, the Openreach products[20] that we are principally concerned with in relation to QoS are:

- FTTP;
- FTTC including G.fast, SOGEA and SOGfast; and
- MPF including SOTAP.

3.4 We set minimum QoS standards and/or transparency and reporting obligations on these products in the WFTMR21.[21] They apply or relate to Openreach's performance in installing these products in response to orders placed by its wholesale customers and to its performance in repairing reported faults.

3.5 In this section, we start by setting out our review of Openreach's performance since the WFTMR21, followed by our assessment of factors which could impact QoS in these markets over the 2026-31 review period. We then set out the minimum QoS standards we are proposing to impose on BT and our reasoning followed by proposed transparency and reporting requirements.

Review of Openreach's recent WLA service performance

FTTC and MPF performance

3.6 In the WFTMR21, we imposed minimum QoS standards for FTTC and MPF products as set out in Table 3.1 below. This reflected our view at the time that there had been a steady improvement and stabilisation in Openreach's delivery of QoS in the period up to 2019-20, in-line with the minimum QoS standards we imposed in the 2014 review and again in the 2018 review.

3.7 We determined that those standards should be maintained in the 2021-26 review period, other than a temporary relaxation in standards in Year 1 of the period due to the impact of the Covid-19 pandemic. We determined that increasing standards further would have been

[19] Our provisional SMP findings are set out in Volume 2.
[20] These being products which Openreach supplies to comply with its network access obligations.
[21] Ofcom. March 2021. Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26. Volume 5.

disproportionately costly given the limited consumer benefit that we expected from any additional increase.[22]

Table 3.1 Current minimum WLA QoS standards[23]

Standard	Level (Year 1)	Level (Years 2-5)
Repair within 2 working days (SML1) Repair within 1 working day (SML2)	83%	85%
Repair within 7 working days (SML1) Repair within 6 working days (SML2)	96%	97%
Installations to be completed by Committed Date	91%	94%
First Available Date (FAD) for installations requiring an engineer visit - working days within which first date offered for installation appointments	12 days	10 days
Quality standards in relation to the FAD - Frequency with which regulated installation appointment date must be offered	89%	89%

3.8 We have assessed Openreach's performance over the WFTMR21 period up to December 2024. For almost all of this period, Openreach has been consistently above the required standards. The main exception was the period around industrial action in the second half of 2022, where performance dipped. We investigated in 2023 and concluded that three of the minimum QoS standards had been breached. Our decision set out some observations on Openreach's approach that it should learn from but concluded that a fine was not proportionate in this case.[24]

3.9 More generally, performance of FTTC and MPF products across different KPIs appears to be steady over the period with minor improvements in some areas. We have not observed a material deviation in any area.[25]

3.10 More detailed information on Openreach's FTTC and MPF QoS performance over the current period is contained in Annex 13.

[22] Ofcom. March 2021. Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26. Volume 5. Paragraph 3.6.
[23] Standards must be met individually in all of Openreach's Management Regions, aside from the "Repair within 6/7 working days standard", which must be met nationally. Openreach can also exclude some repair or provisioning orders impacted by MBORC events from the calculation in up to 2 regions. Ofcom. March 2021. Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26. Volume 7. Page 240.
[24] Ofcom. March 2024. Confirmation Decision served on BT by the Office of Communications (Ofcom) for contravention of SMP Condition 10.1. Case reference: CW/01273/06/23.
[25] Openreach reports to Ofcom. Report 1152 and Ofcom Summary Sheet. December 2024.

FTTP performance

3.11 In WFTMR21, we decided not to set QoS standards for FTTP products due to the relatively small volumes and therefore the limited historical data from which an appropriate standard could be determined.[26] However, we did require Openreach to provide KPIs to us so we could observe trends in FTTP performance.

3.12 These KPIs show that FTTP performance has generally either been maintained or improved over the period. Significant improvements can be seen in repair completion and minimising missed appointments, while performance of appointment availability commitments and completion of installations have been steadier. The main exception was a material negative deviation in performance during, and in the period following, the industrial action mentioned above. There was also another drop in November and December 2024, which we understand was due the impact of inclement weather and higher than expected demand.[27]

3.13 More detailed information on Openreach's FTTP QoS performance over the current period is contained in Annex 13.

Comparison of FTTP and FTTC performance

Provisioning

3.14 Openreach performance in provisioning FTTP is generally lower than FTTC. However, we would expect this.

3.15 Installing FTTP for the first time usually takes longer and can be more uncertain than FTTC because it is a more complex provisioning process.[28] A fibre connection needs to be made into the premises[29] and a new optical network terminal (ONT) installed.[30] FTTC provisioning is unlikely to be as complex. In many cases an existing copper line from the premises to be served can be connected by an engineer at the street cabinet often without requiring a visit to the premises.[31]

3.16 Figure 3.1 illustrates how [✂] and Figure 3.2 illustrates how performance of completed installations by the committed date has been lower for FTTP than FTTC.

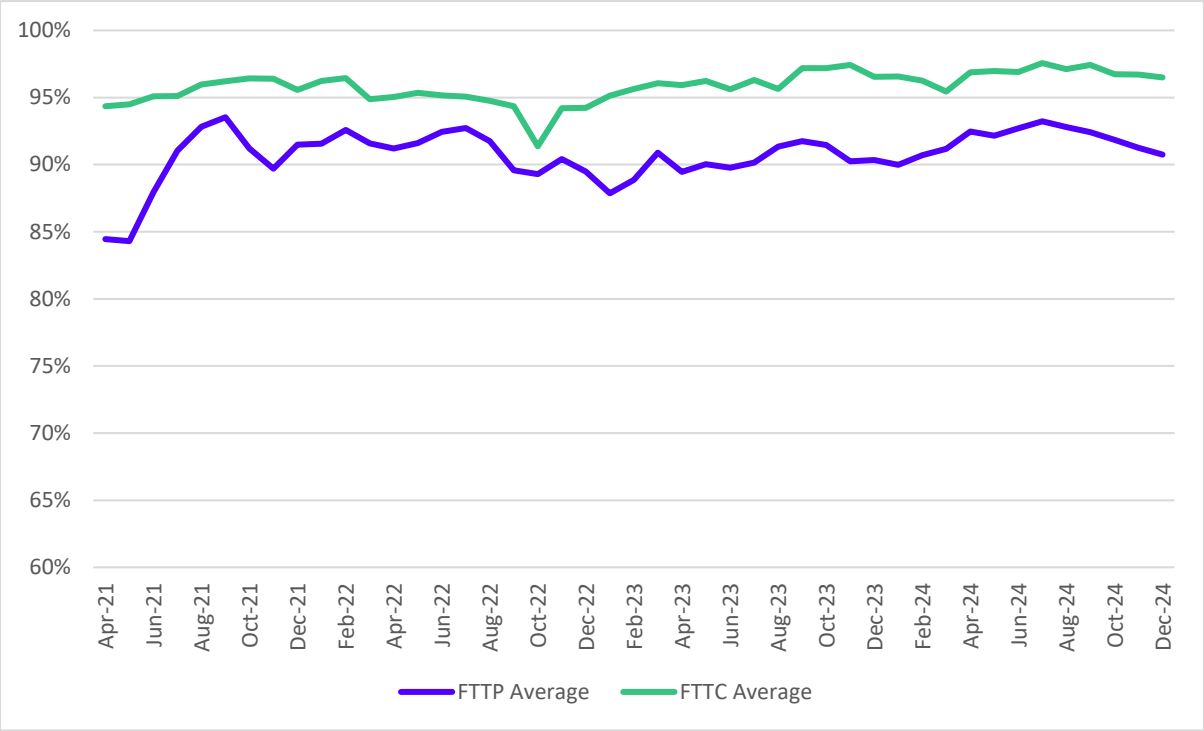
Figure 3.1: [✂][32]

[✂]

Source: [✂].

[26] Ofcom. March 2021. Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26. Volume 5. Paragraphs 3.102-3.105.
[27] [✂].
[28] First time installations account for most orders for Openreach FTTP at this time and we expect this to remain the case for some time to come. [✂].
[29] Either overhead from a nearby pole or buried from a nearby flex point e.g., in the pavement and then into the premises through a drilled hole. In a minority of cases, additional civil works are needed to extend the fibre network to reach the premises to be served.
[30] Unlike the network termination equipment (NTE) for copper connections, the ONT for FTTP requires power.
[31] So, in many cases, no appointment needs to be organised with the end-user.
[32] [✂].

Figure 3.2: FTTP and FTTC Percentage installation completed by the committed date[33]



Source: Ofcom analysis of Openreach reports to Ofcom. WFTMR WLA KPI Report – December 2024.

