Quality of Service on Openreach wholesale fixed telecoms access services

Framework for the TAR - Non-Confidential Version

1 Introduction and background

In its 2021-26 Wholesale Fixed Telecoms Market Review (WFTMR), Ofcom imposed remedies to encourage BT to provide appropriate Quality of Service (QoS) in a range of fixed wholesale markets where it was deemed to hold Significant Market Power (SMP), including the WLA, LLA, and IEC markets.

The remedies consisted of:

- the imposition of **Minimum Service Levels (MSLs)** for specified Openreach products in each market, consisting of targets on both installation and provisioning times and on time to repair service faults;
- a requirement on Openreach to include within its reference offer a set of **Service Level Agreements/Guarantees (SLA/SLGs)** to compensate access seekers if defined QoS targets were not met on particular orders, along with a mechanism for dispute resolution if these contractual arrangements could not be commercially agreed;
- a **non-discrimination obligation** on Openreach to ensure it provides the same level of QoS to BT's downstream divisions as to external access seekers; and
- **transparency** obligations on Openreach to report QoS performance.

The MSLs set for copper-based WLA and LLA products over 2021/22 to 2025/26 broadly reflected those that applied for 2020/21, which were set in Ofcom's 2018 WLA review and 2016 BCMR review respectively. The MSLs applied to LLA were also applied to Openreach IEC products. MSLs were not set for Openreach's FTTP WLA products due to the limited information on the appropriate level of QoS at that point, but a transparency requirement was imposed for Openreach to report QoS performance over the 2021-26 period, in order to inform potential future MSLs.

Ofcom has now begun its Telecoms Access Review (TAR 26), which will include a review of competitive conditions and appropriate regulation, including QoS regulation, across a range of fixed telecoms markets for the period 2026-31.

We have been asked by Vodafone, Sky, and TalkTalk ("the clients") to identify key considerations for setting QoS regulation in the TAR, given market developments and evidence on Openreach behaviour since 2021, and likely developments over the TAR 26 review period.

In the rest of this note, we set out:

- a framework for considering appropriate QoS regulation;
- key considerations based on this framework and relevant evidence of Openreach behaviour; and
- the resulting implications for Ofcom when setting the appropriate regulation in the TAR.

2 Economic framework for considering appropriate QoS regulation

2.1 A regulatory regime which only controls nominal prices is not sufficient

Regulatory remedies are designed to protect end users from exploitative and exclusionary conduct by operators with Significant Market Power (SMP). Such conduct can include increasing prices above the competitive level (i.e. the level of prices that would pertain under effective competition). However this should be interpreted broadly, as highlighted by the European Commission:

"'increase prices' includes the power to maintain prices above the competitive level and is used as shorthand for the various ways in which the parameters of competition — such as prices, output, innovation, the variety ***or quality*** *of goods or services — can be influenced to the advantage of the dominant undertaking and to the detriment of consumers"*[1]

Appropriate regulation will therefore aim to ensure that all relevant parameters of competition proxy a competitive outcome. This competitive outcome includes both the nominal price and other parameters such as quality.

If regulation imposed a constraint on nominal prices alone, then the dominant undertaking can alter other parameters to their advantage, for example reducing quality below a competitive level, to the detriment of consumers and rivals.

Reducing quality may directly benefit the dominant undertaking by allowing them to reduce costs and hence to increase profits. There may also be an indirect benefit through the exclusionary effect of reducing the ability of rivals to compete by reducing the quality of wholesale services used by rivals below the services provided to the dominant entity's own

1 Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings. Emphasis added.

downstream business. Even if non-discrimination obligations apply, lowering the quality of service may advantage the incumbent's downstream business by inducing a 'flight to quality' if the dominant entity is perceived as being more reliable in a market where overall quality is poor.

