

Regulatory assessment of BT's exchange closure programme

Considerations for the TAR - Non-Confidential Version

Executive summary

As a consequence of the transition from the legacy copper based networks to modern full fibre networks, BT is seeking to drastically reduce the number of network buildings ('exchanges') within its network. This exchange closure programme will significantly reduce BT's cost base and forms a key element of BT's ongoing cost reduction initiatives.

A necessary condition for an exchange to be closed is that all services delivered from this exchange must be migrated to 'enduring' exchanges that will not be closed or ceased. This will include services delivered by BT itself at a retail level and wholesale services provided to competing retail communications providers (CPs). These wholesale services include those where BT has SMP in relevant markets and which Ofcom regulates on an ex ante basis.

BT, through its Openreach subsidiary, has set out plans to close a tranche of 105 exchanges by 2030, including proposed commercial arrangements with CPs to migrate or cease services delivered from these exchanges. This will include services in markets where BT has been found to have SMP and which Ofcom regulates. The migration of services will take place in the period covered by the forthcoming Telecoms Access Review (TAR), which will cover 2026 to 2031.

However, BT proposals do not appear to be consistent with Ofcom's statutory duties, or BT's responsibility as a dominant undertaking to not distort competition. In particular:

- Despite the overarching aim of the exchange closure programme being to reduce costs, BT's proposals would be likely to result in higher end-user prices and reduced service quality. Under these proposals, CPs would face significant wholesale and retail migration costs to transfer end users currently served by these exchanges, and a large portion of these costs would likely be passed on to end users;
- The migration costs will also distort competition, as BT's downstream divisions have the incentive to partially absorb these higher costs, anticipating the long-term benefits from cost savings. Unlike CPs, who will need to pass on migration costs to their customers, BT Retail will have the ability to avoid doing so, thereby giving it a competitive advantage; and



■ BT's proposed processes are inefficient from an overall industry perspective. This is because BT, as a dominant provider, has an incentive absent regulation to set-up processes which minimise its own costs rather than in a way which minimises overall costs.

These issues highlight the need for Ofcom to intervene as part of the TAR, to ensure that customers receive a fair share of the long run benefits that will result from the exchange closure programme. Ofcom should also ensure that the terms and conditions of the migration programme minimises competitive distortions, and that BT implements efficient processes for the migration that minimise overall industry costs.



1 Introduction

In December 2020,¹ Openreach announced plans to close exchanges that BT deems will no longer be needed to support continuing FTTP, FTTC or Ethernet services, which includes plans to close 105 exchanges by 2030.

The Openreach plans will have a significant impact on how Communications Providers ("CPs") that use Openreach's network will need to configure their own networks, and the services they use in each exchange, over the coming years. By moving to a smaller number of exchanges, BT sees an opportunity for Openreach and CPs to consolidate infrastructure, reduce energy consumption and increase efficiency.

Openreach has engaged with CPs and conducted consultations to outline its approach for migrating services and ceasing operations at the proposed exchange closures. While Openreach has acknowledged broader concerns regarding consumer protection and the potential impact on the wider industry, BT's incentives will be focussed on the efficiency gains it can achieve from closing exchanges.

However, Vodafone, Sky, and TalkTalk (the 'Clients') have expressed concerns that Openreach's proposals may negatively impact both CPs and end users. In light of these concerns, the Clients have engaged Frontier to evaluate whether Openreach's approach aligns with the regulatory and policy objectives set out by Ofcom, and whether it strikes a reasonable balance.

In this paper, we first outline Openreach's proposed approach and Ofcom's broader objectives for the TAR. Next, we outline an appropriate economic framework for Ofcom to evaluate the exchange closure program in the context of the TAR. We then set out our assessment of Openreach's proposals based on this framework. Overall, we consider that Openreach's current proposals do not appear to be consistent with Ofcom's overall objectives.