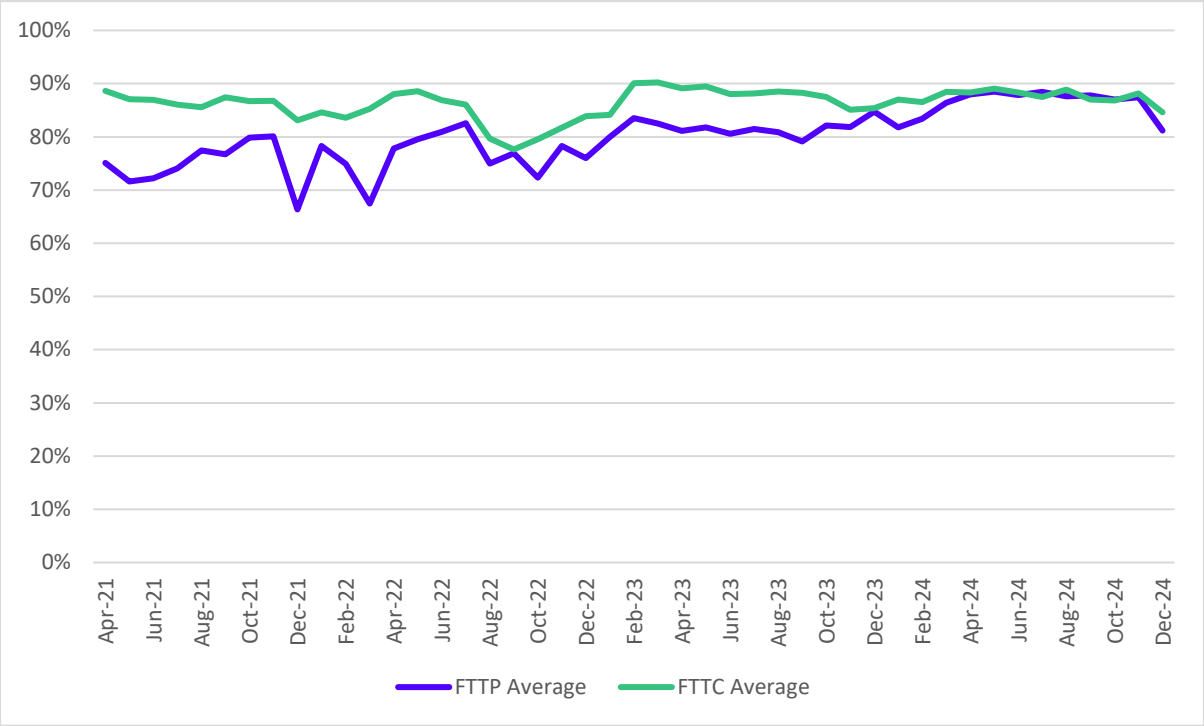
3.17 We also recognise that complex FTTP installations can, due to unforeseen issues, affect a small subset of customers who may be subject to lengthy delays. Given that, the tail of complex orders can be particularly long for a newly developed network. We have assessed the potential impact of these delays and how they affect certain customers with both Openreach and some of the larger ISPs. We discuss this further below.

Repair

3.18 FTTP products have materially lower fault rates than FTTC which results in a better overall outcome for users. [✂].[34] Repair completion rates within 1 working day (SML2) for FTTP have historically been slightly lower than for FTTC but the gap has closed in recent months. This is illustrated in Figure 3.3 below which shows monthly FTTC and FTTP repair completion performance for the period April 21 to December 24.

[33] KPI 2 (a). Openreach reports to Ofcom. Report 1152 and Ofcom Summary Sheet. December 2024. Orders completed by the committed date include those (more complex) orders where a committed date was provided after a survey (the KCI2 Assure process) to allow further works to be completed.
[34] [✂].

Figure 3.3: FTTP and FTTC Percentage Repair completion by SML2[35]



Source: Ofcom analysis of Openreach reports to Ofcom. WFTMR WLA KPI Report – December 2024.

Assessment of the need for QoS standards

3.19 In this subsection, we consider whether it is appropriate to set any QoS standards in WLA markets for the review period.

3.20 As set out in Volume 2, we propose to separate the WLA market into separate geographic areas depending on the extent to which there is the potential for material and sustainable network competition. As described above, these different characteristics lead to different objectives in WLA Area 2 and WLA 3.

3.21 Due to the different objectives, we have separately assessed potential market developments and the appropriateness of QoS remedies for different network products in each WLA Area. We have therefore separately considered:

a) FTTC and MPF in WLA Area 2;
b) FTTC and MPF in WLA Area 3;
c) FTTP in WLA Area 2; and
d) FTTP in WLA Area 3.

Legacy copper-based products

FTTC and MPF (WLA Area 2)

3.22 We propose to maintain minimum QoS standards for FTTC and MPF products in WLA Area 2 equivalent to the current levels. We consider the standards offer sufficient protection

[35] Percentage Repair completion i.e., for SML2, the percentage of Faults where Openreach restored Service within the Repair Service Level timeframe. KPI 3 (b) (i). Openreach reports to Ofcom. Report 1152 and Ofcom Summary Sheet. December 2024.

against potential decreases in performance for those customers who remain on FTTC/MPF for this review period and consider any risks of maintaining them are likely to be limited.[36]

3.23 Customers are increasingly likely to have FTTP available as an alternative to using these products. We expect there to be increasing migration from legacy copper-based products to FTTP over the review period and a consequential decrease in volumes.[37]

3.24 We have considered whether this means that we should remove QoS standards for copper-based products in WLA Area 2. While we expect greater availability and take-up of FTTP in this review period, we think it is important that existing FTTC/MPF customers retain adequate protection as the market develops, for the following reasons:

a) Historical precedent makes it clear that Openreach performance could fall to lower levels for network access products.[38] Although QoS has improved since then, this change is likely to have been influenced to a reasonable extent by the introduction of minimum QoS standards in 2014 and the subsequent raising of those standards in 2018.[39]
b) Without minimum standards, Openreach may have a stronger incentive to allow FTTC and MPF repair QoS to decline, since experiencing poor service may prompt those consumers (who are able to) to switch to Openreach FTTP. Minimum FTTC/MPF QoS standards relating to fault repair are likely to become more important than provisioning minimum QoS standards in the 2026-31 review period, since demand for new provisions is expected to decline quite sharply whereas the installed base may decline more gradually.

3.25 The existing minimum standards and levels have been in place since 2018 and are a relatively settled benchmark recognised by both Openreach and its customers. This suggests that keeping the standards at the same level is a relatively low risk option, which provides a safety net for FTTC/MPF customers, while also being unlikely to lead to materially poor regulatory outcomes.[40]

3.26 We consider that maintaining FTTC/MPF standards in WLA Area 2 is unlikely to materially affect investment in FTTP networks by Openreach, VMO2 or altnets, or the development of network competition. There has been significant investment in FTTP since 2021 against the backdrop of these longstanding standards, so maintaining them should not have a material adverse impact. In addition, customers will still have a significant incentive to migrate to FTTP due to the better service it delivers.

FTTC and MPF (WLA Area 3)

3.27 We consider similar arguments apply for keeping minimum QoS standards for FTTC and MPF products in WLA Area 3.

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[36] For example, removing these standards may lower costs to Openreach which may then be passed through to consumers.
[37] See Volume 3, Section 6.
[38] Ofcom. 2014. Fixed Access Market Reviews Statement. Volume 1, Section 9.
[39] We have previously undertaken analysis that indicated improved Openreach performance was linked to minimum QoS standards. We also found that ISPs also considered improvements in Openreach performance were, in part, a result of the standards. Ofcom. 6 May 2020. Improving broadband and landline standards. A review of how Ofcom's service quality rules have affected Openreach's service level performance.
[40] Poor outcomes could arise when standards are set 'too high', leading to significant costs incurred by Openreach for minimal benefit, or when standards are set 'too low', leading to ineffective regulation.

3.28 In addition, we consider that material and sustainable competition is unlikely to develop in Area 3. This may create a stronger incentive on Openreach to allow FTTC/MPF repair QoS to decline, as there will be limited risk that they could migrate to an altnet, as opposed to Openreach's FTTP network.

3.29 Below, we propose the specific level of minimum QoS standards for copper-based WLA products for the 2026-31 review period.

FTTP

3.30 We have assessed whether it is appropriate to set QoS standards for FTTP for the first time. As with FTTC and MPF we have considered the appropriateness of introducing standards for FTTP separately in WLA Area 2 and WLA Area 3.

FTTP (WLA Area 2)

3.31 We do not consider it is appropriate to introduce minimum standards in this review for FTTP in WLA Area 2, for the reasons set out below.