The incentive to degrade quality was acknowledged by Ofcom in its Wholesale Fixed Telecoms Market Review (WFTMR) in 2021, where it stated that absent regulation, *"Openreach may not have sufficient incentive to maintain an adequate level of service quality in the provision and repair of wholesale services, or may discriminate in the quality of provision."*[2]

2.2 Regulating quality of service is critical to maximising benefits for end-users

Ensuring sufficient quality of service on Openreach regulated wholesale products is important in ensuring market outcomes reflect Ofcom's key regulatory objectives and statutory duties, including to promote the use of gigabit-capable networks:

- **Protecting consumers**. Reduced quality of service at the wholesale level will negatively impact on consumers, through more frequent and/or longer interruptions in services caused by a greater number of faults or slow resolution of faults, and frustration resulting from long delays to the installation of fixed services.[3]
- **Promotion of downstream competition.** Reducing the quality of wholesale services used by rivals, below that of services provided to BT's own downstream business, limits the ability of downstream rivals to compete. It can also dampen the intensity of downstream competition through reducing customer switching, for example through long or uncertain waiting times for an installation or repair discouraging customers from changing provider.[4]
- **Supporting the take-up of new technologies.** Inadequate QoS on new technologies could dampen incentives for customers to switch from legacy services. For example, frequent and long-lasting outages on new technologies could reduce consumers perception of the "quality uplift" they will receive versus their current services.
- **Maximising benefits from new technologies.** New technologies like FTTP gigabit-capable networks have the ability to improve end-user experiences and create significant benefits for end-consumers versus legacy technologies (for example through increased speeds and lower latency). Consumers will not realise the benefits if the quality of service provided over those networks is insufficient.

2 Ofcom WFTMR 2021 Decision, Volume 3, paragraph 1.6.

3 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 2.4.

4 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 2.5.

Regulation should therefore aim to encourage appropriate quality of service across the full range of Openreach regulated services, and ensure Openreach do not discriminate between downstream BT divisions and their competitors.

2.3 The appropriate level of quality will balance benefits with costs

As explained above, absent regulation, Openreach may have an incentive to reduce quality. Ofcom regulates QoS, for example by setting MSLs, to prevent quality falling below an appropriate level. Even where quality has previously been regulated, Ofcom will need to decide whether the previously determined minimum level of quality continues to be appropriate.

Achieving higher quality may result in additional costs – for example achieving shorter installation times and reducing the time to repair faults may require Openreach to hire additional staff to create larger provisioning and network repair teams. These increased costs will either be passed on to end users, or lead to reduced margins across the value chain. In an effectively competitive market, competition will tend to lead to an outcome where the level of quality delivered to end users will balance the benefits of increased quality and the corresponding costs, to maximise economic welfare.

QoS regulation therefore requires an understanding of the interplay between the benefits of improved quality of service and the level of costs to achieve any improvement. This assessment is likely to be relatively imprecise. This is both because the benefits of higher quality in terms of improved end user outcomes, including the dynamic effects around faster migration and easier switching, are difficult to quantify, but also because estimating the costs of efficiently improving quality of service is challenging.

However as discussed below, Ofcom's approach to price regulation in the WFTMR, where some products were covered by price caps which are indexed by CPI ('pricing continuity') and other products were not price regulated ('pricing flexibility') approach, allows Openreach to set prices overall above a cost based level. This provides a margin buffer which could allow quality improvements to be mandated without necessarily increasing the level of regulated wholesale prices and hence end user prices, as prices could still be materially above unit costs even taking into account any additional cost required to make quality improvements.

2.4 QoS regulation is necessary irrespective of the approach to price regulation

It was Ofcom's overall intent in WFMTR to prevent Openreach from abusing its dominant position both through exploitative and/or exclusionary conduct.

The charge control imposed on Openreach's WLA, LLA, and IEC services in the WFTMR to prevent excessive pricing differs from most previous charge controls in two aspects:

- The ‘pricing continuity’ approach, where under the charge control prices were indexed with the Consumer Price Index (CPI) from the level of charges at the start of the WFTMR period, rather than set on a glide path towards an estimate of cost-based prices;
- The ‘pricing flexibility’ approach, where only a subset of anchor products were regulated.