This paper is focused on the overarching proposed approach for the exchange closure programme. It does not comment on operational details, detailed remedies, or associated topics such as the regulation of copper switch-off, which is a pre-requisite to exchange closure.

Also, while Openreach is the BT division that is engaging with CPs on this matter, the exchange closure programme is a core part of BT Group's overall strategy to reduce overall costs. In this respect, when discussing incentives and regulation within our assessment we

Openreach published a consultation document on "Future handover architecture and exchange footprint"



focus on the BT Group overall as the principal driver of the exchange closure programme, even though Openreach is the CP-facing division.²

2 Context

2.1 BT's exchange closure programme

In the long-term, BT expects to reduce its number of exchange buildings from the current c.5,600 exchanges to c.1,000, with an initial plan to close 105 exchanges ("the Priority 105") prior to 2030.

Reducing the number of exchange buildings and consolidating equipment within the remaining buildings will allow BT to realise significant cost savings on rental, power, and other operating costs.

However the exchange closure will also create additional costs for CPs.

- The reduction in the number of exchanges is facilitated by the rollout of FTTC and FTTP networks. Unlike copper cables, which are limited by attenuation constraints, FTTP technology reduces the need for exchanges to be located close to end users. However this reduction can only happen once products that rely on copper cabling from exchanges to street cabinets ('E-side copper')³, including Wholesale Line Rental (WLR) and Metallic Path Facility (MPF), are switched off. In order to close exchanges all end-users in these exchange areas need to migrate from these legacy services to services supported from 'enduring' exchanges. CPs need to remove their equipment that supports legacy services from exchanges and re-organise their network topology, which will drive additional costs. Although the Priority 105 exchanges represent a small subset of the exchanges to be closed, BT estimates that they are currently used to serve 1 million end-users and may set a precedent for subsequent exchanges.
- In addition, because of economies of scope with the provision of legacy services, BT exchanges are also used as points of presence by CPs for their own backhaul needs, to connect to other CPs or to their mobile sites. This means that CPs need to also plan for backhaul routes which need to be rebuilt following exchange closures, which would also drive further additional costs (see section 3.1.2).

For this paper we do not focus on the implications of the structural separation and governance arrangements of Openreach but focus on the incentives resulting from the common ownership of Openreach and other BT Divisions.

D-side copper cable, from street cabinets to end user premises will still be used to deliver FTTC services, but the fibre cables used to deliver both FTTC and FTTP services bypasses many local exchanges.



BT states that its guiding principles in designing its closure plan for the Priority 105 exchanges is to (i) minimise the impact on customers, (ii) protect vulnerable customer groups and Critical Network Infrastructure (CNI); and (iii) minimise costs for industry, including both BT and CPs.

To facilitate CPs' migration to enduring exchanges, BT proposals offer to waive some of its migration charges. However it does not propose to compensate for all costs directly incurred by CPs because of the exchange closures. This is because BT believes that, when considering the costs and benefits of exiting the exchanges in its timelines, CPs should have "a more positive NPV from exiting". BT also offered to engage in discussions with CPs to provide additional solutions which can meet the needs of end customers, but we understand these solutions would be chargeable⁵.

2.2 Ofcom's objectives for fixed access networks and the closure of exchanges

In March 2024 Ofcom published a document setting out its objectives and approach for the Telecoms Access Review 2026⁶ (TAR 2026). This will update the regulation that currently applies to fixed telecoms markets, set by the Wholesale Fixed Telecoms Market Review 2021 (WFTMR), which expires in March 2026.

This document sets out that:

- Ofcom intends to continue with the same objectives of promoting competition and investment in gigabit-capable networks where this is efficient, sustainable and where it delivers benefits to consumers.
- Ofcom considers that the long-term nature of network investments requires certainty and stability of regulation. This includes continuing to support and honour the "fair bet" principle. This means that in setting any future charge controls, Ofcom policy would be to allow BT to keep any returns in excess of its cost of capital it has earned up to that point, as well as ensuring it can earn its cost of capital going forwards.
- Ofcom's regulatory approach to the retirement of Openreach's copper network and subsequent closure of exchanges will take into account how to achieve the best outcomes for consumers, both in relation to migrating quickly and smoothly to the better services available on gigabit-capable networks, and to ensuring the promotion of competition.