3.32 WLA Area 2 covers locations where we consider there is, or there is likely to be, the potential for material and sustainable network competition. The evidence suggests that QoS is, and will continue to be, an important dimension of network competition. [✂].[41][✂]. We expect that as network competition develops, it will increasingly drive FTTP QoS in WLA Area 2.[42]

3.33 Given this, unless there is a significant risk of consumer harm from inadequate FTTP QoS, we consider that competition should be allowed to play out rather than introduce new regulation prematurely and risk undermining the benefits from QoS being driven by competition instead of regulation in the long term.

3.34 We consider that there is a risk that introducing minimum QoS standards could undermine the development of network competition. In particular, setting a minimum QoS standard for Openreach FTTP, could reduce the extent to which ISPs, currently reliant on Openreach's wholesale services, choose to purchase wholesale services from a competing network.[43] While the scale of any impact may depend on the level of those minimum standards, we consider that setting minimum standards at all risks setting expectations about continued QoS regulation in these areas. There is also a risk that standards are set above the competitive level and the higher costs imposed on both Openreach and competitors could lower the incentives for further investment.

3.35 The absence of minimum standards to date does not appear to be resulting in significant consumer harm. As mentioned above, KPIs covering QoS on FTTP services have generally been steadily improving. There have been some periods where they have dropped temporarily, for example, following industrial action in 2022, and more recently in November and December 2024. However, at this stage we do not consider that there is evidence of material and persistent FTTP QoS issues that mean it would be necessary or appropriate to propose introducing minimum QoS standards.

[41] [✂].
[42] In addition, both Openreach and altnets may also want to improve QoS more generally in order to encourage consumers and ISPs to use their new FTTP networks.
[43] As explained in Volume 3 Section 1, take-up is important for network competition to become established.

3.36 Based on current performance, and our expectation that network competition will play an increasing role in driving QoS, we do not consider there to be a significant risk of consumer harm from inadequate FTTP QoS if we do not impose minimum standards in WLA Area 2.

3.37 We recognise QoS issues can still occur for individual consumers. Specifically, we are aware that a minority of customers migrating to FTTP can be subject to significant delays and uncertainty when their FTTP installation encounters unforeseen engineering issues (e.g., a blocked duct).[44] However, we do not consider that imposing a minimum QoS standard is likely to improve outcomes for consumers in this type of scenario. When building a new network, there are always likely to be some premises for which installation is more difficult and costly, which can lead to delays.

3.38 We consider that setting a minimum QoS standard to reduce the installation time of more complex installations may result in negative consequences. In particular, it may discourage Openreach from making FTTP available to premises which are more likely to have complex installations. This is because, in addition to the cost of a more difficult installation, provisioning to these premises would increase the risk of a breach of quality standards. Openreach may therefore decide that it is not commercially viable to offer FTTP to premises where there is a risk of a complex installation.

3.39 We are also aware that Openreach is currently rolling out plans to change the installation process to limit the number of customers who are subject to a more complex installation process.[45] We encourage this where it provides greater certainty and improved installation times and expect this could reduce the number of customers subject to delayed installations.

3.40 Although we are not proposing minimum standards on FTTP in WLA Area 2, we propose to retain the existing FTTP reporting and SLA/SLG requirements. These will provide some protection for consumers, both via a reputational incentive and compensation for poor performance. We consider that these requirements together with the impact on QoS from developing network competition will provide adequate protection.

3.41 KPIs would also reveal FTTP QoS performance over the period and, if a material issue with QoS becomes apparent during the 2026-31 period, we can consider if additional interventions are appropriate.

FTTP (WLA Area 3)

3.42 In contrast to FTTP in WLA Area 2, we think it is appropriate to introduce minimum QoS standards in WLA Area 3 for FTTP.

3.43 We consider that material and sustainable network competition is unlikely to develop in WLA Area 3. This means that without regulation, there is a greater risk of inadequate QoS delivered by Openreach (as described above), and therefore consumer harm. Moreover, Openreach could also prioritise QoS performance in areas where it faces competition at the expense of areas where it does not, further exacerbating poor performance in WLA Area 3.

3.44 Existing repair performance in WLA Area 3 is also already lower than in WLA Area 2, even when accounting for the fact that WLA Area 3 is more rural, and therefore potentially more

[44] [✂].

[45] Broadly, Openreach is planning to increase the number of orders where it commits to an installation date at the point of sale, rather than wait for an engineering assessment before committing to an installation date.

complex or challenging to undertake repairs, than WLA Area 2.[46] This could, in part, be a consequence of the different competitive environments faced by Openreach in the two areas, mentioned above.

3.45 Given that we do not have an objective in WLA Area 3 to promote network competition, there is not the same risk as in WLA Area 2 of minimum QoS standards undermining the development of competition. Therefore, given the risks of consumer harm for FTTP in WLA Area 3, we propose that minimum QoS standards in WLA Area 3 are necessary.

3.46 However, during a period of rollout and growing FTTP customer numbers, we consider there is a risk that setting a stretching minimum QoS standard could lead to regulatory failure. For example, this could occur if it reduced the incentive on Openreach to offer FTTP to premises where it is more difficult to install, as a refusal of Openreach to offer FTTP to a premises is likely to be more detrimental to that consumer than reduced QoS performance.

3.47 To reduce this risk, our intention in setting standards is to provide a backstop to ensure that the service does not drop below the level that Openreach has already shown it can achieve, to guard against the risk of any future deterioration in performance. We consider this is a proportionate approach at this point as it limits the risk of any regulatory failure from setting standards too high (particularly while rollout and take-up is still increasing in Area 3), but also provides adequate protection to consumers who are less likely to benefit from future network competition.

3.48 We set out how we propose to set standards for FTTP in WLA Area 3 below.

Proposal for minimum QoS standards and levels

3.49 We set out below our proposed minimum QoS standards for the following markets:

a) FTTC and MPF across WLA Area 2 and WLA Area 3; and
b) FTTP in WLA Area 3.

Minimum standards for FTTC and MPF

3.50 For FTTC and MPF minimum QoS standards we propose to:

a) maintain the existing standards for FTTC and MPF that were used in the 2021-26 period; and
b) remove the requirement that standards for installations need to be met for individual UK management regions.[47]

3.51 We set out our reasoning and the details of our proposed standards below.

Maintaining existing standards

3.52 As outlined above, we consider there are strong reasons for keeping current standards:

a) They are a relatively settled benchmark recognised by Openreach and its customers.
b) We do not have any evidence related to performance of FTTC or MPF products that suggests a change to the current standards is needed.

[46] Annex 13. Paragraph A13.65 and Table A13.9.
[47] All current FTTC standards must be met in 5/7 of Openreach's Management Regions, aside from the "Repair within 6/7 working days standard", which must be met nationally.

3.53 For these reasons, we consider it is proportionate to keep the existing standards over the course of the review period.

Meeting standards for individual UK management regions and the impact of increasing rurality

3.54 Openreach forecast an approximate [✂]% drop in FTTC provisions between 2021-22 and 2027-28.[48] It suggested the forecast lower volumes would mean it was no longer proportionate to require either repair or provision standards to be met for individual regions. Openreach also suggested that removing this requirement would help manage the upward pressure on task times that arises from having FTTC customers that are increasingly rural.[49]

3.55 Openreach also suggested that the increasing rurality of FTTC customers is an important factor to consider when setting QoS standards because travel times can be longer in rural areas and the work can be more complex due to the idiosyncrasies of rural networks.[50] It suggested that Ofcom should review QoS policy if copper repair or provision volumes fall below 0.25 million per quarter for two consecutive quarters.[51]

3.56 We consider below:

a) Whether the application of minimum QoS standards in each region remains appropriate.
b) Whether the average FTTC customer in individual regions is becoming more rural, with a higher cost associated with provisioning and repairs, meaning that it is more difficult for Openreach to meet existing performance standards.

Removing the requirement for minimum QoS standards to apply to all UK regions

3.57 We propose to remove the requirement that minimum QoS standards should apply separately to all Openreach UK management regions for FTTC, as we consider it would provide some flexibility to manage its resourcing of FTTC and MPF repairs and provisioning.

3.58 FTTC and MPF products are declining in usage and so we consider it is appropriate that the regulatory burden should be reduced where possible to keep it proportionate with the size of the market.

3.59 We consider it is possible to reduce the regulatory burden here with limited risk of harm to consumers. We propose to maintain the UK-wide minimum QoS standards so overall UK-wide performance would be maintained. We will also still require KPI reporting on a management region basis and so will be able to respond if we observe consistently lower performance in individual regions.