This approach allows BT to set prices above (forecast) cost, and does not directly control the prices of all products, relying on the indirect constraint from the ‘anchor’ products.

The pricing continuity approach implicitly assumes that the wholesale products provided by Openreach do not materially change over time i.e**. there is a continuation in pricing for the same product**.

This approach may not adequately protect against excessive pricing if there is a material change in the regulated wholesale product. This could include reductions in QoS on the product, but also a change in the scope of the products, such as removing product features that were previously included, or explicitly or implicitly charging access seekers for features that were previously covered by the wholesale charge. If these changes have the effect of shifting costs from Openreach to access seekers, it means that access seekers face higher price increases than those envisaged under the price continuity/flexibility approach. It also undermines downstream competition by reducing the ability of access seekers to compete with BT’s downstream arm - any shift in costs would reduce the profitability of external access seekers, but not BT, as the shift would just represent an internal transfer within the BT business (the cost increase faced by BT’s downstream businesses would be offset by a reduction in cost for Openreach).

The considerations set out above and in the previous section will still be relevant for the TAR 2026 period if a similar pricing approach is applied for Openreach SMP services.

3 Specific considerations for the TAR 26 period

3.1 It is appropriate to impose QoS targets on all products where Openreach has SMP

In markets where BT is determined to hold SMP in the TAR 26, it is appropriate to apply QoS regulation, including MSLs, obligations to agree SLAs and SLGs, non-discrimination obligations, and transparency obligations. Where BT still holds a dominant position, Openreach continues to have the ability and incentive to reduce QoS and/or discriminate on QoS between BT’s downstream business and its downstream competitors, to the determinant of consumers and competition.

This includes FTTP WLA services. Ofcom decided not to impose QoS targets on these services in WFTMR 2021, on the basis that these were still nascent services. This meant that evidence on the expected QoS performance for these services was still too limited to inform the appropriate level of targets.[5] However FTTP services are now well-established, with significant deployment of FTTP networks across large parts of the UK, meaning there should now be sufficient information available on the performance of these networks to inform MSLs. Also as noted above, MSLs on FTTP services will ensure that the increased QoS and functionality possible on FTTP vs copper-based networks, and the associated benefits for end-users associated with that, are realised.

3.2 The MSLs set in WFTMR 2021 may not reflect a forward looking competitive level

The MSLs applied in the WFTMR were set broadly in-line with the targets in place for 2020/21, which were those set in the 2018 WLA and 2019 BCMR reviews, based on expected QoS out-turn in the pre-COVID period. This reflected Ofcom's position that Openreach was on a trajectory to meet the 2020/21 targets in the pre-COVID period, and that imposing stricter MSLs than those in 2020/21 would result in Openreach incurring disproportionately high costs over the 2021-26 period.[6] It however noted that relevant changes to the market would mean that the appropriateness of those MSLs may need to be reviewed in future.[7]

Evidence on market developments suggest that those MSLs may no longer reflect the competitive level of QoS. For example, Openreach is undertaking an extensive transformation project with a significant upgrade to its IT architecture, including:

- streamlining customer ordering systems;
- the migration of its data to Cloud Platforms, to allow its teams to have better access to customer and network information; and
- the roll-out of AI Ops, which BT states will enable the "self-healing" of issues and reduce human effort in fixing outages and reducing customer downtime.[8]

It is therefore likely that Openreach are currently able to achieve improvements in connection and ordering times, and fault incidence and repair times, at a lower cost than in the pre-COVID period, with this ability growing over the TAR period as its transformation is completed.

In addition, it is also unclear whether any higher costs incurred by Openreach if more stringent MSLs were imposed would result in higher prices for end users, given Ofcom's current approach to price regulation. Under the price continuity/flexibility approach, the level of prices under the charge controls is set above the level of expected costs, which leads to high expected margins on regulated products. This means that Openreach prices could still be

5 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 3.10.

