
Promoting competition and investment in fibre networks

Initial proposals – Approach to remedies

CONSULTATION:

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1. Overview

1.1 Demand for fixed and mobile broadband connections is growing rapidly, from both people and businesses. To meet this demand, sizeable investment is needed to upgrade the UK's broadband infrastructure. Whether to support fibre to the home broadband, connections to 5G mobile stations, or seamless business connectivity, more fibre networks will be needed to support the next generation of services in the UK. The UK Government has also signaled strong support for full fibre and wants 15 million premises to be connected by 2025.

1.2 **Our goal is to support investment and competition in ultrafast services, to as many people and businesses as possible.** In July 2018 we set out our broad strategy to support investment and competition in ultrafast services.

1.3 **Our strategy is to secure investment in fibre networks by both BT and other companies by promoting network-based competition.** We want to encourage BT's competitors to build networks rather than rely on access to the Openreach network. Competition is the best means to ensure continued investment in building and maintaining high quality, future-proofed telecoms networks.

1.4 **Making sure alternative operators have a fair opportunity to invest at low cost is critical to this strategy.** This means giving them access to the same benefits BT has to re-use existing duct and pole infrastructure on equivalent terms. This is being delivered through our physical infrastructure market review.

1.5 This document sets out our initial views on regulatory measures for wholesale fixed telecoms markets from 2021 which we think will, in combination with duct and pole access, best achieve our strategy to secure investment by promoting network-based competition.

What we are proposing – in brief

We propose varying our regulation in three different categories of geographic area, depending on the level of competition.

In competitive areas, we would not impose regulation.

Where competitive networks are or may be built – roughly two thirds of the country - regulation must ensure a smooth transition to the new world. This means: considering both consumer and business services at the same time given new fibre networks support both; maintaining stable, flat inflation-adjusted regulated prices for Openreach's current superfast broadband and leased lines that allow sufficient margin for competitive entry; not regulating the price of Openreach's higher quality products that use the new, higher value and innovative fibre-based network.

Competitive network build will not be possible everywhere: in these areas – the final third of the country - we are proposing regulation to allow full recovery of Openreach's fibre network costs. Where there is only one credible network operator, frequently Openreach, regulation must support investment by that operator. To do this, we are proposing regulation that is based on Openreach's actual costs, and allowing Openreach to recover new fibre network costs from a wider range of services (akin to a regulated asset base model). At the same time, we are proposing cost based access to Openreach's dark fibre in these areas to promote competition for enterprise customers and the deployment of backhaul capacity for the rollout of 5G services, while also continuing safeguard regulation of leased lines.

In all areas to ensure Openreach provides the quality of service customers expect, we propose broadly maintaining our current approach to setting quality of service remedies.

Public intervention is a crucial element of securing fibre network availability to the whole of the UK - we support the Government's ambition for direct intervention to deliver fibre investment early to the hardest to reach consumers and businesses.

As Openreach's fibre network is built, **we are proposing a phased transition of customers from copper to new fibre networks with the protection of consumers at the heart of this approach.** This means supporting Openreach in closing the old copper network by relaxing some existing regulatory requirements associated with copper networks; and moving regulation (including associated price protections) from copper to fibre services.

This overview is a simplified high-level summary only. The proposals we are consulting on and our reasoning are set out in the full document.

Our strategy and the benefits of fibre networks

- 1.1 As demand for data continues to grow, our strategy is to secure investment in fibre networks by promoting network-based competition so people and businesses can access the ultrafast, reliable connections they need. Fibre technology will be critical in delivering better broadband for people and businesses, and providing connections to current 4G, and

new 5G, mobile base stations. Fibre broadband delivers faster speeds than copper-based services, greater stability at peak times and lower fault rates.

- 1.2 We believe that competition between different networks is the best way to drive investment in high-quality, innovative services and keep prices down. Our view is that over the next five to ten years there is potential for significant investment in new, fibre networks by BT and rival network providers.
- 1.3 Widespread availability of fibre networks can also lead to wider benefits to society. It can boost economic growth and productivity.¹ Innovation in a number of sectors could also be improved. For example: healthcare (e.g. remote diagnostics, which could allow surgeons to operate on patients in a different location), entertainment (particularly improvements in virtual and augmented reality technologies) and transport (such as autonomous cars).²
- 1.4 We must ensure investment in fibre networks is not focused exclusively on larger towns and cities, and that smaller communities also benefit from fibre connectivity.
- 1.5 The UK and devolved Governments are also actively working to achieve wider availability of super- and ultra-fast broadband. There are a number of schemes planned or currently active which are investing public money into improving availability, especially in rural areas of the UK. Alongside the development of our proposals, we will work closely with policy makers to provide input on how public investments can best complement our work to increase commercial investment.
- 1.6 In July 2018, we set out our plans to provide longer-term regulatory certainty and support for competitive investment in fibre networks across the UK. We said that by 2021, we will regulate residential and business markets more holistically, bringing together our assessments into a single review, lasting at least five years instead of three. In advance of this, we expect to implement elements of our strategy in the context of our Business Connectivity Market Review (BCMR) and Physical Infrastructure Market Review (PIMR).
- 1.7 We recognise that investment and competition will vary by geography, and that regulation should also vary by geography. In December, we set out our initial proposals on how to define geographic markets from 2021, depending on the level of competition in different areas.

Our approach to regulation

- 1.8 When we conduct wholesale market reviews, we impose obligations on telecoms providers who are identified as holding a position of significant market power (SMP). We do this to

¹ See, for example, Ofcom (2018), 'The economic impact of broadband': <https://www.ofcom.org.uk/research-and-data/telecoms-research/broadband-research/economic-impact-broadband>

² See, for example, the 2018 WIK report commissioned by Ofcom: https://www.ofcom.org.uk/data/assets/pdf_file/0016/111481/WIK-Consult-report-The-Benefits-of-Ultrafast-Broadband-Deployment.pdf

promote competition and protect consumers in accordance with our duties. Our regulation is forward-looking (*'ex ante'*) in nature, rather than relying on retrospective *'ex post'* competition law to address concerns arising from identified conduct.

- 1.9 Historically, our approach to imposing regulatory obligations has considered residential ('local access') and business ('leased lines') markets in separate reviews. We have required BT, through Openreach, to provide wholesale products that were unique to each of these markets. This reflected our expectation that BT would continue to face limited network competition in markets where it had SMP, over the future period covered by our reviews. Based on this expectation, we focused on intervening in wholesale products with the intention of promoting competition in retail markets.
- 1.10 The potential for significant investment in fibre networks over the coming years has several implications for how we regulate companies.
- Our regulation will have a sharper focus on promoting competition by encouraging investment in competing fibre networks. This includes proposing to lengthen the period of our market assessments from three years to five years to provide greater investor certainty.
 - New fibre networks will be capable of providing services in each of the markets we currently review separately. Therefore, when considering whether and how to regulate, it is no longer appropriate to focus on each of these markets in isolation. For example, measures taken in respect of wholesale local access services will have implications for the incentives to build new fibre networks, which will in turn affect competition for leased lines, and vice-versa.
 - In setting regulatory remedies, we propose to take greater account of differences in competitive conditions in geographic areas. In rural areas and smaller towns, where the prospects of entry by competing networks is limited, our remedies will aim to preserve the incentives on BT to invest in fibre services.
 - In contrast, in potentially competitive areas, our proposed remedies have a greater focus on incentivising rival network build. Our proposed regulation around access to key wholesale services is intended to promote competition by ensuring that access seekers have appropriate incentives to build new networks themselves and/or enter into commercial arrangements with alternative network builders, as opposed to overly relying on buying cost-based wholesale services from BT.
 - Our proposals for wholesale remedies will be developed in light of our proposal to require BT to offer unrestricted access to its network of ducts and poles, as set out in our 2018 physical infrastructure market review (PIMR) consultation. We see this measure as a key component in the deployment of rival fibre networks. Therefore, in areas where we consider there is potential for network build, we will place greater weight on the availability of duct and pole access (DPA) in the overall

package of remedies than in areas where we consider there is limited potential for network build.

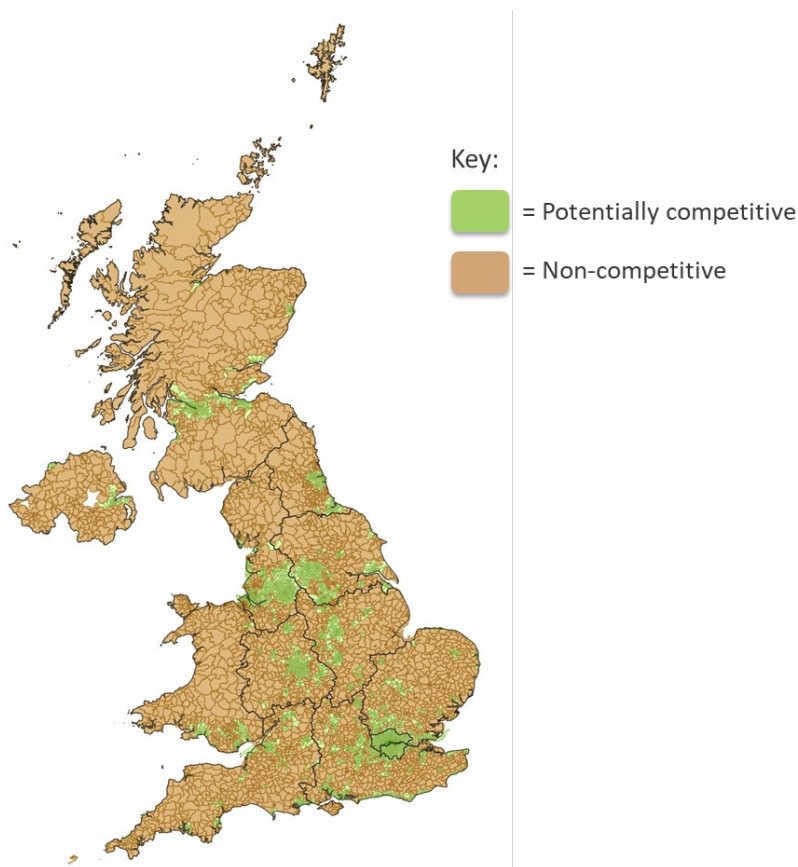
- Given BT is likely to play a key role in investing in fibre networks over the coming years, we will need to consider how regulation can support a smooth transition for customers switching to its fibre network as BT looks to retire its copper network.