3.60 We recognise that there are some risks with removing these localised standards, and it is possible that there may be a slight increase in variation between performance across different regions. However, variation in performance is already likely within the individual

[48] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Paragraph 194.
[49] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Paragraph 200.
[50] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Paragraph 194 iv.
[51] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Paragraph 201.

regions themselves due to the mix of premises they each contain.[52] We do not think that merging regions meaningfully changes the incentives on Openreach to manage customers in more challenging and remote locations.

3.61 Overall, we think this change would be proportionate and the KPIs would allow us to monitor future performance. We welcome views on this.

Impact of increasing rurality

3.62 We recognise that having an increasing proportion of customers on copper-based products in rural areas could potentially make meeting provisioning and repair minimum QoS standards more challenging for Openreach. We undertook analysis to understand how material this issue is likely to be over the 2026-31 review period.[53]

3.63 This analysis showed that:

a) Historically the provisioning performance for FTTC has not been lower in rural areas compared to urban areas.
b) Historically the on-time repair performance has been slightly lower in rural areas (84%) than urban areas (88%). This four percentage point difference in performance suggests that on average, we might expect the on time repair performance to decrease by approximately one percentage point (e.g., from 87% to 86%) every time the proportion of rural customers increases by about 25 percentage points (e.g., from 25% to 50%).

3.64 Current on time repair performance tends to be higher than the minimum QoS standards to the extent that, even if the proportion of rural customers reached 100%, then Openreach would still meet the minimum QoS standard in three regions. In all other regions it would need a significant increase in rural customers to be at risk of not meeting the standard.[54]

3.65 Overall, we consider that there is likely to be some impact from the increasing rurality of FTTC customers, but its impact on the ability of Openreach to meet minimum FTTC QoS standards appears to be relatively small and we do not propose any specific change to our regulatory approach on this basis.

Proposed minimum QoS standards for FTTC and MPF products

3.66 As set out above, we propose to retain all minimum QoS standards for FTTC and MPF products.

3.67 We plan to remove the requirement to meet minimum FTTC and MPF QoS standards in each UK management region.

Table 3.2 Proposed minimum QoS standards for FTTC and MPF products

Standard	Level
Repair within 2 working days (SML1) Repair within 1 working day (SML2)	85%
Repair within 7 working days (SML1) Repair within 6 working days (SML2)	97%
Installations to be completed by Committed Date	94%

[52] Rural areas have slightly lower performance than urban areas across the UK. Annex 13. Figure A13.16.
[53] Annex 13. Paragraphs A13.43 to A13.54.
[54] London and the South East is the region that would need the smallest increase in rural customers in order for performance to drop below the minimum QoS standard. It would require the current percentage of rural customers to increase from 8% to 45%.

Standard	Level
First Available Date (FAD) for installations requiring an engineer visit - working days within which first date offered for installation appointments	10 days
Quality standards in relation to the FAD - Frequency with which regulated installation appointment date must be offered	89%

Minimum QoS standards for FTTP in WLA Area 3

3.68 We think it is appropriate and proportionate to set minimum QoS standards for FTTP in WLA Area 3 using the same metrics that we use for FTTC and MPF. This creates consistency with existing practice, and we think it is most appropriate to introduce minimum QoS standards that ensure Openreach customers are able to rely on the contractual expectations in their SLAs.

3.69 As discussed above, our proposed approach to setting these QoS standards is to provide a 'backstop' protection based on existing performance.[55]

FTTP on time repair

Setting the standard for repair within 1 working day

3.70 We considered three potential options for setting a QoS minimum standard for 'FTTP mean repairs completed within the SLA'. These are set out in Table 3.3.[56] We understand that SML2 comes as standard for FTTP and SML1 is not offered.[57] Therefore we are only proposing a minimum QoS standard on SML2 for FTTP, but not SML1.

[55] See paragraphs 3.46-47.
[56] Further information on the development of these options is set out in Annex 13.
[57] Openreach. October 2024. Product description. Generic Ethernet Access over Fibre to the Premises (GEA-FTTP) including FTTP on Demand (FOD). Version 27. Section 3.6 Service Maintenance Levels. Openreach response dated 21 February 2025 to s135 notice dated 10 February 2025, question 9.

Table 3.3 WLA Area 3 FTTP repair options

Option	Value
Option 1 (low): Openreach's average performance over 2023-24 in WLA Area 3	74%
Option 2 (medium): Openreach's performance in WLA Area 2 over 2023-24 which matches the rurality of WLA Area 3	79%
Option 3 (high): Openreach's average performance over 2023-24 nationally	83%

Source: Ofcom analysis of Openreach s135 to Ofcom. Openreach response dated 14 November 2024 to s135 notice dated 10 July 2024, questions A&B.

3.71 We propose to use option 2 (i.e., 79%) to set the QoS minimum standard. This option means that customers in Area 3 should receive the same performance as customers in Area 2 when they have the same level of rurality. Although Openreach will need to raise its existing performance in WLA Area 3 to meet this standard, it is already meeting an equivalent level of performance in WLA Area 2 for the same type of locations (and therefore a similar expected cost of repair). This option reduces the risk that Openreach has a limited incentive to raise performance in WLA Area 3, due to the weaker competitive pressure from other networks.

3.72 We consider that option 1 is likely to lead to consumers receiving a lower level of performance than they would receive in a more competitive area with the same geographical characteristics. There does not appear to be a good justification why consumers in WLA Area 3 should receive a lower performance, once we have adjusted for the impact of greater rurality.

3.73 We also considered whether it would be appropriate to set a standard where we set performance based off an average over 2023-24 nationally. This is option 3 in Table 3.3 where the metric would be set at 83%. However, we consider that this would be inappropriate as it does not take into account that on average premises in WLA Area 3 are more rural and therefore more costly to serve.[58] It would also require a significant improvement from Openreach's current performance in WLA Area 3 which could result in significant costs.

3.74 We propose to give Openreach sufficient time to make any performance increase required by commencing the minimum QoS standards in the year 2027-28 (i.e., the second year of the review period).

3.75 Setting a higher standard than existing performance in WLA Area 3 means that Openreach will need to improve relative to current performance. We think this would be proportionate because:

a) It achieves our objective of protecting consumers in WLA Area 3. The benefit to FTTP customers in WLA Area 3, by ensuring they are protected against poor performance, would be significant.

[58] We would not expect the level of performance seen in a competitive market to be the same across all areas. This is because in more rural areas the costs can increase significantly, but generally the benefits are similar. This means the optimal level of quality (i.e., where the benefits just outweigh the costs) will – all else equal – be lower for rural areas.

b) Openreach already delivers this level of performance for customers in WLA Area 2 with the same rurality characteristics. We consider that providing the same level of performance to customers of an equivalent type in WLA Area 3 is the minimum necessary to achieve our consumer protection objective.
c) WLA Area 3 only contains approximately [✂]% of existing FTTP customers, which means a performance improvement would only affect a small proportion of customers. No increase in performance is required for the vast majority of Openreach FTTP customers.
d) We propose to only apply FTTP standards in WLA Area 3 from the year 2027-28. This gives Openreach a reasonable period of time to improve performance before standards come into force.

Setting the standard for repair within 11 working days

3.76 For FTTC and MPF customers, the second on-time repair standard requires that 97% of repairs are completed within a period of SLA + 5 days.[59] This is to ensure that even when SML timescales are missed there remains a strong incentive for Openreach to complete those orders without undue delay. The aim of this standard is to incentivise Openreach to complete repairs as quickly as possible for a large proportion of consumers, even in instances where SLA performance expectations have not been met.

3.77 We have considered whether to set the QoS standard for FTTP in WLA Area 3 using the same +5 working days beyond the SLA that we use for FTTC, or a different number of working days beyond the SLA. We have considered what proportion of customers would be protected under different options by assessing Openreach's performance in the same way that we set out above, i.e., basing it on Openreach's performance in WLA Area 2 which matches the rurality of WLA Area 3 in 2023-24.

3.78 If we were to use the same standard that we use for FTTC and MPF customers (i.e., SLA + 5 days) for FTTP standards in WLA Area 3, then only 92% of customers currently meet this level of performance.[60] If we set the QoS standard using this metric then it would leave 8% of customers without the protection of any QoS repair standard.

3.79 We consider that 8% is too high a proportion of consumers to be left without protection and therefore propose to change the approach so that the minimum QoS standard is based on SLA + 10 days. Based on existing performance using the approach set out above, a SLA + 10 days standard would be met by 96% of customers.

3.80 We think this is a proportionate approach taking into account the fact that our objective is not to set stretching targets for Openreach, but instead ensure that there is a backstop to limit any deterioration below existing levels of performance that Openreach has shown it can achieve (in WLA Area 2).

3.81 We therefore propose to set an FTTP repair standard in WLA Area 3 so that 96% of customer repairs are completed within a period of SLA + 10 days.