6 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 3.3.2

7 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 3.9

8 BT 2024 Annual report, page 22.

materially above unit costs, even taking into account any additional cost required to make quality improvements. As such, any increase in costs could be absorbed by Openreach, rather than being passed on through higher wholesale (and in turn retail) prices.

We also note that despite Ofcom setting the MSLs to reduce the risk of Ofcom non-compliance, Openreach did not meet some of its MSLs in 2022/23, including in provisioning and fault repaired times for WLA services, and fault repair times on LLA services.[9] This suggests that BT has focussed on reducing its costs to a minimum, even if this results in a degradation in QoS and the risk of not meeting MSLs. This is at odds with the behaviour Ofcom expected in WFTMR 2021, where it noted that, given the risks of adverse events causing a decline in quality, Openreach would be expected to maintain quality above the standards in "businesses as usual" circumstances in order to avoid failing to meet the MSLs.[10] This suggests that Openreach has reduced QoS below that assumed by Ofcom in WFTMR 2021, in order to benefit from the reduced costs.

3.3 There is also evidence that Openreach has changed the scope of its wholesale services, shifting costs to access seekers

As noted above, the price continuity / flexibility approach implicitly assumes that the wholesale products provided by Openreach do not materially change over time i.e. there is a continuation in pricing for the same product.

Price regulation may not adequately protect against excessive pricing if there are changes to the specification of wholesale products which result in a material shift in costs from Openreach to access seekers. Without any adjustments to the price control to account for this, this would result in access seekers facing higher effective price increases than those envisaged under the price continuity/flexibility approach, which will feed through into end user prices. It also undermines downstream competition by reducing the ability of access seekers to compete with BT's downstream arm.[11]

There is evidence that Openreach has, and proposes to, change the scope of regulated products.

First, Openreach has **removed activities that supported the provision of wholesale services**. One example is the removal of the 'Job Control' function from the specification of wholesale ethernet services, in 2018. Prior to this change the Job Control function in

9 https://www.ofcom.org.uk/phones-and-broadband/telecoms-infrastructure/2022-23-openreach-quality-of-service-performance/

10 Ofcom WFTMR 2021 Decision, Volume 5, paragraph 2.8

11 The shift in costs would reduce the profitability of external access seekers, but not BT, as the shift would just represent an internal transfer within the BT business (the cost increase faced by BT's downstream arm would be offset by a reduction in cost for Openreach).

Openreach proactively managed the provision process for wholesale ethernet orders, including jeopardy management. The Job Controller monitored and validated issues and delays raised by the access seeker. It also facilitated the resolution of issues in a timely manner, including through escalating issues within the Openreach business, and providing timely and clear communications on issues that access seekers' could pass straight onto customers.

Following the removal of this function from the relevant products, we understand that access seekers needed to deliver activities previously carried out by Openreach, by recruiting additional staff. This was necessary to ensure Openreach met their delivery timescales, noting where issues are pushing the delivery off track and escalating accordingly with the Openreach Service Desk. However, access seekers are now unable to escalate issues within Openreach other than through the Service Desk, and cannot liaise directly with relevant Openreach staff in the same way that the Job Controller could previously. We understand that the Openreach Service Desk is reactive to CP queries or escalations, and does not deliver the pro-active management previously delivered by the Job Control function.

Second, **Openreach can reduce the scope of certain new wholesale services versus the equivalent legacy services**, which has resulted in access seekers having to incur additional costs in order to make use of the service. For example, Openreach has proposed reducing the scope of its Ethernet Access Direct service (EAD2) versus those of existing EAD services. In particular:

- On existing EAD services, we understand that Openreach currently fits Network Termination Units (NTUs), and is required to provide both network and customer-facing small form factor pluggable modules (SFPs) to connect fibres into the NTUs, to enable access seekers to use the service.
- However for the proposed EAD2 product, Openreach does not intend to fit NTUs, which would mean that the access seeker or end-user would now be required to fit an NTU themselves, as well as an SFP into this device.