1.11 In our December consultation on our approach to geographic markets, we set out our initial proposals on categorising areas of the country according to the competitive conditions that exist in those areas. We proposed three categories of geographic area for the purposes of targeting our *ex ante* regulation:

- **Geographic area 1 - competitive areas:** that are effectively competitive where we would not impose regulation;
- **Geographic area 2 - potentially competitive areas:** where non-BT fibre networks are being built, or where there are reasonable prospects of them being built and therefore *ex ante* regulation needs to reflect this potential for competitive investment; and
- **Geographic area 3 - non-competitive areas:** where we think non-BT fibre networks will not be built to any material extent and therefore *ex ante* regulation should focus on BT's investment.

1.12 Our analysis in that document, indicated the following map of potentially competitive areas and non-competitive areas in the UK.

Figure 1: Illustrative map of the UK showing potentially competitive and non-competitive postcode sector areas (potentially competitive in green, non-competitive in brown)



1.13 We have followed this distinction in this consultation, by considering what measures are appropriate in potentially competitive and non-competitive areas.

Our initial proposals on remedies

1.14 In this document, we provide our initial proposals on the key remedies that we consider will need to be imposed on BT, in the event of an SMP finding, in the fixed telecoms markets from April 2021.³ More specifically, we provide our initial proposals relating to:

- The requirement to provide network access for wholesale local access and leased line services;
- The approach to setting charge controls and regulating prices;

³ For the purposes of the discussion in this document, we have assumed that we find BT to have SMP in relevant access markets. However, we are still considering our market analysis and we will set out our proposals and analysis of access markets, including whether we propose to determine any undertaking as having SMP, in our December 2019 consultation.

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- The approach to ensuring quality of service; and
 - The framework for ensuring consumers are smoothly transitioned from Openreach's existing copper network to its new fibre network, so that Openreach can retire its copper network.
- 1.15 Our initial view is that for quality of service and transition, our proposed approach should be the same in both potentially competitive areas and non-competitive areas, whereas we propose to vary our approach for other remedies.
- 1.16 Our proposals for setting charge controls have the objective of promoting competition through network investment by BT and alternative network builders.
- 1.17 In potentially competitive areas we are proposing to not have cost oriented prices, as we believe that pricing should ultimately be driven by competition rather than regulation. Whereas, in non-competitive areas we are proposing to introduce a utility-style approach to setting prices (referred to as a Regulatory Asset Base (RAB) approach). This would provide BT with greater certainty that it will recover the costs of its efficient investments in these areas as it would share the costs of its investment in a new fibre network across other services in the non-competitive areas.
- 1.18 We also recognise that BT will want to retire its copper network fairly soon after deploying a fibre network, as this will enable cost savings and de-risk the fibre investment. To this end we are proposing a framework that will support BT in transitioning consumers from its copper network to its fibre network in an efficient and timely manner.
- 1.19 Overall we believe that our proposed approach will significantly reduce the regulatory risk faced by BT. If, up front, there is an acceptance that the fibre network will replace the copper network then there is no greater risk on the fibre network than there was on the copper network. Moreover, in situations where we do regulate prices we would ensure that BT gets an opportunity to earn a fair return on its efficient investments (including its fibre investment). We also believe that our proposed approach supports investment by BT's competitors by limiting the RAB approach to areas where competitors are unlikely to invest at scale and in the potentially competitive areas setting regulated prices that take into account competitor's costs of building fibre networks.
- 1.20 Finally, in designing our remedies we will face a further complication because of past investment in leased line networks to provide services for large businesses and operators. This means that in a few limited areas, typically business districts of large cities, there will be additional competition to that provided by operators of new fibre networks. Where we find this to be the case, we would look to adjust our remedies by reducing or removing leased line regulation in those specific areas as necessary.

Next steps

- 1.21 This consultation closes on 7 June 2019.

- 1.22 We expect to set out full details of our regulatory proposals in the fixed telecoms market, alongside our market analysis and SMP findings, in December 2019. We will take account of responses to this consultation in formulating these proposals.

2. Proposed remedies in potentially competitive areas

Introduction

- 2.1 This section sets out our initial views on remedies to impose on BT in potentially competitive areas where we find SMP. We consider areas to be potentially competitive if any of the following conditions are met:
- Alternative fibre networks are present;
 - Alternative providers have specific plans to build;
 - We consider that there is a possibility of network build.
- 2.2 As these areas are not currently effectively competitive, we would expect to regulate access to key wholesale services in order to protect consumers and retail competition. However, in doing so, we wish to promote competition in new fibre networks through network investment. With this in mind our regulation of wholesale services in these areas will be primarily about maintaining current regulation around access to key wholesale services. The intention of this is to ensure that access seekers have appropriate incentives to build new networks themselves and/or enter into commercial arrangements with alternative network builders, as opposed to overly relying on buying cost-based wholesale services from Openreach.
- 2.3 In light of this and consistent with our duty to promote competition, we will have regard to the following objectives:
- a) **Ensuring BT's competitors have appropriate conditions to support their investments.** Rival networks have become increasingly active in recent years, in announcing and taking forward plans to build fibre networks. We consider this is a critical time for sustaining a regulatory environment that will encourage build by these networks. When they are in place they will play an important and long-term role in protecting consumers and promoting retail competition.
 - b) **Ensuring BT has appropriate conditions to invest in fibre.** In addition to promoting competition in rival networks, we want to see BT deploy fibre networks. We note that competitive investment could further encourage BT to invest.
 - c) **Protecting consumers against excessive prices and poor quality.** We consider that it will be important to protect consumers against excessively high prices and protect service quality.
 - d) **Maintaining retail competition based on access to the Openreach network.** Retail competition is currently based on access to Openreach's network. We consider it is important to ensure regulatory protection in the period while network competition develops.

Promoting competition and investment in fibre networks

- 2.4 We intend to introduce a package of remedies, across wholesale local access and leased lines services, in light of the above objectives.
- 2.5 We recognise that our regulation will involve trade-offs between achieving each of the above objectives. A key consideration for us is how to get the right balance between retaining the incentives to invest in new networks (leading to longer-term benefits to consumers such as choice and innovation) and protecting consumers in the shorter-term.
- 2.6 Our proposed package of remedies has been developed against the background of our current intention that rival networks will have unrestricted access to Openreach's duct and pole infrastructure. We consider that unrestricted access to Openreach's duct and pole infrastructure will play a crucial and increasing role in promoting network build in potentially competitive areas during the review period and in the longer-term.
- 2.7 The remedies that we are considering for potentially competitive areas are summarised in Table 1 below.

Table 1: Proposed regulation in potentially competitive areas

	Network access	Charge control	Quality of service	Equivalence of inputs / non-discrimination	Prohibition of geographic discounts
MPF ⁴	Yes. Remove General Access requirement for new copper services	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	Yes
Copper 40/10 (FTTC)	Yes	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	Yes
Copper (FTTC higher bandwidths)	Yes	No	As of 31 March 2021	Yes	Yes
Fibre broadband	Yes	No	No	Yes	Yes
Leased lines up to 1 Gbit/s	Yes	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	Yes
Leased lines above 1 Gbit/s	Yes	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	Yes
Dark fibre	No	No	No	No	No

Network access and charge control remedies

Wholesale local access services

Network access

2.8 Our provisional view is that where we find BT to have SMP in potentially competitive areas, it will be necessary to continue to require them to provide network access. We propose to

⁴ Metallic Path Facility (MPF): The provision of access to the copper wires from the customer premises to a BT MDF that covers the full available frequency range, including both narrowband and broadband channels, allowing a competing provider to provide the customer with both voice and/or data services over such copper wires.

reimpose the general obligation requiring BT to provide network access where a third party reasonably requests it, and to do so on fair and reasonable terms and conditions, as soon as it is reasonably practicable.

- 2.9 The main services for which we currently require BT to provide network access in the wholesale local access market are MPF and VULA.
- a) Metallic Path Facility (MPF) is the copper wire connecting consumers to the BT network and is used to support voice and broadband services.
 - b) Virtual Unbundled Local Access (VULA) provides a high-speed broadband connection to consumers over BT's superfast network (either FTTC⁵ or FTTP⁶).
- 2.10 If Openreach did not offer network access to its existing wholesale customers, then in order to continue to offer retail broadband services they would be required to either build their own networks, or seek commercial agreements with another network operator. We recognise that removing the above requirements on BT would give a very strong incentive for rival network investment. However, we consider that to do so could be very damaging to retail competition and consumers in the short term.
- 2.11 Our initial view is that regulated access to these services is likely to continue to play an important role in promoting competition in downstream markets from 2021 as rival network providers deploy their own networks. Therefore, we propose that Openreach will be required to provide general network access, including the specified forms of MPF and VULA (across all bandwidths). However, we consider that copper-based services should now be seen as legacy services as the market moves to fibre, and for that reason we propose to remove the general network access requirement for new copper-based services, so that access seekers will only be able to have new forms of copper network access by commercial agreement with Openreach.