[59] i.e., 6 days for SML2.
[60] This 92% is based on the hybrid approach outlined above in which we use Openreach's performance in WLA Area 2 which matches the rurality of WLA Area 3 in 2023-24. Observed performance at SLA + 5 days in WLA Area 3 is 89%.

Proposed standards for FTTP provisioning

3.82 Our analysis of provision performance illustrates minimal differences between WLA Area 2 and WLA Area 3. We have therefore set a standard for WLA Area 3 based on Openreach's existing performance across the UK.

3.83 As shown in Annex 13, existing performance shows that the frequency of installations completed by the committed date is 91% across the UK in 2023-24. We therefore propose to use this value as the minimum QoS standard.

3.84 We propose that the required FAD for installations requiring an engineer visit should be 18 working days. This is the number of working days within which a first date must be offered for an installation appointment and is based on Openreach's existing SLAs.

3.85 We propose to set a minimum standard that the required FAD for installations (18 working days) should be offered 90% of the time. [✂].[61]

Proposed minimum QoS standards for FTTP in WLA Area 3

3.86 We propose to set minimum FTTP QoS standards in WLA Area 3 as shown in Table 3.4.

Table 3.4 Proposed minimum QoS standards for FTTP products in WLA Area 3

Standard	Level
Repair within 1 working day (SML2)	79%
Repair within 11 working days (SML2)	96%
Installations to be completed by Committed Date	91%
First Available Date (FAD) for installations requiring an engineer visit - working days within which first date offered for installation appointments	18 days
Quality standards in relation to the FAD - Frequency with which regulated installation appointment date must be offered	90%

Updating FTTP standards for the statement

3.87 The data we have used in our analysis to propose minimum FTTP QoS standards was based on Openreach performance in the year 2023-24. However, the upward trend in FTTP performance means that by the start of the 2026-31 review period the proposed standards may be below Openreach performance by that time.

3.88 As our objective is to set standards at a level to guard against deterioration in Openreach performance. We are therefore minded to update the standards in Table 3.4 above to take this effect into account where reasonable and appropriate. We propose to use the same methodology that is described above and in Annex 13, but with updated data from the year 2024-25, once it becomes available.

Transparency obligations

3.89 We propose to retain the same transparency obligations as in WFTMR21 for FTTC and MPF products. We consider the existing metrics have helped us understand how Openreach

[61] [✂].

performance is tracking over time. This information allows us to understand whether further regulation or removal of regulation would be appropriate.

3.90 For these same reasons, we also consider it appropriate to retain existing KPI obligations for FTTP. However, we propose to require them to be provided separately for WLA Area 2 and WLA Area 3 and as a UK wide value. This is so we can evaluate any differences that could result from the difference in regulatory approach or competitive conditions in WLA Area 2 and WLA Area 3.

3.91 We have considered whether it would be appropriate to impose requirements on Openreach to provide additional FTTP KPIs which provide transparency of its performance in relation to more complex installations.

3.92 Our provisional view is that, whilst in principle this might be beneficial, in practice gathering further evidence and deciding on the specifics of any new KPIs would be better left until Openreach's new provisioning processes have had time to bed in and mature.[62] We would welcome views from stakeholders.

Consultation question

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

[62] [✂]. Openreach response dated 21 February 2025 to s135 notice dated 10 February 2025, question 12.

4. QoS regulation in LLA and IEC markets

4.1 This section sets out our proposals relating specifically to QoS regulation in those LLA and IEC markets where we provisionally find that BT has SMP, including transitional arrangements for DFA in postcode sectors that have been reclassified from LLA Area 3 to other regulated LLA markets. We also propose QoS regulation for a transitional period in the IEC BT+2 markets we are proposing to deregulate in this review.[63]

4.2 For the reasons set out in Section 2 of this volume, we are proposing to continue to impose an SMP condition requiring BT to comply with all such QoS requirements as we may direct in relation to network access provided by BT and to publish information about the QoS it provides as we may direct.

4.3 In LLA and IEC markets, the Openreach products[64] we are principally concerned with in relation to QoS are:

- Ethernet services – Openreach's ethernet access direct (EAD) and ethernet backhaul direct (EBD) products;[65]
- Wave division multiplex (WDM) services – Openreach's optical spectrum access (OSA) and optical spectrum extended access (OSEA) products;[66]
- Dark fibre services – Openreach's products of the same name;[67] and
- Cablelink services – Openreach's products of the same name.[68]

4.4 We set minimum QoS standards and/or transparency and reporting obligations on these products in our previous review, WFTMR21.[69] They apply or relate to Openreach's performance in installing these products in response to orders placed by its wholesale customers and to its performance in repairing reported faults.

4.5 We start by setting out our review of Openreach's performance since WFTMR21 followed by our assessment of factors which could impact QoS in these markets over the 2026-31 period. We then set out the minimum QoS standards we are proposing to impose on BT and our reasoning followed by proposed transparency and reporting requirements.

4.6 Our proposed minimum QoS standards and reporting requirements are unchanged from those we imposed in WFTMR21.

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[63] Our provisional SMP findings are set out in Volume 2.
[64] These being products which Openreach supplies to comply with its network access obligations.
[65] More detail on Openreach's ethernet products can be found on its website. Accessed on 15 November 2024.
[66] Further detail on WDM products can be found on Openreach's website. Accessed on 15 November 2024.
[67] Openreach's dark fibre products can be found on its website under passive products. Accessed on 15 November 2024.
[68] More detail on cablelink products can be found on Openreach's website under exchange-based products. Accessed on 15 November 2024.
[69] Ofcom. 18 March 2021. Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-2026. Volume 7: Legal instruments. Notification of Directions to BT under section 49 of the Communications Act 2003 and SMP Condition 10 (Quality of Service Directions). Schedule 1, Direction 1 and Schedule 2, Direction 2.

Review of Openreach's service performance since WFTMR21

4.7 In WFTMR21, we imposed the minimum QoS standards set out in Table 4.1 below in relation to ethernet, cablelink and dark fibre services.[70] These were very similar to the standards we imposed in our previous market review (BCMR 2019). This reflected our then view that existing standards had helped bring Openreach's service quality for installing and repairing ethernet leased lines and dark fibre to a good level and that setting stricter standards was disproportionate.

Table 4.1 Current minimum WLA QoS standards

Standard	Level (Years 2021-26)
MTTP (mean time to provide) across orders	No more than 38 working days
Upper percentile limit for provisions	No more than 4.5% of orders older than 133 working days
Certainty: Percentage of orders completed on or before the initial contractual delivery date (iCDD)	86%
Certainty cross-link: Maximum mean period for the iCDD	No more than 53 working days
Faults repaired within the service level agreement (SLA)	94%

4.8 From 2021-24, Openreach has met all the minimum QoS standards we set, except for 2022-23 when it contravened the requirement that the MTTP be no more than 38 working days.[71] Openreach's service performance in that year was impacted by eight days of industrial action. It narrowly missed out on meeting this standard achieving a MTTP of 38.4 working days over the annual compliance period.

4.9 We investigated this in 2023 together with breaches of other minimum QoS standards that happened in the same year and concluded that three of the minimum QoS standards had been breached. Our decision set out some observations on Openreach's approach that it should learn from but concluded that a fine was not proportionate in this case.[72]

4.10 We require Openreach to submit monthly KPIs and a biannual report on orders which take more than 133 working days to complete. This information allows us to monitor Openreach's service performance in some detail and is not limited to just checking

[70] Consistent with decisions in previous market reviews, we did not set minimum QoS standards on Openreach's WDM services in WFTMR21.
[71] As at end of January 2025, Openreach's year to date performance was exceeding all five minimum QoS standards. Openreach. 12 February 2025. Quarterly Leased Line QoS Update. Slide 3.
[72] Ofcom. March 2024. Confirmation Decision under section 96C of the Communications Act 2003. Confirmation Decision served on BT by Ofcom for the contravention of SMP Condition 10.1.

performance against our minimum QoS standards. We also require Openreach to publish a subset of its KPIs on its website quarterly.[73]

4.11 In Annex 13, we set out our assessment of Openreach's performance over the period August 2021 to December 2024. In summary, since the period impacted by industrial action, Openreach performance has been improving relative to our minimum QoS standards.

4.12 MTTP has been reducing i.e., installation orders have taken less long, on average, to complete and the percentage of installation orders completed on time and repairs completed within the timeframe specified in Openreach's SLA have both been rising. The proportion of complex orders taking more than 133 working days to complete has been falling. Lastly, the average time it takes Openreach to provide its customers with its iCDD has been reducing.

4.13 Whereas we recognise that various factors may have led to these performance outcomes,[74] we do not consider that imposing stricter standards for this review period is appropriate or proportionate against a backdrop of rising service quality for customers.