Paragraph 2.15, Openreach industry consultation response, March 2024

⁵ Paragraph 171, Open reach industry consultation, June 2023

https://www.ofcom.org.uk/__data/assets/pdf_file/0019/281611/telecoms-access-review-2026.pdf



Given the significant role BT plays in fixed markets, Ofcom considers that its behaviour is key in ensuring that competition operates fairly for all CPs. It has therefore set up an Openreach Monitoring Unit ("OMU") which ensures that it meets Ofcom's expectations for how it deals with both its customers and its competitors. In its latest report the OMU explains in the context of BT's exchange closure programme that "Ofcom expects Openreach to also consider whether its products, processes and prices are fit for purpose for CPs' network reconfigurations across the broader estate of exchanges in the coming years. More broadly Openreach should consider the needs of its customers who are also network competitors."

Paragraph 3.42, Openreach monitoring report, 27 June 2023



3 The relevant economic framework to be considered by Ofcom

In the long run BT expects to achieve significant cost reductions from closing exchanges, which could translate to lower end user prices if these cost reductions are passed on to consumers. However, given BT has been deemed to have Significant Market Power (SMP) on Inter-Exchange Connectivity (IEC) services from a number of exchanges⁸, absent regulation there is a significant risk that the benefits of these cost reduction will not be passed on to consumers, but will be retained by BT. In contrast, since Ofcom deems the downstream retail markets to be competitive, it is expected that the costs incurred by CPs due to migration will be passed on to consumers.

Furthermore the increased costs (see sections 3.1.2 and 4.2) and disruption due to the migration process (see sections 4.4) could both distort competition and reduce quality of service for end users.

Therefore depending on the specific design of the exchange closure programme, exchange closure may not meet or appropriately balance Ofcom's objectives.

In this section we set out the economic framework to assess the appropriateness of BT's proposals. We consider four factors that we consider are key for Ofcom to balance, in line with its own stated objectives:

- Efficiency, both allocative and productive efficiency;
- Promotion of sustainable competition;
- Certainty of returns on efficient FTTP investment; and
- Protection of end users

3.1 Efficiency

3.1.1 Allocative efficiency

Allocative efficiency refers to a situation where pricing of different products leads to the optimal allocation of resources for end-users, with costs appropriately recovered from the parties responsible for driving those costs. In general allocative efficiency is maximised when prices

⁸ See Ofcom's 2021 WFTMR which finds BT has SMP in BT+1 and BT only exchanges



align with incremental costs, i.e. prices for end users reflect the costs that serving that end user causes.

In a well-functioning competitive market, end-users can expect to get lower prices when suppliers reduce their costs, even if the long term reduction in costs requires some upfront expenditure. In the context of the exchange closure it implies that the additional surplus obtained from cost savings should be shared with end-users rather than be fully captured by BT. If BT does not pass on its cost savings while CPs transfer their migration costs to end-users, it could result in higher end-user prices despite BT enjoying reduced costs in the long run. This would seem to be a perverse outcome, in contradiction with the principles of a competitive market.

Similarly when considering drivers of costs, e.g. cost causality, it is not the actions of the end user or the CP that is causing the migration cost to be incurred, but the desire of BT to close exchanges in order to benefit from cost savings. This would suggest that the cost of the migration incurred by BT and by CPs should be recovered from BT as it both causes the migration costs to be incurred and ultimately benefits from the migration.

In relation to other forms of migration i.e. from / to different technologies, Ofcom has implemented an approach whereby regulated prices are set on the basis of a hypothetical ongoing network (HON), so that customers are no worse off than if the technology transition had not happened. A similar approach here would require BT to set migration charges such that CPs overall had no higher costs than if the exchange closure programme did not happen.