Whether to set charge controls

- 2.12 There is also a risk that, absent regulation, BT would have the incentive and ability to increase wholesale access prices to an excessively high level so as to weaken retail competition. In light of this concern, we need to consider:
- a) Whether to set charge controls.
 - b) The design of any such charge controls, and in particular:
 - i) To which services they relate.

⁵ Fibre To The Cabinet (FTTC), a network structure in which optical fibre extends from the exchange to a street cabinet housing broadband equipment with the remaining part of the network, from the cabinet to the customer, provided by a copper wire.

⁶ Fibre To The Premise (FTTP), a network structure in which the optical fibre extends from the exchange to the customer.

ii) The basis for setting the charge controls, and their level.

2.13 One option for addressing our concerns would be to impose a requirement on BT to set fair and reasonable charges. We consider that such remedies would create uncertainty about the appropriate charges for wholesale services. Our current view is that a specified charge control is required to address these risks.

Design of charge controls

2.14 In our WLA 2018 decision, we took account of the need to incentivise competitive network investment both in the scope of the charge control, and in the cost basis we used:

- a) We set charge controls on MPF and GEA⁷ 40/10, which are used to supply standard broadband and superfast broadband (at 40Mbit/s down and 10Mbit/s up). We referred to these two products as 'anchor products'.⁸ We did not set charge controls on higher speed products and instead allowed pricing flexibility. We believed that the combination of having price-regulated anchor products and price flexibility on higher speed products balanced our competing objectives of protecting consumers and promoting investment in fibre networks. While observing that future pricing decisions would be made in the prevailing circumstances, we noted that "...we do not expect to extend our charge controls beyond retaining cost-based controls on copper access and 'up to 40 Mbit/s' VULA services, as a matter of course."⁹
- b) We set these controls on the basis of BT's costs but including a Hypothetical Ongoing Network (HON) adjustment, which involves uplifting the value of BT's heavily depreciated assets (mainly exchange equipment) to reflect the cost of maintaining a network on an ongoing basis. We found that BT's costs with a HON adjustment led to a price level which was within the achievable cost range of a "Reasonably Efficient Operator" (REO).

2.15 Both the scope and the cost basis of our WLA 2018 charge control were informed by our objective of creating incentives for communications providers to build competing networks. We were also mindful of preserving BT's incentives to invest in fibre services by maintaining pricing flexibility for higher bandwidth services.

⁷ Generic Ethernet Access (GEA): Openreach's wholesale service providing telecoms providers with access to its FTTC and FTTP networks in order to supply higher speed broadband services.

⁸ We use the term "anchor pricing" to describe the approach of regulating the price of a lower-bandwidth (or 'anchor') product, to provide a degree of constraint on higher-bandwidth products, which otherwise benefit from pricing flexibility.

⁹ Paragraph 1.45, Ofcom, Wholesale Local Access Review Statement, March 2018.

Our proposals from 2021

- 2.16 In developing our proposals for setting charge controls, we are seeking to promote competition by reference to the four key objectives set out above.
- 2.17 We recognise that rival entrants may take different paths to deploying fibre networks. For example, operators may initially offer leased lines to businesses, and later broadband to homes. Our proposals for unrestricted DPA are intended to give entrants flexibility in this regard.¹⁰
- 2.18 As outlined earlier, a key consideration for us in promoting competition is striking an appropriate balance between encouraging competitive network investment and protecting consumers over the period of the review.
- 2.19 Our initial view is that investment incentives will be best supported by maintaining a stable regulatory regime, with charge controls set consistently between successive market reviews. In light of this, we propose setting a charge control for the price of MPF+GEA 40/10 such that the price at the end of the current charge control in March 2021 will be taken forward in inflation-adjusted terms, with pricing flexibility for higher-bandwidth WLA services.¹¹
- 2.20 In particular, we consider that our proposals will meet our four objectives set out in paragraph 2.3 above, as follows:
- a) **Ensuring BT's competitors have appropriate conditions to support their investments.** This approach sets prices somewhat above BT's costs. We consider this is appropriate because entrants, who are likely to face higher costs than BT, need to be able to compete with Openreach's wholesale services. Further, our view is that our approach will give access seekers a stronger incentive to switch to an alternative supplier, enter partnerships with such suppliers, or deploy their own network connections. We consider that this, along with the availability of DPA, will ensure appropriate incentives for competitive network build.¹²
 - b) **Ensuring BT has appropriate conditions to invest in fibre.** Investment/potential investment in fibre by BT's competitors will put competitive pressure on BT to invest in fibre itself.

¹⁰ Paragraph 5.7, Ofcom, Physical Infrastructure Market Review, November 2018.

https://www.ofcom.org.uk/_data/assets/pdf_file/0014/125420/PIMR-consultation.pdf

¹¹ We note that the current charge control has a slight downward trajectory, to allow for increasing opex efficiency. We do not propose to extend this downward trajectory in the next review period.

¹² This general approach is consistent with Ofcom's approach to setting price caps to date. The existing price cap includes an ongoing network adjustment to reflect the fact that network assets may have a value in use above their depreciated book value. We made this adjustment to avoid inefficiencies such as a possible adverse impact on rival telecoms providers' incentives to deploy their own networks (and a delay in customer migration to fibre-based services). A stable charge control would preserve competitive investment incentives by retaining this adjustment. WLA 2018, Volume 2, paragraph 2.98.

- c) **Protecting consumers against excessive prices and poor quality.** We recognise that we could achieve lower consumer prices by regulating Openreach's wholesale charges to cost, or by imposing charge control regulation on other WLA services above the 40/10 product. However, in the long term we consider that where there is scope for competitive entry this will deliver better outcomes for consumers than ongoing regulation of a monopoly provider, including stronger competition at the retail level. We recognise that the strength of the constraint provided by the 40/10 product may diminish during the control period, but this will happen gradually, allowing time for competitive investment to emerge and add to the competition already provided by Virgin.
- d) **Maintaining retail competition based on access to the Openreach network.** We consider that retail providers will still be able to compete based on access to the Openreach network, as they will be able to have this access on similar terms as at present. Rival network deployment will give them more options for wholesale provision.

2.21 This approach also ensures stability and continuity from our decision in the WLA 2018. As we develop our proposals further, we will continue to review the costs faced by BT and BT's competitors to ensure that our charge control proposals meet our four objectives.

Leased lines

Network access

- 2.22 In our BCMR 2018 consultation, we propose that BT is required to provide network access in the markets in which we have provisionally identified BT has SMP, which are: Contemporary Interface (CI) Access services at all bandwidths in the rest of the UK outside the Central London Area (CLA), excluding Hull; and CI Inter-exchange connectivity at local exchanges where fewer than two competitors to BT are present.
- 2.23 Our view is that from 2021, our regulation of leased lines services should reflect what we expect to be increasing use of unrestricted DPA.
- 2.24 We consider that growing volumes of a well-functioning and effective DPA remedy will allow us to move the focus away from regulating BT's leased line services. Ultimately, we consider that unrestricted DPA should be our primary remedy in delivering customer benefits through the deployment of fibre networks.
- 2.25 We recognise both that this will take time and the important role that requiring BT to provide network access to leased line services has played in delivering competition and customer benefits to date. In light of this, we are keen to ensure a level of continuity with the regulation that applies up to 2021. Therefore, we propose that in the event of an SMP finding, BT is required to offer network access to leased line services (i.e. those equivalent to CI services across all bandwidths). The obligation requiring BT to provide network access where a third party reasonably requests it is vital to necessary for promoting and

protecting competition in downstream markets. Without such a requirement, BT may have the incentive and the ability to refuse access at the wholesale level or provide access only on less favourable terms, thereby benefiting its own retail divisions and hindering downstream competition, ultimately against the interests of consumers.

- 2.26 In non-competitive areas we are proposing to introduce dark fibre as our primary remedy for leased lines (see Section 3). We do not propose to introduce dark fibre in potentially competitive areas because our approach is to encourage competition in rival networks upstream of dark fibre. Introducing dark fibre is not consistent with that approach.

Charge controls

- 2.27 In our BCMR 2018 consultation, we proposed to set a leased lines charge control to 2021 at a flat (nominal) cap at current (regulated) prices for services at 1 Gbit/s and below, reflecting our prioritisation of price stability for the short period of that charge control. We also proposed a safeguard cap at current prices for VHB services. The origin of the current prices for up to 1 Gbit/s is our 2016 Business Connectivity Market Review, where the price cap was set at our estimate of efficient costs. This estimate was updated in our Temporary Conditions decision.¹³
- 2.28 In developing our proposals for whether and how to set a charge control on leased line services, we intend to have regard to our four key objectives for promoting competition as set out in paragraph 2.3 above.
- 2.29 One option for addressing our competition concerns is to impose a requirement on BT to set fair and reasonable or cost-oriented charges on leased line services. However, consistent with our views relating to wholesale local access services, we consider that this would leave significant uncertainty about the level of charges for leased line services.
- 2.30 Therefore, our initial view is that a specified charge control is required to address these risks.
- 2.31 Our view is that ensuring regulatory stability from 2021, will be a significant factor in preserving the investment incentives faced by competitors to BT to build their own networks.
- 2.32 We propose setting a charge control for the price of leased lines services such that the prices at the end of the current charge control will be taken forward in inflation-adjusted terms.