4.14 In 2023, we consulted on a proposal to change the current on-time fault repair standard to a mean time to repair (MTTR) metric but decided not to proceed after having considered consultation responses.[75] We said we would consider what fault repair standard is appropriate in this review and we discuss this below.

Assessment of the forward look

4.15 In this subsection, we summarise our assessment of the review period in order to inform our view on whether any changes are appropriate to the existing arrangements for regulating QoS in LLA and IEC markets.

4.16 We have separated the LLA market into separate geographic areas depending on the extent to which there is the potential for material and sustainable network competition.[76] Our regulatory objectives slightly differ in each area.

4.17 In LLA Area 2 and the HNR Area, we want to promote investment and competition in networks that offer LLA services by Openreach and other telecoms providers, while seeking to protect consumers and competition based on access to Openreach's networks as network competition develops. There is significantly more leased line network competition in the HNR Area than LLA Area 2, but we still provisionally find that BT has SMP. While there is still a role for regulation to continue to promote investment/competition in this area, less intervention is required than in LLA Area 2.

4.18 In recent reviews, including WFTMR21, we have reflected these geographic distinctions in competitive conditions through the exercise of our regulatory judgement in maintaining QoS standards in LLA Area 2 as well as LLA Area 3 but not in the HNR Area.[77]

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[73] See https://www.openreach.com/about/our-company/our-key-performance-indicators (larger businesses). Accessed on 4 February 2025.
[74] For example, operational changes, changes in the mix of job complexity, more manageable and/or predictable demand.
[75] Ofcom. October 2023. Quality of Service for Ethernet and Dark Fibre. Statement on proposed modifications to Quality of Service Directions and related Key Performance Indicators for Ethernet and Dark Fibre repairs.
[76] Volume 2, Section 5.
[77] All other QoS remedies apply in both markets.

4.19 Looking ahead for this review period, we continue to consider that it is appropriate and proportionate to retain minimum QoS standards on Openreach in LLA Area 2 as well as LLA Area 3:

a) While we think there is, or there is the potential for, material and sustainable competition to develop in LLA Area 2, we think it is necessary to provide protection for customers and existing models of competition from poor QoS while that develops.
b) We do not consider that LLA Area 3 is likely to have the potential for material and sustainable network competition to emerge, and so minimum QoS standards are necessary to promote competition based on access to Openreach's network and to protect leased line customers.

4.20 To ensure that Openreach maintains adequate levels of QoS performance going forward requires, in our judgement, the continued imposition of a full package of QoS remedies across its main network access products. We discuss the HNR Area below.

4.21 In IEC BT Only and BT+1 exchanges we want to promote competition based on access to Openreach's networks and protect consumers. We continue to consider that QoS regulation, including requiring Openreach to comply with minimum QoS standards, is appropriate and proportionate to support this model of competition in these markets.[78]

Impact of exchange exit

4.22 In Volume 3, Section 3, we discuss the impact of exchange exit on the continued provision of network access.

4.23 We recognise that some service disruption may arise as circuits are ceased and re-provided[79] but the materiality of this disruption is unclear. We intend to ask the OTA2 to monitor this aspect of the programme and keep this under review.

4.24 Our existing QoS regulations, including minimum QoS standards maintained at current levels, should keep incentives on Openreach to ensure that service performance is maintained at adequate levels as network changes are managed through the exchange exit programme and that its customers are treated equally throughout.

EAD2.0

4.25 We understand that Openreach is developing a new ethernet leased line product, currently known as EAD2.0. This could be introduced before or during the period we are considering in this review.[80]

4.26 We understand that, under current plans, EAD2.0 is intended to be a development of the existing EAD product which has been in service for many years.[81] If this is the case, the new product will be subject to QoS regulation; whether the regulation currently in force or that which we are proposing to impose for the 2026-31 review period in this consultation. This is because we currently define 'relevant ethernet services' as inclusive of any new product

[78] Thereby addressing the competition problems arising from BT's SMP described in Section 2 of this volume.
[79] Or through other approaches to reconfiguring circuits.
[80] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Page 47.
[81] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Non-Confidential version for publication. Paragraph 219.

which is introduced to wholly or substantially replace any of the current EAD, EBD or Cablelink products[82] and we are not proposing to change this definition.[83]

4.27 As EAD2.0 is currently under development, we do not know what, if any, impact its possible introduction may have on Openreach's service performance over the review period. Whilst we would expect the product to perform better than its predecessor, this does not necessarily mean that our current QoS regulation will remain appropriate.

4.28 Should evidence be submitted to us in the future which supported the need to modify any QoS directions we have made (whether this relates to the introduction of EAD2.0 or some other factor), then we would consider this carefully and, if appropriate, consult on proposed changes as we have done previously.[84]

Provisional conclusions on our assessment of the forward look

4.29 Our provisional view is that there is no evidence of changes in LLA and IEC markets over the review period, that indicates to us that changes are necessary to the way we regulate Openreach's service performance for installing and repairing its main network access products – ethernet and dark fibre. However, we welcome the views of stakeholders.

Proposals for QoS regulation

Minimum QoS standards

4.30 The significant improvement in Openreach's performance in installing leased lines seen since 2016 has continued since our last review in 2021.

4.31 Noting our provisional conclusions about the forward-look above, we consider that keeping the same minimum QoS standards, both the metrics and levels, set in WFTMR21 remains an appropriate and proportionate remedy for our competition concerns in LLA and IEC markets for this review period.

4.32 In reaching this view, we have considered the following in particular:

Repairs

4.33 We have considered whether it is appropriate to change the standard for Openreach's performance in repairing the services it provides. The existing standard requires Openreach to clear faults in accordance with its contractual service level commitments 94% of the time over an annual compliance period.

4.34 In July 2023 we consulted on modifying the minimum QoS standard for repair of ethernet and dark fibre products and associated transparency requirements.[85] This was based on

[82] Paragraph 9 a (xii) of Direction 1 of the QoS Directions.
[83] The treatment of EAD2.0 under our proposed charge control conditions may differ, depending on when the product is launched. See Volume 4, Section 6, Footnote 195, for a description of how we propose to treat a new EAD 2.0 product for the purpose of the Ethernet Baskets.
[84] For example, having imposed minimum QoS standards in 2014, there was a change in the mix of wholesale services purchased from Openreach, which would have reduced the effectiveness of the existing standards. So, in 2016, we used our direction making powers to address this. Ofcom. 19 October 2016. Quality of Service for WLR and MPF. Directions and Consents relating to the minimum standards and KPIs imposed in the 2014 Fixed Access Market Reviews.
[85] Ofcom. 14 July 2023. Quality of Service for Ethernet and Dark Fibre. Proposed modifications to Quality of Service Directions and related Key Performance Indicators for Ethernet and Dark Fibre repairs.

evidence from Openreach that there had been a change in the underlying fault mix. Openreach argued that a decrease in easier to fix faults resulted in more complex faults making up a greater proportion of overall faults, making the existing on-time repair (OTR) standard more challenging and no longer fit for purpose.

4.35 Openreach proposed replacing the existing standard with a mean time to repair (MTTR) metric and that faults caused by force majeure (commonly referred to as 'matters beyond our reasonable control' or MBORC) and customer faults should be removed from this standard.

4.36 In our subsequent statement, we decided not to make changes to the existing repair standard at that time and said that a more appropriate time to consider this issue would be in this current review.[86]

4.37 As we recognised at the time, the merit of an alternative metric of MTTR is to provide some incentive on Openreach to deliver all repairs including the most complex repairs which take longer than the relevant SLAs. However, we also acknowledge concerns from other stakeholders that an MTTR approach may not maintain the same level of incentive to deliver timely repairs as the current OTR standard. It will also be difficult to set the level of a new MTTR metric, particularly knowing whether it is consistent with an equivalent OTR standard. This difficulty increases the risk of us setting an inappropriate standard compared to maintaining the existing standard.

4.38 We have reviewed whether the existing OTR metric and level remains a proportionate and appropriate way of ensuring that Openreach performs to the repair service level which we require to include in its relevant network access reference offer.

4.39 We provisionally conclude that it is for the following reasons:

Complementing SLA/SLGs

4.40 Our approach to defining QoS metrics for minimum standards, since we first introduced them a decade or so ago, has been to give greater certainty to access seekers that the SLAs we require Openreach to specify in its relevant reference offer for network access, will be the levels of service that Openreach delivers for them most of the time. Relying on SLGs to provide this certainty, had not proved sufficient.