3.1.2 Productive efficiency assessed across the industry

Productive efficiency refers to the maximisation of outcomes for a given cost, or the minimisation of cost for a given outcome. While BT's exchange closure programme is designed to reduce **BT's costs**, BT should be required to conduct its exchange closure programme in a way that minimises total industry costs not just its own costs.

As noted above, the exchange closure programme will cause CPs to incur higher costs to manage the transition, which could be significant:

- Own costs to manage the transition, including new equipment installation at receiving exchanges, reorganisation of backhaul links connecting receiving exchanges, customer management, churn, network reconfiguration, project management and equipment removal at closed exchanges.
- Additional charges from BT, which could include EAD circuit migrations charges, cease/termination charges for the products migrated (such as PIA, cables, copper loop, hosting, energy), and additional wholesale rental charge arising from the dual running of services during the migration process. These dual running costs may involve the rental of duplicate space, power, and backhaul during the transition between exchanges.



Furthermore, higher rental charges may apply when migrating to longer circuits, as circuit pricing is distance-based. If the new enduring exchange is farther from the customer than the exchange being decommissioned, this could result in increased rental costs.⁹

While BT asserts that CPs will have "a more positive NPV from exiting", this appears to focus only on the payments to BT, which could be lower due to the consolidation into smaller footprints in the enduring exchanges, rather than considering the relevant wider set of costs. CPs have a strong incentive to minimise their forward looking costs, so if exiting exchanges was NPV positive then CPs would have a strong incentive to migrate customers with no need for BT to set out deadlines for exchange closure.

In practice, there is likely to be a range of "designs" for the exchange close process which would result in the same long-term cost savings for BT, but which lead to significantly different outcomes in terms of short-term transition costs and therefore total costs for the industry: Maximising productive efficiency means choosing the design of the process which results in lower overall industry costs on an NPV basis.

To reduce overall costs and to allow for its objective of a "quick and smooth migration", Ofcom needs to ensure that BT's exchange closure is designed with proper consideration for (i) factors which drive CPs own transition costs, and (ii) wholesale products and charges which incentivise CPs to migrate their customers in an efficient and timely way.

3.2 Sustainable competition

BT is an critical trading partner for CPs. It is the largest supplier of wholesale products and its exchanges have consequently become the central point for industry to coalesce at, even for activities such as mobile backhaul, which do not necessarily rely on regulated services. BT has market power in the provision of the many substitute services required by CPs to exit exchanges i.e. services that customers migrate onto, and connectivity services for CPs (EAD/aggregation links for cell sites, broadband services, or enterprise services for example). Absent regulatory oversight, BT therefore has the ability to design its exchange closure programme in way which would give it the incentive and ability to engage in conduct that could distort competition and/or harm consumers.

Ofcom can ensure sustainable competition and appropriate investment incentives in fixed access markets through several key strategies:

Non-discrimination: Ofcom should ensure that CPs facing higher costs and BT benefiting from reduced costs does not jeopardize CPs' ability to compete with BT's other divisions, which can either internalise higher Openreach charges or other costs driven by the

In some cases CPs may purchase from BT Wholesale rather than directly from Openreach. Ofcom should consider the degree to which any remedies should also apply to BT Wholesale.



exchange closure programme taking account of the long term benefits to BT of the programme (e.g. BT fixed retail), or may be less impacted by the programme.