¹³ Ofcom, Business Connectivity Markets: Temporary SMP conditions in relation to business connectivity services, Statement, November 2017, Section 5. As noted in paragraph 5.25, the underlying model was not updated. https://www.ofcom.org.uk/data/assets/pdf_file/0019/108019/BCMR-Temporary-Conditions.pdf

Other regulatory remedies

- 2.33 Following on from the above discussion, we propose to impose the following general requirements on BT in relation to wholesale provision of wholesale local access and leased line services where we find SMP:
- a) To provide network access (including necessary ancillary services) on reasonable request, as discussed above.
 - b) To publish and operate a process for requests for new forms of network access. Discrimination in relation to the handling of requests for new types of network access has the potential to distort competition at the retail level by placing third-party telecoms providers at a disadvantage compared with the downstream retail business of the vertically integrated provider with SMP. We believe that where it has SMP BT has such an incentive, and ability, in the absence of the Statement of Requirement process we have established for such requests.
 - c) Requirements for transparency of charges, terms and conditions. Again, these remedies are complementary to the network access obligation. We propose requiring BT to:
 - i) Publish a Reference Offer (RO) including information relating to such issues as terms and conditions for provisioning, technical information, SLAs and SLGs, and availability of co-location, along with further information concerning LLU and VULA network access remedies (as at present).
 - ii) Notify in writing changes to the charges of its regulated products, with notice periods as at present.
 - iii) Publish, in advance, changes to technical information, as at present.
 - d) Non-discrimination and Equivalence of Inputs (EoI). A non-discrimination obligation is a complementary remedy to the network access obligation, primarily to prevent the dominant provider from discriminating in favour of its own downstream divisions in a way that would harm competition and competing telecoms providers. We believe that EoI (i.e. a complete prohibition of discrimination with no discretion) is the most effective form of non-discrimination, as it is transparent and gives the access provider appropriate incentives to improve the services it offers to its competitors.
 - e) Quality of service. See Section 4.
 - f) Financial reporting. We expect that we will continue to impose financial reporting obligations on BT to provide us with the information necessary to make informed regulatory decisions, monitor compliance with SMP conditions, ensure that those SMP conditions continue to address the underlying competition issues and investigate potential breaches of SMP conditions and anti-competitive practices:

- i) Accounting separation, to prevent discrimination by BT in favour of its own activities to prevent unfair cross-subsidy, and to allow us to monitor BT's activities in respect of the EOI obligation.
- ii) Cost accounting obligations ensure that BT has in place a system of rules that support the attribution of revenues and costs to individual markets and services. It therefore supports the accounting separation obligation.

2.34 In the WLA 2018 market review we introduced regulation to prevent Openreach from discriminating by applying geographic discounts to wholesale prices. This was to address the concern that BT might seek to prevent or reduce competitive rollout of new fibre networks by reducing its wholesale prices in areas where others are starting to roll out new networks. We continue to be concerned that Openreach might react to entry by deploying pricing measures aimed at weakening competitors' business cases for the deployment of new networks including geographic discounts, creating a risk that competitors cut back on their investment plans. The benefits to BT from reducing competitive pressures could be substantial and therefore we consider it may have an incentive to engage in such discriminatory behaviour. We consider that this risk is greater than any potential costs which might arise from constraining Openreach's ability to introduce targeted geographic discounts, and we propose to continue to prohibit such targeted discounting.¹⁴

Strategic network deployment

- 2.35 Competing network providers have expressed concerns that Openreach will target its network upgrades to areas where those competing providers are investing in fibre networks, with the purpose of destabilising competitors' long-term investment strategies. Some providers have noted announcements by BT to upgrade its network in cities where other networks have already announced plans to deploy fibre. A related concern is that requests for DPA access could give BT advanced notice of its rivals' investment plans.
- 2.36 The Government has suggested that BT could publish in advance an agreed medium-term plan of the areas in which it is planning to roll out its fibre network.¹⁵ Openreach has published its current (FY 18/19 Q4) Fibre First Programme Build Plan, showing the number of exchanges in specified cities where it plans to deploy over the next 24 months.¹⁶ Network providers have argued to us that to be effective such a publication should be

¹⁴ The above discussion follows our reasoning in Ofcom, December 2017. *Wholesale Local Access Market Review: Promoting network competition in superfast and Ultrafast broadband – Consultation*.

https://www.ofcom.org.uk/data/assets/pdf_file/0021/108381/consultation-wla-competition-superfast-ultrafast-broadband.pdf.

¹⁵ Paragraph 116, DCMS, *Future Telecoms Infrastructure Review*, July 2018.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732496/Future_Telecoms_Infrastructure_Review.pdf.

¹⁶ https://www.homeandbusiness.openreach.co.uk/docs/default-source/default-document-library/Openreach_FTTTP_Fibre_First_Towns_Cities_and_Boroughs_Programme_Build-Forward_Look.

mandatory and supported by detailed build plans, with a requirement on BT to explain material deviations from its plans.

- 2.37 We recognise that the investment case for rival network deployment is challenging, and that the possibility of a strategic response by the incumbent, aimed at deterring or limiting competitive entry, could increase the risk associated with such investment, particularly if BT has material incumbency advantages over its rivals, such as an existing relationship with retail providers.
- 2.38 On the other hand, we expect BT to upgrade its network in response to competitive entry, and we see this as one of the benefits to consumers of such entry occurring. We also note that fibre deployment by BT and others may naturally focus on larger cities, where the cost per premises of deployment will tend to be lower, and this may naturally lead to some early overlap of deployment plans. Our strategy is to promote competitive deployment of fibre, and we would like to see at least three providers in as many areas as possible. We would expect the risk of fibre deployment by BT to be factored into the investment cases of alternative providers.
- 2.39 Ofcom is currently conducting in-depth monitoring of Openreach's compliance with their new commitments, Openreach's fibre roll-out programme, and the impact that the new arrangements are having on our objective of enabling access to fast, reliable broadband through the development of competing networks. We will continue with our monitoring, and we will also continue to consider carefully any concerns raised with us by stakeholders relating to strategic behaviour by Openreach. On the specific suggestion of a mandatory requirement on Openreach to publish detailed build plans and to justify material deviations from those plans, we are concerned that such a measure would limit BT's flexibility in responding to market developments and operational challenges, and require close regulatory involvement in its commercial activities. In our view, such an intervention would not be appropriate in present circumstances.

Consultation questions:

Question 2.1: Do you agree with our overall approach to regulation in potentially competitive areas?

Question 2.2: What is your view of our access and charge control proposals for wholesale local access services in potentially competitive areas?

Question 2.3: What is your view of our access and charge control proposals for leased line services in potentially competitive areas?

3. Proposed remedies in non-competitive areas

Introduction

- 3.1 This section sets out our initial views on remedies to impose on BT in non-competitive areas where we find SMP. We consider areas to be non-competitive if all of the following conditions are met:
- Openreach is the only network present;
 - no alternative providers have specific plans to build;
 - We do not consider that there is a possibility of network build.
- 3.2 As these areas are not competitive at the wholesale level, we would expect to regulate access to key wholesale services in order to protect consumers and retail competition. However, in doing so, we wish to provide appropriate incentives for BT to invest in a new fibre network. This will support widespread availability of fibre across the UK, even in the most remote areas, ensuring that people and businesses across the UK are able to get access to the new networks.
- 3.3 In designing the proposed remedies for non-competitive areas, consistent with our duties we will have regard to the following objectives:
- a) Preserving the investment incentives faced by BT;
 - b) Protecting customers against the risk of high prices; and
 - c) Promoting retail competition, which will continue to be based on access to Openreach's network.
- 3.4 Our objectives for non-competitive areas mirror those in potentially competitive areas (see paragraph 2.3 above), except that they do not include the objective of ensuring BT's competitors have appropriate conditions to support their investments. We intend to introduce a package of remedies, across wholesale local access and leased lines services, in light of the above objectives.
- 3.5 A key consideration is how to get the right balance between protecting consumers and preserving BT's incentives to invest in fibre networks. Our traditional approach to regulation essentially involves allowing BT to recover the costs of new services from those consumers that purchase them. But this may not provide BT with sufficient incentive to build fibre networks in non-competitive areas, because it will tend to face higher-than-average build costs, and also because it does not face competitive pressures from rival

infrastructure operators.¹⁷ Accordingly, we think there is a case for allowing BT's fibre investment to be partly funded through higher charges for copper-based services.

- 3.6 We are considering a version of the "regulatory asset base" (RAB) approach, a widely-used model in other regulated sectors. In this model, the regulator identifies a set of desired investment outcomes and the efficient costs of achieving them. The investment gives rise to an "asset base", and the regulator sets charge controls at a level which will allow the firm to recover its efficient costs. We could use this approach to preserve BT's incentives to invest in fibre networks by allowing it to recover its costs more widely from its customer base in the area (including customers of both fibre-based services and copper services), while maintaining price caps at a level that would protect consumers.
- 3.7 The remedies package that we are considering for non-competitive areas are summarised in Table 2 below.

¹⁷ There is also a positive effect on BT's incentives in that, other things equal, it is likely to see higher take-up of fibre services where it does not face wholesale competition for fibre customers.