4.41 So, we imposed minimum QoS standards requiring Openreach to perform to its SLAs for key aspects of service performance by setting minimum levels which must be met in aggregate annually. The minimum QoS standards therefore complement our reference offer obligations.[87]

4.42 We continue to believe this to be an appropriate way of defining QoS metrics.

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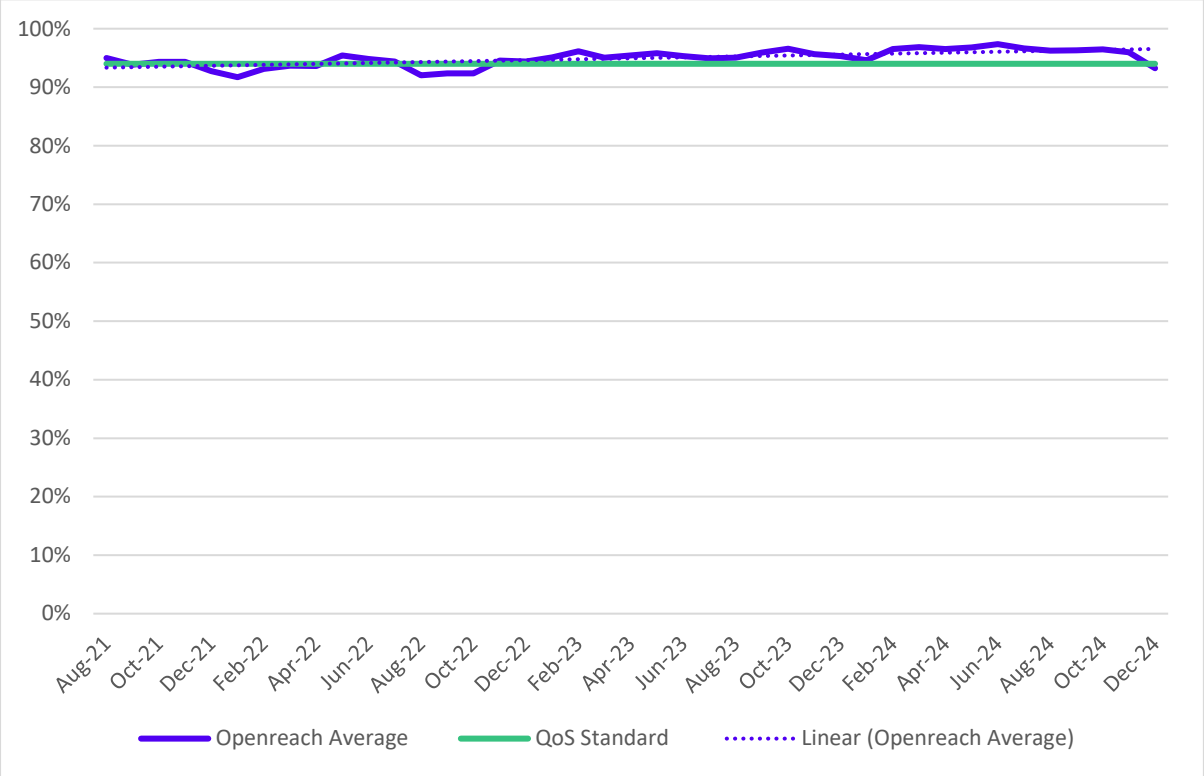
[86] Ofcom. 30 October 2023. Quality of Service for Ethernet and Dark Fibre. Statement on proposed modifications to Quality of Service Directions and related Key Performance Indicators for Ethernet and Dark Fibre repairs.

[87] There are a few instances where we have had to deviate from this approach. For example, in setting leased line provisioning standards for the first time in 2016, we found only a small proportion of orders were delivered within the SLA. So, we decided to use MTTP with upper and, initially, lower percentile metrics instead. We also decided that other measures were also appropriate and proportionate to address the then practice whereby Openreach, in many cases, repeatedly changed the contracted date for delivering circuits. Ofcom. April 2016. Business Connectivity Market Review – Volume I. Review of competition in the provision of leased lines. Paragraphs 13.52 to 13.55 and Table 13.10.

Actual repair performance

4.43 We set out below in Figure 4.1 Openreach's performance against the existing repair standard since WFTMR21. This evidence shows that, since the periods of industrial action in the summer/autumn of 2022, Openreach's performance has exceeded the OTR minimum QoS standard and has trended upward.

Figure 4.1: LLA Faults repaired within the service level agreement (SLA)



Source: Ofcom analysis of Openreach reports to Ofcom. WFTMR Leased Line KPI Report – December 2024.

4.44 One reason for this change in trend is that the percentage of customer faults (i.e., easier to fix faults) has [✂] since the consultation in 2023.[88]

4.45 While we recognise that there is some variation in the type of faults that are included in the metric, we do not consider the impact of this variation is sufficiently material to conclude that the current OTR standard is not appropriate.

Customer faults

4.46 Removing customer faults would mean that significantly fewer faults would be captured by the repair incentive and could also lead to increasing volatility in the output values.

MBORC

4.47 We also do not think excluding MBORC repairs from the minimum QoS standard, and the subsequent reduction in the risk to Openreach of not meeting the standard, outweighs the benefits of including these repairs. These benefits were outlined by stakeholders in response to the 2023 consultation and were that the inclusion of MBORC faults incentivises

[88] Openreach. 26 July 2024. Telecoms Access Review (TAR) 2026. Openreach Submission. Confidential. Page 79. [✂].

Openreach to repair these faults in a timely manner, and ensures this category is not used to improve performance by incorrectly categorising faults as MBORC.[89]

Provisional conclusion

4.48 We consider that the existing OTR standard remains appropriate and proportionate for the purposes of setting a minimum QoS standard for leased line fault repair and provides the best outcome for consumers.[90] However, we welcome views from stakeholders.

HNR Area

4.49 In WFTMR21, we decided to continue not to impose QoS standards in the HNR Area despite finding that BT has SMP in this market.[91] We reasoned that there was less need for stringent QoS regulation given the more competitive market conditions in the postcode sectors which form the HNR Area than LLA Area 2 and LLA Area 3.[92]

4.50 We propose to continue not to impose minimum QoS standards in the HNR Area for the same reasons as we have taken in previous reviews. Given the market conditions, Openreach has less incentive to allow its QoS to deteriorate significantly as its wholesale customers may be more likely to switch to other networks which are present in this area.

4.51 Our overall objectives for the HNR Area are the same as in LLA Area 2, but we are taking a lighter approach to remedies as a whole in the HNR Area. This reflects the fact that network competition is stronger in the HNR Area, and so although there is still a role for regulation as competition develops, the extent of protection necessary for leased line customers and existing models of downstream competition is lower than LLA Area 2.

4.52 We consider that our competition concerns in this market are adequately addressed by continued monitoring of Openreach service performance in the HNR Area over the 2026-31 period. We propose to do this by keeping in place the same reporting obligations. These are additional to SLA/SLG reference offer obligations and measures addressing discriminatory conduct.

WDM

4.53 Consistent with decisions in previous market reviews, we did not set minimum QoS standards on Openreach's WDM services in WFTMR21.

4.54 Our reason then for not doing so was because WDM circuits were quite low in volume and because we did not consider it likely that Openreach would degrade service quality on products which it was actively promoting as having features comparable to dark fibre.[93]

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[89] Ofcom. 30 October 2023. Quality of Service for Ethernet and Dark Fibre. Statement on proposed modifications to Quality of Service Directions and related Key Performance Indicators for Ethernet and Dark Fibre repairs. Paragraph 3.7.

[90] This is not to say that an MTTR metric is not a useful measure of performance.

[91] A decision we first made in the 2019 BCMR Statement.

[92] Ofcom. 28 February 2020. Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26. Volume 3: Non-pricing remedies. Paragraph 7.43.

[93] Ofcom. 28 June 2019. Promoting competition and investment in fibre networks: review of the physical infrastructure and business connectivity markets. Volume 2: market analysis, SMP findings, and remedies for the Business Connectivity Market Review (BCMR). Paragraph 15.146.

4.55 We note from Openreach's latest KPIs, that the installed base of WDM circuits has increased since WFTMR21. But the number of WDM circuits remains small compared to the installed base of ethernet circuits and, as a proportion, has not changed much since 2021.[94]

4.56 We therefore do not propose setting QoS standards on Openreach's WDM services in this review for the same reasons as before.

Transparency obligations

4.57 We have an existing reporting framework which broadly covers:

- the time it takes Openreach to complete installation orders;
- fault repair performance,
- Openreach's ability to meet its committed delivery date (and the timing of this date); and
- monitoring of more complex and delayed orders (including specific in-depth reporting on a less frequent basis).

4.58 Openreach is required to provide this information to Ofcom on a regular basis and publish a subset of this data on its website.

4.59 We consider that this framework had been successful, providing information on key QoS metrics which informs our analysis and ongoing monitoring.

4.60 We are therefore proposing to continue to require BT to provide the comprehensive set of QoS performance statistics in LLA and IEC markets in which we provisionally find BT to have SMP.