- Fair pricing of substitutes / preventing excessive prices: Ofcom should require BT to offer fair access to products required by CPs to exit exchanges. This could include setting wholesale price controls to ensure CPs can compete on a level playing field. Where there is no specific charge control BT could set excessively high wholesale prices. This would enable it to increase its revenues and in combination with retail pricing could price squeeze its competitors in downstream markets and / or increase profitability above the level assumed by Ofcom. For example, where CPs would be forced to migrate to more expensive products due to the reparenting of circuits or the cut off from competitive alternatives, Ofcom should ensure that BT provides the service to existing connections under the same price (CPs should incur the same overall rental price, regardless of whether the circuits are longer).
- Compensation of CPs' transition costs: CPs incurring higher costs to manage exchange exit means that CPs' ability to compete with BT's downstream business will be diminished: unlike BT, which can internalise the costs because it gets the long term benefits of the programme, they would have to pass on these costs to end-users. This could further reinforce BT's market power in downstream markets and threaten CPs' incentives to invest in networks (fixed and mobile access networks, backhaul networks and Ethernet circuits). It is therefore important for Ofcom to consider the merits of a mechanism which would allow CPs to be compensated for the short term costs they incur to enable BT to achieve cost savings in the long run, reflecting BT's own incentive to internalise this trade-off.

Given Ofcom's focus on sustainable competition in the TAR, Ofcom should require BT to provide sufficient visibility on its plans to other operators and should consider mitigation mechanisms which can ensure that the exchange closure does not result in a distortion of competition.

3.3 FTTP investment incentives

Ofcom's strategy is to encourage FTTP investment by BT and altnets. There has been significant investment by both BT and a wide range of altnets since 2020, even before any firm plans for exchange closure.

Much of the cost savings that BT would achieve as a result of the exchange closure programme will be fixed and common costs, which do not directly impact the profitability of additional investments. Besides, migration to FTTC is sufficient for exchange closure. This means that a more or less rapid migration and hence exchange closure is unlikely to materially affect BT's incentive to roll out FTTH services.



In addition, any increase in CPs costs due to migration is unlikely to have a significant positive impact on the rate of migration to FTTH networks, as the bulk of the exchange closure programme is likely to happen after most customers will have migrated to FTTH networks.

As such, while incentivising investment in FTTH network is one of the key objectives of the TAR (and previously the WFTMR), it is not a critical consideration when assessing BT's proposals for exchange closure.

3.4 End user protection

The exchange closure program may impact customers who are reliant on high quality communications services, such as end users using special services (e.g. alarm lines and health pendants), and critical national infrastructure lines that support the water, health, security, electricity, and gas industries among other B2B users. Additionally, due to the difficulty of forcibly migrating more vulnerable residential customers, the exchange closure program may also adversely affect these individuals.

To minimise the risks for these end users, Ofcom should consider the following approaches:

- Stakeholder engagement: engage with providers of special services, CNI and organisations that represent vulnerable populations to ensure that their specific needs are considered.
- Requirements on governance: ensure the burden of managing the migration of these customers is spread appropriately across the industry, with BT deploying appropriate resources to meet the increased demand during the transition.
- Affordability of substitutes: Ofcom should consider whether prices of substitutes for critical services are a barrier to migration, and if discount schemes could be implemented.



4 The current BT proposals are unlikely to achieve a reasonable balance between Ofcom objectives

In the following sections we assess BT's proposals in light of the economic framework described in section 3. Overall we find that the proposals are unlikely to achieve a reasonable balance between Ofcom objectives.

4.1 BT's commercial offer retains long term costs savings but passes on the cost of migration to CPs and end users

BT presents lower charges to CPs compared to normal migration charges, i.e. waivers of some charges, as a benefit for CPs mitigating for the additional transition costs they incur. However, this framing does not acknowledge that the migration necessitated by exchange closures primarily benefits BT, with no clear evidence that it can also benefit CPs or their customers.

BT states that its pricing proposals will enable CPs to achieve "a more positive NPV from exiting" but it has not substantiated this claim, nor demonstrated its relevance to Ofcom's regulatory objectives. Furthermore, BT has not clarified what counterfactual scenario would be used to assess this NPV or how the conclusion is derived.

More broadly, BT's proposals do not clearly ensure that CPs or end users will benefit from the exchange closures. BT holds significant market power in relevant wholesale markets, and current pricing remedies do not require wholesale prices to reflect costs in many of these markets. As a result, there is no guarantee that the cost savings from the exchange closure programme will be passed on to CPs or end users.