Table 2: Proposed regulation in non-competitive areas

	Network access	Charge control	Quality of service	Equivalence of inputs / non-discrimination	Prohibition of geographic discounts
MPF	Yes. Remove General Access requirement for new copper services	Charge control based on RAB approach	As of 31 March 2021	Yes	No
Copper 40/10 (FTTC)	Yes	Charge control based on RAB approach	As of 31 March 2021	Yes	No
Copper (FTTC higher bandwidths)	Yes	Charge control based on RAB approach	As of 31 March 2021	Yes	No
Fibre broadband	Yes	No	No	Yes	No
Leased lines up to 1 Gbit/s	Yes	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	No
Leased lines above 1 Gbit/s	Yes	Inflation-adjusted from 2021 levels	As of 31 March 2021	Yes	No
Dark fibre	Yes	Yes – Cost based	Yes	Yes	No

Network access and charge control remedies

Wholesale local access services

- 3.8 Our provisional view is that where we find BT to have SMP in non-competitive areas, it will be necessary to continue to require it to provide network access. We propose to reimpose the general obligation requiring BT to provide network access where a third party reasonably requests it, and to do so on fair and reasonable terms and conditions, as soon as it is reasonably practicable.
- 3.9 We propose that BT will be required to provide general network access, including the specified forms of MPF and VULA (across all bandwidths). We are proposing this to

promote retail competition across these services, since without network access BT would be the only retail provider.¹⁸

Charge control framework for non-competitive areas

- 3.10 There is a risk that, absent regulation, BT would have the incentive and ability to increase wholesale access prices to an excessively high level so as to weaken retail competition. Here we set out our initial views relating to setting a charge control in the non-competitive areas.
- 3.11 The framework previously applied by Ofcom, to incentivise investment during periods of technological change, was to allow a period of pricing flexibility on new services while maintaining charge controls on legacy services. This framework is designed to incentivise BT to invest in new technologies so long as the investment will result in greater profits compared with continuing to provide services over the current technology. This will occur if BT can earn more revenue from customers of the new services, or incur lower costs of serving these customers.
- 3.12 Our initial view is that there is a material risk that BT would not invest in fibre services in non-competitive areas under the previous framework. Under this framework BT's incentives to invest in fibre are likely to be influenced by the following factors:
- Impact on costs: While a fibre network provides some operating cost savings due to lower fault rates, information from BT indicates that network build costs are the largest cost component. These are likely to be significantly higher in non-competitive areas (where the density of premises is lower).¹⁹
 - Impact on revenues: this is the additional revenue BT can earn by selling fibre services compared to the existing copper services. In both potentially competitive and non-competitive areas, pricing flexibility would allow BT to charge a premium for fibre services. However, the level of this premium will be constrained by the price of copper services.
 - Impact on market share: In the potentially competitive areas, investing in fibre services can improve BT's ability to retain its market share as it will be competing against operators who will be deploying their own fibre networks. In the non-competitive areas, BT's investment incentive is weaker because it is likely to retain a high market share even if it does not deploy fibre.

¹⁸ We consider that copper-based services should now be seen as legacy services as the market moves to fibre-based provision, and for that reason we propose to remove the general network access requirement for new copper-based services, so that access seekers will only be able to have new forms of copper network access by agreement with BT.

¹⁹ Information provided by Openreach on 19 December 2018.

- 3.13 Furthermore, there are a number of additional factors which may cause BT to delay its investment:
- BT may prefer to defer its investment until there is more pent-up demand for fibre services, e.g. once more established applications for fibre networks emerge and the risk profile of the investment is lower. A lower risk profile under a 'wait and see' approach may also give BT a better ability to exploit its SMP.
 - BT may prefer to invest in shorter term projects that satisfy its shareholders and are more closely aligned with management incentives, e.g. projects that are less risky or allow a quicker payback.
 - BT may discount longer term projects such as building a fibre network, due to the need to rely on Ofcom maintaining its regulatory commitments across multiple review periods.
- 3.14 If investment in fibre services did not occur, consumers may suffer because they are unable to obtain the services they need – as set out in Section 1, fibre networks have the potential to provide significant benefits to consumers of communications services and citizens in the future. If this happens, it may take considerable time for BT to catch up with consumer demand because of the time it takes to deploy fibre networks.

A Regulated Asset Base (RAB) Framework could provide BT with stronger incentives to invest in FTTP in non-competitive areas

- 3.15 In contrast to the previous framework, which requires investment costs of the new network to be recovered only from the users of the new services, a RAB approach allows investment costs to be recovered across a wider range of services. For example, a RAB approach could allow the investment costs to be recovered from consumers taking existing copper services as well consumers who take up the new fibre services.
- 3.16 A RAB approach can therefore help secure investment in cases where it might not otherwise have occurred. Whilst a RAB approach could provide more certainty of cost recovery for BT's fibre investments in non-competitive areas, it will not eliminate investment risk, with the balance of risk between BT and consumers being determined by the detailed design of the RAB charge control.
- 3.17 Our initial view is that a RAB framework could help to further citizen and consumer interests by promoting investment by BT in a fibre network. We believe we can design it in a way that also protects consumers from the risk of excessive prices by linking any increase in charges to new investment. With this in mind, we currently envisage an approach where:
- The costs of legacy services such as MPF and FTTC would continue to be entirely recovered from the consumers that purchase the legacy services; and

- The costs of new fibre services would enter into a RAB which would be recovered from both consumers that purchase fibre services and consumers that purchase legacy services.

There are a number of steps we would need to take to implement a RAB charge control in non-competitive areas

- 3.18 An important feature of a RAB approach is that it requires a certain level of agreement upfront between the regulated firm and regulator on the scale of an investment and cost recovery. This will require Ofcom to take a greater role in engaging with BT on the detail of its investment plans prior to any investments being made. To illustrate, the process of setting a RAB charge control might involve the following steps:
- First, Openreach would need to propose a plan for a fibre deployment in non-competitive areas;
 - Second, Ofcom would then carry out an assessment of the plan, for example, looking at the scale and timing of the deployment, and assumptions on cost, revenue and take-up; and
 - Third, Ofcom would likely set the terms for cost recovery, including any metrics that would be used to measure delivery of the investment and the level of cost recovery.
- 3.19 In setting the terms of a RAB charge control we would need to take account of the associated risks of regulatory failure and consider ways to mitigate them. This would include balancing the risk of BT over-recovering its costs against the risk that the model does not give it sufficient incentive to make the investment.
- 3.20 Then, we will need to consider how to best ensure that Openreach delivers the agreed investment. There are various ways of seeking to achieve this. For example, we may consider assessing Openreach's delivery of its investment plans in each year in terms of aspects like network coverage and the quality of the services being offered.
- 3.21 We will also need to consider the interaction between public fibre rollout schemes and the charge control in non-competitive areas. There will be parts of the country which are less attractive for BT to go to even when setting these incentives. Setting the charge control to allow BT to cover the last few percent would take a relatively large price increase from other consumers to fund it, while benefitting relatively few people. This is where public funding traditionally comes into play to reduce the number of people who are excluded. It will be important for Ofcom to work closely with policy makers as they design and implement such interventions, which include:
- The Broadband Delivery UK (BDUK) scheme which aims to extend the 24Mbit/s broadband coverage from the current 95% by at least 2%;
 - The Reaching 100% programme (R100) which aims to extend the availability of superfast broadband to 100% of premises in Scotland;

- The Gigabit Voucher Scheme which will make £5,500 vouchers available to businesses in Wales and £800 vouchers available to residential consumers in Wales to get gigabit-speed broadband; and
- The proposed investment in the Future Telecoms Infrastructure Review (FTIR), which aims to fund fibre build in rural areas simultaneously with commercial investment in urban locations.

3.22 Our initial view is that these public rollout schemes could complement a RAB charge control in non-competitive areas by helping to fund the deployment of fibre services to some of the hardest to reach premises. Similar to our approach to the BDUK scheme when setting the 2018 WLA charge controls, we are likely to exclude the costs of any areas being served by public schemes when calculating the cost base for the non-competitive area charge controls.²⁰

3.23 Alongside this consultation, we will engage closely with the relevant public bodies to ensure that our market review process takes account of relevant public sector investments, while enabling public funding schemes to best deliver benefits for consumers.

Key design choices for setting a RAB charge control in non-competitive areas

3.24 In order to set a RAB charge control, there are likely to be a number of design choices that will influence the balance between achieving each of our three objectives in the non-competitive areas.

3.25 For illustrative purposes, we have set out some of the key RAB design choices in Table 3. We have outlined how we might approach each of these design choices and the types of issues we would likely take into account when developing our RAB design proposals.

²⁰ In the 2018 WLA charge controls, while we excluded BDUK areas when calculating the level of the controls, the charge controls applied to all WLA products in the UK, including those in BDUK areas. This effectively assumed that with the BDUK funding, the average cost to Openreach of serving BDUK areas would equal the average cost of serving the rest of the UK (referred to as the “commercial area”).