This change in scope could be efficiency enhancing overall, in the sense that it reduces the "end-to-end" cost of the service by preventing some inefficient duplication of assets or activities across the combination of Openreach and the access seeker. However, there may be an increase in the overall costs to the access seeker to deliver the service, if cost savings made by Openreach when changing the scope of regulated services are not passed on through lower regulated prices, as they would be in an effectively competitive market. By reducing the scope of the regulated products, but not passing through the resulting cost reductions, Openreach is able to increase effective prices faster than the nominal prices which are regulated.

In addition, there is also evidence that **Openreach are taking other actions which have the effect of shifting costs to access seekers**. One example relates to payments made by

Openreach in relation to the Automatic Compensation (AC) Scheme, an industry agreed voluntary Code of Practice which involves retailers providing automatic payments to end-users in the event of certain issues with fixed services.

Openreach introduced corresponding automatic payments to cover most of the retailers' costs for these payments for Openreach caused faults. In 2020 Ofcom asked retailers to commit to increasing AC rates by CPI each year, which was agreed to from April 2021. However we understand that Openreach has not increased the corresponding wholesale payment since April 2022, meaning that retailers are now funding a significantly higher share of AC-related costs for Openreach caused faults than in the past – see example below reflecting payments for delayed repair for the Wholesale Line Rental service.

The AC payment will increase with CPI again in April 2025, at which point retailers will be funding 31% of the payment for delayed repair and provision, up from 15% in 2019.

Table 1 Change in AC rates and Openreach associated SLG payments for delayed fault repair – WLR service

	April 2019	April 2024	April 2025
Retailer AC rate	£8.00	£9.76	£9.98
Openreach payment	£6.79	£6.84	£6.84
% of cost funded by the retailer	**15%**	**30%**	**31%**

Source: Frontier, based on data provided by Sky

As the price cap has allowed Openreach to increase the price of the regulated products by CPI, the average revenue per line, net of compensation payments, has increased faster than CPI.

All of these examples lead to higher-than-envisaged effective price increases for access seekers, and distort competition in downstream markets by reducing the ability of external access seekers to compete with BT's downstream retail businesses.

4 Conclusions and implications for the TAR

The analysis above shows that there is a continued need to regulate QoS:

- MSLs;
- an obligation to provide SLA/SLGs;
- non-discrimination obligations; and
- transparency obligations.

In order for regulation to be effective in achieving its objectives, Ofcom should introduce MSLs on Openreach FTTP WLA services, and re-assess the appropriate level of MSLs for the TAR 26 period on all SMP services. To do this, Ofcom should carry out an appropriate assessment to determine the level of QoS which maximises economic welfare, taking into account any changes in the benefits and cost of delivering higher quality since the WFTMR, rather than relying on a continuation of the current MSLs.

The MSLs implemented in WFTMR 2021 may be below the levels consistent with a competitive outcome. Despite this, Openreach failed to meet some of these levels. As such, continuing with the existing MSLs in the TAR 26 period risks an outturn level of quality that is below the competitive level, to the detriment to end-users and competition.

In addition, there is evidence that Openreach has changed the scope of wholesale services and taken other actions which shifted costs to access seekers, which increase the “total charges” access seekers’ incur to use Openreach wholesale products and distorts competition in downstream markets.

The regulatory regime should therefore also constrain Openreach’s ability to unduly reduce the scope of wholesale services or undertake actions which unduly shift costs to access seekers, and include a mechanism to “adjust” the price control if Openreach do make justifiable changes to the specification of wholesale services. Options to consider include:

- More precisely defining the characteristics of charge controlled wholesale services in the remedies, including the supporting activities that Openreach provide as part of these wholesale services, and
- setting up a mechanism for any changes to the characteristics of the regulated services to be notified to and assessed by Ofcom, with price caps reduced if necessary to take account of the reduced costs of delivering the revised products.