On the contrary and as discussed in the following section BT fails to recognise the substantial transition costs that CPs are likely to face.

4.2 BT does not adequately recognise the costs incurred by CPs, so the exchange closure programme is unlikely to minimise overall costs

It is important that BT considers the impact of its exchange closure programme on CPs, to ensure the migration process seeks to minimise overall costs for the industry. BT currently does not account for CPs' own transition costs in its proposals, which are summarised below:



Table 1 CPs' own transition costs

Cost	Comments
New equipment (cables, hardware, and installation costs) in receiving site	While some recovered hardware could conceivably be reused, given the installation costs and hardware lifetime it is often more cost effective to deploy new hardware.
Customer management	Forced migration will require customer interactions.
	CPs might not have full information from BT to find the most appropriate way to deal with their specific situation.
	It could be even more difficult for CPs which do not provide services directly to end users to engage in the migration process, because it tends to be more difficult to get a reseller to act that an internal division.
Network planning and reconfiguration	Forced cut off of some of CPs backhaul routes means they will need to invest in additional civils work and connectivity to maintain ubiquitous and reliable network presence.
Project management	CPs will face costs to manage the migration from closed exchanges. These include surveys, meetings, procurement, and resource management.
Equipment removal at closed sites	BT expects CPs to remove all their equipment out of racks at closed exchanges.
	BT explains they might be able to remove equipment without charge if CPs transfer them the title of the equipment, but it is unclear if this will cover all equipment.
Stranded assets	We understand that CPs have invested considerable sums to build backhaul capabilities to exchanges and accommodate traffic growth where CPs have found it difficult to obtain dark fibre services from BT.
	Investment decisions for such assets may reflect an expected economic lifetime of up to 15-20 years. This means that CPs will not be able to recover all costs associated with these assets.

As a dominant provider, BT lacks the incentive, absent regulation, to deliver services to CPs in a manner that minimises overall industry costs.

BT appears to limit its commercial support to waiving some of its standard charges to the Priority 105 exchanges rather than also covering some or all of CPs transition costs, meaning



that CPs will not be sufficiently incentivised to migrate their customers in other exchanges in advance of closure. This may lead to (i) longer dual running of exchanges; (ii) force CPs to engage in inefficient renewals of equipment in exchanges which are going to be closed later, or (iii) lead to multiple migrations (and associated costs) for a single end user.

Without adequately considering CP's own transition costs, BT cannot accurately evaluate the impact of its approach on competitors or ensure that its approach maximises productive efficiency i.e. minimises total industry costs, including costs borne by CPs.

This is likely to result in higher-than-necessary costs for CPs, leading to three additional adverse effects that conflict with Ofcom's objectives:

- **Higher end-user prices**: CPs are likely to pass on the additional costs to end users, given many of these costs are variable.
- Inefficiencies: Since the transition costs incurred by CPs are driven by BT's decision to close exchanges, it would be appropriate for BT to bear these costs from an allocative efficiency perspective. BT should therefore propose a funding mechanism to cover these.
- **Distorted competition**: BT can internalise the transition costs incurred by its own downstream businesses given the benefit it incurs via exchange closure cost savings, potentially avoiding cost pass-on to end users, while other CPs lack this capability. This provides BT with a competitive advantage in the relevant downstream retail markets.

BT's plan to migrate end users relies predominantly on a "stick" approach with a cessation of sales for legacy products. It should also consider incorporating a "carrot" approach with commercial incentives to sell enduring products and improve productive efficiency. For instance, making the offering of EAD products at enduring exchanges more advantageous than at exchanges slated for closure could be an effective strategy.