Table 3: Illustrative example of how a RAB charge control for non-competitive areas could be designed

Design choice	Description and possible approach	Relevant considerations
1. Which services would the charge controls apply to?	<p>We would need to decide which services would be in the scope of the charge controls and which services to allow pricing flexibility on.</p> <p><u>Possible approach:</u></p> <ul style="list-style-type: none"> • Charge controls on all WLA copper based services: MPF, GEA 40/10, GEA 55/10 and GEA 80/20. • Pricing flexibility for fibre services. 	<ul style="list-style-type: none"> • Pricing flexibility for higher bandwidth FTTC services in non-competitive areas would likely result in higher prices for consumers with minimal countervailing benefits related to competitive network investment. • Pricing flexibility for fibre services (e.g. FTTP and G.Fast²¹) could enable BT to determine the premium it earns for fibre services and provide some flexibility to adjust prices over time to encourage migration to the new services and recover investment costs.
2. Is there a need for the HON adjustment in a RAB approach?	<p>In previous charge controls, which applied to all geographic areas, we applied a HON adjustment.</p> <p><u>Possible approach:</u></p> <p>Set charge controls on all services on the basis of BT's costs with no HON uplift.</p>	<ul style="list-style-type: none"> • Under the 2018 WLA review, the national charge controls for MPF and GEA 40/10 services were set on the basis of BT's costs but included a HON uplift in order to provide good investment incentives. • A RAB framework is an alternative means for incentivising investment, and one that is more suitable where competitive pressures from rival networks are expected to be limited.
3. Which costs would enter the RAB?	<p>In a RAB charge control, investment gives rise to a pool of costs (the RAB) that would be shared across multiple services. We would need to establish which costs should be included in the RAB.</p> <p><u>Possible approach:</u></p> <p>The costs of fibre services that would otherwise not be incrementally profitable for BT to deploy would enter the RAB.</p>	<ul style="list-style-type: none"> • We would likely aim to minimise the impact on consumers by only including in the RAB those costs that are necessary to give BT sufficient incentives to invest in fibre services.

²¹ G.fast: A Digital Subscriber Line standard that supports higher bandwidth transmissions than ADSL and VDSL technologies, often over short copper lines.

Design choice	Description and possible approach	Relevant considerations
<p>4. Which services would the RAB be allocated to?</p>	<p>Having determined which costs will comprise the RAB, we would need to decide which services to allocate the RAB to.</p> <p><u>Possible approach:</u></p> <p>Allocate the RAB to:</p> <ul style="list-style-type: none"> • BT’s fibre services in non-competitive areas; • BT’s copper-based services (MPF, WLR, FTTC) in non-competitive areas. 	<ul style="list-style-type: none"> • We would likely allocate a portion of the RAB directly to fibre services in non-competitive areas based on our forecast of how much of the investment BT could recover directly from fibre customers. • In deciding which of BT’s other services to allocate the remaining RAB to (via a ‘RAB mark-up’), we would likely aim to minimise the distortion by spreading the costs as widely as possible to those consumers who stand to benefit from the investment in fibre services.
<p>5. Approach to forecasting the RAB</p>	<p>We would need to forecast the size of the investment in fibre services in non-competitive areas to include in the RAB and calculate the required mark-up on MPF, WLR, and FTTC services.</p> <p><u>Possible approach:</u></p> <p>Use a variety of information sources to forecast the RAB, including BT’s internal business planning documents; our own cost modelling of deploying; and benchmarking of similar deployments in other countries.</p>	<ul style="list-style-type: none"> • We would take account of the risk that under-recovery may result in BT choosing not to invest in fibre services. For this reason, we may need to consider setting the RAB based on assumptions that increase the probability of BT making profits above its cost of capital.
<p>6. Ensuring BT delivers the investment</p>	<p>There are likely to be various ways to provide BT with incentives to deliver on its fibre investment plan. How we set and administer the charge control is one way we are likely to explore.</p> <p><u>Possible approach:</u></p> <p>Linking BT’s recovery of investment costs to outputs of the investment. E.g. the RAB mark-up being added to copper charges could be made contingent on BT achieving investment delivery targets in each year via the charge control formula.</p>	<ul style="list-style-type: none"> • Linking recovery of investment costs to outputs would offer the advantage that copper charges would not unduly increase if BT failed to deliver. • Targets could be set on the basis of a range of output metrics, such as: network coverage, take-up of fibre services, average available download speeds, or a combination of these. • However, we would also need to consider the complexity required to link investment cost recovery to investment outputs, our ability to monitor outputs and the risks of setting targets too high or too low.

- 3.26 In addition to the above, there is also a range of more detailed design elements associated with setting a RAB-based charge control, including:
- How much of the RAB we allocate to each service;
 - How we recover the fibre investment costs over time;
 - The appropriate rate of return for the RAB assets; and
 - How we rebase the RAB when we come to set the next charge control (2026 onwards).
- 3.27 Clearly, the introduction of RAB-style regulation would be a departure from our traditional approach to regulation. In this document, we have set out how it could be used to achieve our regulatory objectives in non-competitive areas.
- 3.28 However, we recognise that there could be other approaches to regulation that may also meet those objectives. We encourage stakeholders to provide their views on alternative approaches to regulation and how these might fit with achieving our regulatory objectives.
- 3.29 In addition, we acknowledge that the design of RAB regulation will be a key determinant of whether we achieve our objectives. In this document, we have identified some of the high level design choices. We recognise that stakeholders may have views on further design elements. We welcome those views.

Leased line services

- 3.30 In non-competitive areas retail competition in leased lines will continue to rely on access to Openreach products. However, rather than rely primarily on Openreach's active Ethernet wholesale products (leased lines), we propose to require BT to supply dark fibre where we find SMP. We envisage that over time dark fibre will be the primary focus of our regulation. Accordingly, we propose that dark fibre be supplied at cost, while regulation of the existing active products is maintained on a "safeguard" basis, recognising that the industry will take time to adjust to the shift to dark fibre.

Network access and charge controls for dark fibre and leased line services

- 3.31 Dark fibre is a service providing access to unlit strands of optical fibre between two points in Openreach's network. Other telecoms providers take the unlit fibre and attach their own electronic equipment to deliver services. This differs to network access to Openreach's "active" leased line services, which require the telecoms provider to use Openreach's electronic equipment at each end of the fibre.
- 3.32 Dark fibre is most suited to situations where dedicated point to point fibre is needed in configurations comparable to those provided by leased lines (i.e. access segments - between a customer premises and a BT exchange; or inter-exchange segments - between BT exchanges).
- 3.33 Our view is that dark fibre provides several competition benefits over leased line services primarily around giving telecoms providers greater flexibility over the equipment and

services they can offer. This service flexibility can result in a lower cost of provision and service innovations. For example, telecoms providers using dark fibre can:

- choose their own electronic equipment, enabling them to deliver services that better suit their own network requirements and their customers' needs;
- make their own decisions on bandwidth upgrades based on the underlying costs of upgrades;
- eliminate inefficient active equipment duplication; and
- potentially deliver improvements more quickly than they can currently.

3.34 Our preliminary analysis suggests that even though non-competitive areas comprise rural and smaller urban areas, there is significant potential leased lines demand (based on the number of large business and mobile backhaul sites). This suggests that the additional benefits from having access to dark-fibre over leased lines only could be significant.

3.35 We also consider that the availability of dark fibre in non-competitive areas could provide wider benefits since it would improve synergies with fibre deployments in potentially competitive areas by allowing competing telecoms providers to offer similar products across both areas.

3.36 The primary concern of introducing a dark fibre remedy is that it could weaken incentives for rival providers to invest in networks and services. However, since non-competitive areas are those where there is limited potential for rival networks to be deployed, we consider the risk of dark fibre undermining large scale multi-service deployments to be less relevant in our assessment.

3.37 Given the competitive benefits of dark fibre relative to leased lines, our initial view is that BT should be required to provide network access to dark fibre.²²

3.38 In addition, given that where we find BT to have SMP, we expect that it will have the incentive and ability to set an excessive price for dark fibre, our initial view is that we should set a charge control.

3.39 Our understanding from industry is that given the benefits of dark fibre we should shift the focus of our regulation from active leased line products to dark fibre. Our view is that in shifting our regulation, we should impose a cost-based charge control for dark fibre but relax the intensity of regulation of the active products. This approach will encourage take-up, assist the shift towards primary reliance on dark fibre, and deliver the strongest benefits.

²² We would anticipate that dark fibre would be mainly used for leased lines sold to enterprise customers, mobile and fixed access backhaul connections. However, we recognise that it is difficult to predict all of the ways in which dark fibre could be used. We would therefore not envisage placing usage restrictions on the use of dark fibre.

- 3.40 We recognise that customers have traditionally been reliant on having network access to BT's leased lines, so it is clear that regulatory protection on those products needs to continue during this review period. We consider that it is important to ensure a smooth transition as customers increasingly migrate to using dark fibre from 2021. Therefore, we propose to require that BT provides network access for leased line circuits up to 1Gbit/s and VHB circuits.
- 3.41 However, given the proposed shift in regulation towards dark fibre, we do not propose to impose a cost-based charge control on leased lines. Instead, we propose to set a safeguard cap on leased line circuits up to 1Gbit/s and VHB circuits. Our initial view is that this should be set so that prices remain broadly flat in real terms during the review period.

Other regulatory remedies

- 3.42 Subject to the above, we propose to impose the same general requirements on BT in relation to the wholesale provision of network access in wholesale local access and leased line services as those in potentially competitive areas, as set out in paragraph 2.33 above.
- 3.43 As explained in paragraph 2.34 the purpose of our proposal on geographic discounts in potentially competitive areas is to prevent BT from acting so as to deter rival network build. We have provisionally defined non-competitive areas to cover locations where (a) BT is the only provider, (b) no rival network has announced plans to build, and (c) there is no contiguous urban area of more than 20,000 premises. Our initial view is that we would not prohibit BT from offering geographic discounts in non-competitive areas.

Consultation questions:

Question 3.1: Do you agree with our overall proposed approach to regulation in non-competitive areas?