Consultation question

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

[94] [✂]. Ofcom analysis of Openreach reports to Ofcom. WFTMR Leased Line KPI Report – December 2024. KPI (r).

5. QoS regulation in the physical infrastructure market

5.1 We propose to maintain our position not to impose QoS standards in the physical infrastructure market. We also propose to maintain our position not to impose transparency requirements on Openreach in relation to the physical infrastructure market.

5.2 In Volume 3, Section 5, we set out our proposals to maintain the requirement on Openreach to provide PIA. This proposed remedy, in practice, comprises a range of services, systems and processes as part of the PIA product. For example, the PIA product includes giving PIA users access to a specific mapping tool and requiring PIA users to go through a process whenever network adjustments are required. Openreach and PIA users work together to continually improve and develop the PIA product including through trials like the recent underground proof of concept that aims to enable faster network adjustments for PIA users. This ongoing development makes it difficult for us to assess what QoS standard metrics or transparency requirements would be necessary (should we consider it appropriate and necessary to make such interventions) and what the appropriate levels for QoS standards should be.

5.3 We note that industry has defined and implemented a set of KPIs to provide transparency to PIA users, the OTA2 and Ofcom. Openreach publishes these KPIs on a quarterly basis. These KPIs continue to be discussed at an industry level, and we expect there to be some ongoing development as to the exact KPIs/metrics reported. While the proposed QoS SMP condition allows us to impose KPIs primarily aimed at helping us to identify potential undue discrimination in the physical infrastructure market, we consider that at this stage it is unnecessary and consider that the voluntary KPIs already agreed within industry are sufficient to allow for transparency in relation to PIA.

5.4 Overall, there is no strong evidence that there is a QoS issue in the physical infrastructure market at present. We will continue to monitor Openreach's performance as part of our ongoing work on PIA implementation and monitoring.

5.5 If, because of this ongoing monitoring, we were to encounter concerns during the review period which led us to consider that imposing interventions pursuant to the proposed QoS SMP condition was proportionate and necessary, then we could at that point exercise our direction making powers.

Consultation question

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

6. Legal tests

6.1 In this volume we set out our proposal to require BT to comply with any QoS standard and reporting requirement we may direct in relation to network access it provides in each of the following product markets – physical infrastructure, WLA (Area 2 and 3), LL Access (HNR, Area 2 and 3) and IEC (BT Only exchanges, BT+1 exchanges, and for a transitional period newly reclassified BT+2 exchanges).

6.2 In order to give regulatory effect to our proposals we are proposing to set draft SMP Condition 10 set out in Volume 7. Section 87(3) of the Act authorises the setting of SMP services conditions in relation to the provision of network access. Section 87(5) of the Act provides that such conditions may include provision for securing fairness and reasonableness in the way in which requests for network access are made and responded to and for securing that the obligations contained in the conditions are complied with within the periods and at the times required by or under the conditions. Section 87(6)(b) of the Act also specifically authorises the setting of SMP services conditions which require a dominant provider to publish, in such a manner as Ofcom may direct, all such information for the purposes of securing transparency.

6.3 We also set out above our proposal to set QoS Directions pursuant to SMP Condition 10 in the markets for WLA (Areas 2 and 3), LLA (Areas 2 and 3) and IEC (BT Only and BT+1 exchanges, and for a transitional period newly reclassified BT+2 exchanges).

Section 47 tests

6.4 We consider that draft SMP Condition 10 satisfies the tests set out in section 47 of the Act, namely that the obligation is:

- objectively justifiable in relation to the networks, services or facilities to which it relates;
- not such as to discriminate unduly against particular persons or against a particular description of persons;
- proportionate to what the condition or modification is intended to achieve; and
- transparent in relation to what it is intended to achieve.

Objectively justified

6.5 We consider that draft SMP Condition 10 is objectively justifiable. It is designed to address the competition concerns that we have identified in our market analysis (see Volume 2). As explained in Section 2 above, our market analysis has provisionally found, among other things, that BT has the ability and incentive to not maintain an adequate level of service quality in the installation and repair of wholesale services or to discriminate in the quality of provision.

6.6 Therefore, in the absence of a requirement to comply with any QoS standards and transparency requirements directed, BT could degrade its QoS below an adequate level, or it could provide access seekers a worse QoS compared to that obtained by its own downstream businesses.

6.7 We explain above why we consider that obligation is objectively justified in the context of the markets we have reviewed.

Not such as to discriminate unduly

6.8 We consider that draft SMP Condition 10 does not discriminate unduly against BT. We have provisionally decided that it is the only telecoms provider to hold SMP in the markets that we have identified (or can be treated as such under section 46(8A) of the Act regarding the IEC BT+2 markets) and the draft SMP condition seeks to address that market position.

Proportionate

6.9 We consider that draft SMP Condition 10 is proportionate to what it is intended to achieve. We propose to impose an obligation on BT that: is effective to achieve our aim; is no more onerous than is required to achieve that aim; and does not produce adverse effects which are disproportionate to our aim. We explain above why we consider it is proportionate in the context of the markets we are reviewing.

Transparent

6.10 We consider that the draft SMP Condition 10 is transparent in relation to what is intended to be achieved. The text of the proposed draft SMP condition is published in Volume 7 for consultation and the operation of the SMP condition is aided by our explanations in this document. Our final statement will set out our analysis of responses to this consultation and the basis for any final decision that we take.

Section 46 tests

6.11 In Sections 2 and 4, we are proposing to impose draft SMP Condition 10, and draft QoS Directions pursuant to that Condition, in relation to BT+2 exchanges that we are proposing to deregulate for a transitional period of 12 months in relation to active leased lines and a transitional period on which we are seeking views in relation to DFX (we are proposing that transparency requirements would apply for a further 30 working days after this period).

6.12 Section 46(8A) of the Act provides that we can continue to treat a person (here BT) previously determined as having SMP in a given market, who we determine no longer has SMP in that market, as continuing to have SMP in that market for so long as we consider necessary to ensure a sustainable transition for those benefitting from the obligations imposed as a result of the previous SMP determination.

6.13 For the reasons set out in Section 2, we consider that the proposed 12 month period (and a further 30 working days for the transparency requirements) for active IEC services is necessary for these purposes. In relation to DFX, our provisional view is that a longer transitional arrangement is likely to be necessary, for example 2-3 years (with an additional 30 working days for transparency requirements), and we are inviting further evidence and views from stakeholders to enable us to reach a final decision on the time period that would be necessary to ensure a sustainable transition for telecoms providers from these services to alternatives and is no longer than needed to achieve this aim. We therefore consider our proposals to be consistent with section 46(8A) of the Act.

Section 49 tests

6.14 We consider that the proposed QoS Directions satisfy the tests set out in section 49(2) of the Act, namely that in each case the Direction is:

- objectively justifiable in relation to the networks, services or facilities to which it relates;
- not such as to discriminate unduly against particular persons or against a particular description of persons;
- proportionate to what it is intended to achieve; and
- transparent in relation to what it is intended to achieve.

6.15 In particular, the proposed QoS Directions are:

a) Objectively justifiable, in that they aim to ensure that BT provides adequate levels of QoS in relation to the installation and maintenance of the network access on which telecoms providers and their customers rely. For the reasons set out above, we consider that, to achieve this level of QoS, it is appropriate to continue imposing quality standards at the levels we are proposing to set and to impose new QoS standards for FTTP in WLA Area 3 at the levels we propose. We propose to impose transparency KPIs on the delivery of specified services to provide transparency around QoS.

b) Not unduly discriminatory, in that the draft Directions would apply only to BT, which is the only operator we have provisionally found to have SMP in the markets (or can be treated as such under section 46(8A) of the Act regarding the IEC BT+2 markets in which the Directions would apply).

c) Proportionate, in that the draft Directions are targeted specifically to those areas and services for which regulation is required. We consider that the draft Directions are a proportionate means of achieving our objective of protecting consumers by ensuring an appropriate level of service in the delivery of key aspects of network access, taking into account our assessment of BT's operational capabilities and potential costs to customers and telecoms providers. Further, the requirements are structured to take into account the impact of events outside BT's control on its ability to meet the standards. The proposed transparency Directions are targeted at only those services where we consider that transparency is necessary. We also consider that the proposed Directions are no more onerous than is required to achieve our aim; and do not produce adverse effects which are disproportionate to our aim.

d) Transparent, in that it is clear in its requirements and intention, as explained above. The draft text of the proposed Directions is set out at Volume 7.

Ofcom's duties

6.16 As set out in Volume 1, we consider the package of proposed SMP conditions and related Directions both individually and together meet our duties in sections 3 and 4 of the Act.