4.3 BT needs to ensure that the migration process is efficient

BT proposes a clawback mechanism to revoke the waiving of "deferred charges" for CPs that fail to meet their volume commitments, arguing that this approach will incentivise CPs to migrate customers promptly. While this may indeed encourage timely migration, this provision could compel CPs to cease providing services to end users rather than pursue with migration - especially where no alternative product is available - in order to avoid the 'clawback' of discounts already granted. While an incentive mechanism to ensure orderly and timely migration may be justified, any such incentive mechanisms should:

Take account of reasonable timelines for CPs to exit;



- Place obligations on BT to meet stringent FTTP and SOGEA (FTTC) coverage targets before closing exchanges in order to allow for availability of alternative products to migrate to; and
- Require BT to provide dark fibre products where its closure programme forces CPs to reconfigure their backhaul networks.

BT explains it is "exploring process improvements [...] to help with leased line migrations"¹⁰. Given significant number of service lines that need to be migrated, it is important that BT implements an efficient process with high levels of automation, and that it provides clarity and certainty to CPs on how it will achieve this.

We however understand that it remains at this stage unclear what the migration processes will entail, how this will be managed, the timelines involved, or the out-of-hours resources and requirements needed.

BT should provide more details on its proposed migration process and ensure this is efficient. If not, it risks delaying the migration of services and increasing costs for the industry, with a detrimental effect on productive efficiency.

4.4 BT needs to consider the impact on end users

In addition to price and migration risks explained in previous sections, the exchange closure programme may also impact end users through operational issues.

For example, the closure of exchanges also comes with significant risks of service disruption. Given this it is important that BT adopts an approach which focusses on outcomes for customers as well as cost savings for BT. It is not clear from BT's proposal that this is the case:

- For customers not covered by FTTP, BT explains it "will work with CPs where feasible to schedule re-arrangement of copper lines and re-parent to a neighbouring exchange". It is however unclear how BT will ensure equivalent access to voice and broadband for these customers.
- BT considers that introducing an SLG (Service Level Guarantee) regime for migrations "would be disproportionate given the time and cost of introducing a regime and the safeguards and service improvements [they] are already implementing". However we understand that CPs have concerns of lack of suitable processes to ensure that broadband and EAD circuits are migrated with minimal downtime and disruption and customers are protected. An SLG regime (and possibly minimum service levels) would

Paragraph 4.7, Openreach industry consultation response, March 2024



ensure that BT have appropriate incentives to deliver good quality services during the migration process.

Network resilience is a key consideration for end users as it ensures consistent connectivity and minimises disruptions to critical services and daily activities. CPs have invested in backhaul links building on different routes, based on existing exchanges, to ensure that networks are resilient and able to accommodate some level of backhaul redundancy. There is a risk that, in the absence of fair contribution from BT to rebuild these links, network quality/resilience could be compromised and impact bandwidth/availability of service for endusers (less access points, and longer circuits lengths).

5 Conclusion

BT's current proposals for exchange closure do not appear to be aligned with Ofcom's objectives for the TAR. In particular:

- The commercial offer pass on many of BT's migration costs albeit at discounted rates onto CPs, who also face substantial additional expenses. This arrangement is likely to result in higher prices for end users, while BT ultimately benefits from cost savings. This approach is inappropriate because (i) the decision to close exchanges, which drives these costs, was made by BT, and (ii) BT, rather than CPs, stands to gain the most from the closures.
- The proposals may fail to minimise the costs associated with exchange closures, as they do not adequately account for the expenses CPs incur to migrate customers to facilitate these closures. This is likely to result in unnecessarily high CP costs, distorting competition in favour of BT's downstream divisions. Unlike CPs, BT's downstream divisions can internalise these higher costs by offsetting them against the future benefits BT gains from the exchange closures.
- The processes and commercial offer set out by BT may result in an **inefficient and** delayed migration of customers.

Given that the underlying services are in markets which BT is likely to have continuing SMP in the TAR, Ofcom should assess potential price and non-price remedies to ensure that the BT exchange closure programme is consistent with its overall regulatory objectives.