Question 3.2: Do you agree that a RAB charge control framework is appropriate for non-competitive areas? If not, please explain why you think an alternative is more appropriate.

Question 3.3: Do you have any comments on the design of a RAB charge control for non-competitive areas?

Question 3.4: Do you agree with our proposal to introduce dark fibre in non-competitive areas?

4. Approach to Quality of Service

Introduction

- 4.1 In this section, we set out our initial proposals to setting *ex ante* regulation relating to Quality of Service (QoS) for the period 2021-2026.
- 4.2 We are minded to maintain a form of QoS standards across the current range of regulated products where we find SMP, but we would not seek further quality improvements in the levels we set for Openreach. We think this approach should protect consumers during the copper to fibre migration and allow BT the flexibility to invest resources into their new network.

We have put in place regulation that has seen BT improve its delivery of QoS

- 4.3 We consider that where BT has SMP, it could have the ability and incentive to provide sub-optimal QoS. This could be to the detriment of retail competition based on access to Openreach's network and ultimately consumers.
- 4.4 Therefore, our initial view is that QoS requirements are likely to be necessary to support the effective functioning of network access remedies that promote competition and provide customer benefits.
- 4.5 Currently, our QoS regulation comprises of the following remedies:
- a) **Key Performance Indicators (KPIs):** Specified information to be provided by Openreach for the purposes of assessing performance and providing transparency of service provision.
 - b) **Service Level Agreements (SLAs):** We mandate that Openreach's reference offer must include a contractual commitment provided by BT to telecoms providers about service standards.
 - c) **Service Level Guarantees (SLGs):** We mandate that Openreach's reference offer must include a contractual commitment specifying the amount of compensation payable by Openreach to a telecoms provider for a failure to adhere to an SLA.
 - d) **QoS standards:** The performance standards that we require Openreach to meet relating to provisioning and fault repair, previously known as Minimum Service Levels. Whereas SLGs oblige Openreach to pay compensation to telecoms providers at the individual activity level (for example, for each repair or installation where Openreach has not met the SLA), quality standards apply to Openreach's performance at the aggregate level over a defined period with the aim of ensuring that quality is maintained at a sufficient level to prevent material detriment to competition and

customers. These are imposed under direction powers, which give us scope to amend the QoS standards if circumstances change.

- 4.6 For WLA services, we have seen a steady improvement and stabilisation of in Openreach's delivery of QoS since we imposed increasingly challenging QoS standards in relation to repair and provision in the 2014 review and again in the 2018 review. The QoS standards introduced in 2018 in particular took account of rising customer needs and the widespread take up of new services by requiring the vast majority of repairs to be completed within a reasonable timeframe and expanding their scope to cover FTTC services.²³
- 4.7 For leased lines services, we have seen a significant improvement in Openreach's Ethernet provisioning performance since we first imposed QoS standards in the 2016 BCMR.²⁴ This has been reflected in the changing attitudes of Openreach's leased line customers - they have told us that the level of performance has improved significantly.²⁵ Therefore, in the BCMR 2018 consultation, we proposed broadly the same form of remedies for QoS as those in the 2016 BCMR and the Temporary Conditions statement, though requiring further incremental improvement in performance in some cases.
- 4.8 Looking forwards, we consider that our broader strategy to incentivise fibre investment and network competition will naturally improve QoS outcomes.²⁶ This is because:
- a) Increased competition in fibre networks will drive better QoS outcomes in potentially competitive areas.
 - b) Moving from copper-based networks to fibre networks should significantly reduce the number of faults in the network.
- 4.9 In the longer term, we expect that the combination of these effects will have a positive impact on the QoS that consumers receive. In light of this, below we consider how our regulatory remedies can ensure good QoS outcomes during the expected transition to fibre networks.

²³ Ofcom, 2018. *Quality of Service for WLR, MPF and GEA*.

https://www.ofcom.org.uk/data/assets/pdf_file/0007/112210/statement-qos-wlr-mpf-gea2.pdf

²⁴ Ofcom, 2018. *BCMR Consultation*, 15.24-5. https://www.ofcom.org.uk/data/assets/pdf_file/0025/124729/lcc-bcmr-2018-volume-1.pdf

²⁵ Ofcom, 2018. *BCMR Consultation*, 15.24-5.

²⁶ Ofcom, *Regulatory certainty to support investment in full-fibre broadband*,

https://www.ofcom.org.uk/data/assets/pdf_file/0025/116539/investment-full-fibre-broadband.pdf

We think a maintaining our current approach will meet our objectives

There is an ongoing need to maintain a form of standards

- 4.10 Given that historically, the combination of SLAs and SLGs and equivalence was not sufficient incentive to prevent a decline in Openreach's QoS, we are minded not to rely on this approach alone to ensure service quality.
- 4.11 As explained above, we consider that some form of binding requirements are necessary, broadly similar to the standards that we have already imposed.
- 4.12 Notwithstanding the above, we would be willing to consider replacing specific regulation with binding commitments from BT if this offers benefits to Openreach's customers.²⁷ In a similar vein, if Openreach and industry can reach agreement around specific changes to the SLA/SLGs that are mutually beneficial, then we would also be willing to consider alterations to (or even removal of) the standards.

Maintaining the current level of standards is likely to be appropriate

- 4.13 Our initial view is that we should broadly maintain the QoS standards and levels on regulated products as at 2021 as the standard to be applied for the next review period.
- 4.14 Firstly, we note that there is broad stakeholder satisfaction with current QoS levels. Requiring QoS levels to increase further is unlikely to be appropriate given what we would expect there to be limited benefits to customers set against high product costs of further QoS improvements. In this regard, we note that as QoS standards increase and tend towards operational limits, the additional cost of making small improvements can be disproportionately large.²⁸
- 4.15 Secondly, we would expect that a fibre network will in the longer-term, lead to improved QoS outcomes for customers. Against this background, we recognise that there is a downside to Openreach unduly devoting its resources to meeting higher QoS levels rather than focusing on fibre deployment.
- 4.16 Thirdly, and related to the earlier points, we note that increasing QoS levels (and investment) on copper services still further, as Openreach transitions to a fibre network, will increase the risk of stranded assets on the legacy network given its remaining lifespan.

²⁷ The recently adopted European Electronic Communications Code provides national regulatory authorities with powers to make commitments by operators legally binding.

²⁸ Ofcom, 2018. *Quality of Service for WLR, MPF and GEA*, Section 5-7 for operational capabilities and Section 10 for Resourcing.

Approach to particular products

QoS regulation for FTTP

- 4.17 We consider that a form of QoS standards should apply to fibre services at the point our charge controls switch to fibre services.
- 4.18 We expect that the appropriate QoS standards and levels would have to be imposed post the publication of the Fixed Telecoms Market Review Statement in 2021. This is to allow a bedding in period to identify the appropriate standards and levels to apply to the new FTTP product.
- 4.19 Notwithstanding the above, we also recognise that imposing equivalent QoS standards on fibre as copper, in advance of switching from copper to fibre, may be appropriate to protect customers using FTTP. We are open to comments on what safeguard might be appropriate.

QoS regulation for PIA

- 4.20 While PIA was introduced in 2010, a number of improvements to the product have been made (and are continued to be expected) as a result of our recent regulatory decisions. Given these changes (and the expected increase in the take-up of PIA) we consider that a period of time will be needed to understand if QoS standards are required post-2021. Therefore, we intend to monitor Openreach progress against the KPIs that have been agreed with industry and use direction powers to apply QoS standards if we consider it appropriate.

QoS regulation for Dark Fibre

- 4.21 In the 2018 BCMR consultation we proposed to apply the proposed Ethernet QoS standards to the proposed BT Only Inter-exchange dark fibre product from year two.²⁹ In part this is due to the initially low volumes that we expect for dark fibre in that period, but also the similarities in ensuring QoS between Ethernet and dark fibre products.
- 4.22 As part of our review of fixed telecoms markets, we will consider whether there is a need to have a specific set of standards for dark fibre that are separate from Ethernet standards.

Consultation question:

Question 4.1: Do you agree with our proposed overall approach to QoS?

²⁹ Ofcom, 2018. *BCMR Consultation*, 15.9.

5. Retirement of the copper network

Introduction

- 5.1 Over the next five to ten years there is potential for significant investment in new fibre networks. We anticipate that BT will play a significant part in the overall level of this investment as it deploys its own fibre network.
- 5.2 Our understanding is that Openreach currently anticipates that the transition from its copper to its fibre network will happen on an exchange by exchange basis.
- 5.3 We expect that Openreach's fibre network to be predominantly using Fibre to the Premises (FTTP), however, in some areas G.fast may be provided to achieve 100% coverage. We also understand that Openreach is planning to offer a voice-only product on its fibre network.
- 5.4 Ultimately, as Openreach deploys its fibre network it will need to retire its copper-network to avoid the dual costs of running parallel networks.
- 5.5 In our view, as set out in our July 2018 Strategic Policy Position and supported in the UK Government's Future Telecoms Infrastructure Review (FTIR), regulation must be able to support the smooth transition from Openreach's copper network to its fibre network otherwise we risk undermining the case for such investment to the long term detriment of all consumers.
- 5.6 In this section, we set out proposals that we consider will support a smooth transition from Openreach's copper network to its fibre network. This includes:
 - a) Proposals for switching the focus of our regulation from products based on Openreach's copper network to those provided over its fibre network when the fibre network is deployed;
 - b) Proposals for relaxing some specific regulation relating to copper products in advance of a fibre network being available; and
 - c) Some observations on issues relevant to ensuring consumer protection.

Proposals for switching regulation when a fibre network is deployed

- 5.7 In Section 2 and Section 3, we set out our proposals for regulating wholesale local access services in potentially competitive areas and non-competitive areas respectively. We proposed that the initial focus of our regulation (and importantly our charge control remedies) should be on services provided over Openreach's copper-network.
- 5.8 However, once a fibre network is deployed we propose that our regulation should transition from being focused on wholesale local access services provided on the copper network to those provided on Openreach's fibre network.

- 5.9 Our understanding is that Openreach is planning to deploy its fibre network on an exchange by exchange basis. That is, it does not intend to decommission parts of its copper network at sub-exchange level. Our initial view is that we should look to switch the focus of our regulation from Openreach's copper services to its fibre services on a similar basis (i.e. on an exchange basis when specific triggers and requirements are met).
- 5.10 While we anticipate that the major incentives for customers to migrate from copper-services to fibre services will be the improvement in the underlying product, we also recognise that our regulation of copper services has an impact on those incentives.
- 5.11 For example, in relation to our charge control remedies, the relative prices of fibre and copper services will be important to those incentives. That is, the lower the price of copper-services relative to fibre services, the weaker the incentives for customers to migrate to the fibre-network. Our initial view is that subject to having regulated products on the fibre network, Openreach should be allowed price flexibility in relation to its copper-based products to incentivise customer migration.
- 5.12 Our view is that the following issues will be relevant to the transition of regulation focused on Openreach's copper network to its fibre network:
- a) the trigger and requirements related to Openreach's fibre network relevant to commencing a process of transitioning regulation to Openreach's fibre network;
 - b) the length of time taken to complete the transition; and
 - c) the level of regulated charges for services provided on the fibre network.
- 5.13 We propose applying the following requirements:
- a) Openreach is required to deploy its fibre network in an exchange area to provide 100% coverage. As such, all customers will have the choice of purchasing a fibre service prior to the focus of our regulation switching away from copper-services.
 - b) Openreach is required to provide a 40/10 service on its fibre network.
- 5.14 Our view is that to ensure a smooth transition for customers, there will need to be a period of time (subsequent to the above requirements being met), where we continue to regulate copper-based services prior to switching the focus of our regulation to a set of regulated fibre products. This needs to be sufficiently long to allow rival access seekers to inform their customers and manage the future changes to the focus of our regulation.
- 5.15 During that time we propose an overlap where we continue to regulate copper-based services in parallel to regulating fibre-base services. We propose that that this should be at least two years. In addition, we propose that at the start of this overlap period, Openreach is no longer required to provide new copper connections (including no longer being required to migrate a customer back to a copper service from a FTTP service).
- 5.16 We propose that when this two-year period has elapsed, we would lift price regulation on copper-based services and switch to regulating a set of fibre-based products only.

The price of regulated fibre-based products

- 5.17 Our traditional approach to setting charge controls during technological change is that the regulated price on the new technology should be no higher than the comparable service provided on the legacy technology.
- 5.18 By way of illustration, this could be interpreted to mean that in relation to our proposals for setting a charge control in potentially competitive areas, the charge for the regulated 40/10 service on the fibre network should be set no higher than that of the 40/10 service provided on the copper network.
- 5.19 However, we consider that services provided on a fibre network have differences to those provided over the copper-network that means they are not comparable services. More specifically, we consider that services provided on a fibre network will offer the following benefits:
- a) A slightly higher and more stable speed.
 - b) Fewer faults and so will deliver a more reliable service for consumers.
 - c) Access seekers will benefit from cost-savings in the value chain as a result of delivering a more reliable service to customers.
- 5.20 Given that these services are not precisely comparable, we are concerned that setting the same charges for the 40/10 service on the copper network and fibre network may undermine incentives to invest in fibre. In order to maintain the investment incentives, we believe a moderately higher charge for the 40/10 product on the fibre network would be appropriate. Our view is that this mark-up should be determined by the value of the additional benefit to customers and access seekers of the 40/10 product being provided over a fibre network.

Proposals for relaxing some specific regulation relating to copper products in advance of a fibre network being available

- 5.21 We also propose modifying existing copper access obligations prior to switching regulation to fibre.

Modification of requirement to develop new copper-based services

- 5.22 The general access obligation requires BT to provide network access on reasonable request and on fair and reasonable terms, conditions and charges.
- 5.23 As the focus of investment and innovation moves to new fibre based services, we are concerned that a continued obligation to develop new services based on copper has the potential to add layers of complexity to the eventual transition process.
- 5.24 Accordingly, we propose to modify the general access obligation, so that it does not apply to the development of new access services where they would be based on legacy copper assets.

- 5.25 BT would continue to be required to supply existing copper services and would still be able to develop new services by commercial agreement outside the regulatory framework.

Modifications to QoS requirements

- 5.26 As discussed in Section 4, we believe that we should broadly maintain the current QoS standards for the existing copper services.
- 5.27 Notwithstanding the above, we recognise that there could be circumstances where repair and maintenance of the copper network results in significant investment and that replacing the copper connection with a fibre connection is more economically rational.
- 5.28 Where Openreach elects to replace a copper connection with a fibre connection, we would expect that Openreach offers satisfactory commercial terms and ensures that the existing consumers services can be fully supported by the fibre network.
- 5.29 We also acknowledge, that in the event that Openreach opts to replace a copper service with a fibre service rather than repair the copper service, QoS regulation will need to be modified.

The importance of consumer protection

- 5.30 As Openreach retires its copper network additional protections may be needed for vulnerable customers and those taking voice-only or basic broadband services.
- 5.31 For vulnerable customers, some of the principles that Ofcom set out in our statement *The Future of Fixed Telephone Services*³⁰ to help ensure a smooth transition to voice over IP services may also be relevant to the retirement of the copper network. In particular, the principles state that communications providers should:
- a) Give adequate notice of service changes;
 - b) Ensure that all communications regarding the migration are clear and timely and in a format that reflects the needs of the customer; and
 - c) Assess customers' needs and offer help with migration if necessary.
- 5.32 As the installation of fibre connections will typically require access to customers' premises, telecoms providers will also need to ensure that suitable measures are in place to protect and reassure customers. All reasonable efforts will need to be made, and adequate warnings given, before any disconnections of service due to repeated failures to make contact with the customer or to obtain access to the premises. Additional measures may

³⁰ <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/future-fixed-telephone-services> para 2.19

be appropriate to avoid disconnections of vulnerable customers dependent on the landline.

- 5.33 We would expect that, despite the move to fibre connections, some consumers will continue to want access to voice-only services or have a need only for basic internet access at an affordable price. In the first instance, we would expect that the competitive market will respond by developing a broad range products to meet the needs of consumers. We will monitor developments in the market closely and consider whether regulatory interventions, beyond any universal service requirements, are needed to protect consumers.

Consultation questions:

Question 5.1: Do you agree with our overall approach to transitioning regulation as BT deploys its new fibre network?

Question 5.2: Do you agree our proposal not to require BT to offer new forms of wholesale access to its copper network?

A1. Responding to this consultation

How to respond

- A1.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 7 June 2019.
- A1.2 You can download a response form from <https://www.ofcom.org.uk/consultations-and-statements/category-1/promoting-investment-competition-fibre-networks-approach-remedies>. You can return this by email or post to the address provided in the response form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to approachtoremedies@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>). This email address is for this consultation only, and will not be valid after 7 June 2019.
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation:
- Competition Group
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:
- Send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files. Or
 - Upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.
- A1.6 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)
- A1.7 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.8 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.

- A1.9 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 4. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.10 If you want to discuss the issues and questions raised in this consultation, please contact James Francey on 020 7783 4363, or by email to james.francey@ofcom.org.uk.

Confidentiality

- A1.11 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, www.ofcom.org.uk, as soon as we receive them.
- A1.12 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.13 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.14 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <https://www.ofcom.org.uk/about-ofcom/website/terms-of-use>.

Next steps

- A1.15 Following this consultation period, Ofcom plans to set out full details of our regulatory proposals in the fixed telecoms market, alongside our market analysis and SMP findings, in December 2019.
- A1.16 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details please see <https://www.ofcom.org.uk/about-ofcom/latest/email-updates>

Ofcom's consultation processes

- A1.17 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.18 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.19 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary:

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

A2. Ofcom's consultation principles

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

Before the consultation

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

During the consultation

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

After the consultation

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

A3. Consultation coversheet

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

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

Nothing

Name/contact details/job title

Whole response

Organisation

Part of the response

If there is no separate annex, which parts? _____

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

DECLARATION

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

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

A4. Consultation questions

Question 2.1: Do you agree with our overall approach to regulation in potentially competitive areas?

Question 2.2: What is your view of our access and charge control proposals for wholesale local access services in potentially competitive areas?

Question 2.3: What is your view of our access and charge control proposals for leased line services in potentially competitive areas?

Question 3.1: Do you agree with our overall proposed approach to regulation in non-competitive areas?

Question 3.2: Do you agree that a RAB charge control framework is appropriate for non-competitive areas? If not, please explain why you think an alternative is more appropriate.

Question 3.3: Do you have any comments on the design of a RAB charge control for non-competitive areas?

Question 3.4: Do you agree with our proposal to introduce dark fibre in non-competitive areas?

Question 4.1: Do you agree with our proposed overall approach to QoS?

Question 5.1: Do you agree with our overall approach to transitioning regulation as BT deploys its new fibre network?

Question 5.2: Do you agree our proposal not to require BT to offer new forms of wholesale access to its copper network?