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Wholesale Broadband Access Market Review

Consultation on market definition, market power
determinations and remedies

Consultation

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About this document

Broadband services play an important role in enabling residential and business consumers to access a range of content and services. Effective retail competition plays a key role in ensuring that consumers benefit from lower prices, greater choice, better quality services and innovation. It has also encouraged high take-up with 78% of consumers and businesses accessing fixed broadband.

This document sets out Ofcom's provisional assessment of competition within the UK's Wholesale Broadband Access markets. The services in these markets are bought by telecoms providers in order to supply retail broadband services to residential and business consumers.

This consultation covers our analysis of competition within these markets, focusing on determining whether any telecoms provider has a position strong enough to influence market outcomes. We then set out the regulatory instruments that we are proposing to introduce to protect competition in those areas where wholesale competition is not effective.

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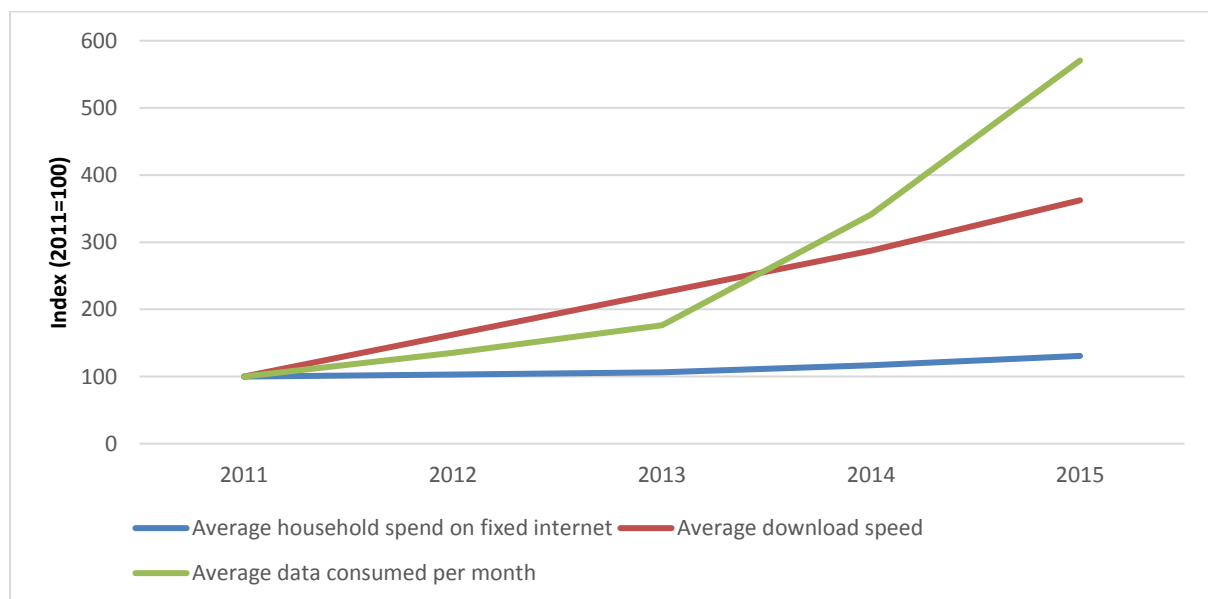
Section 1

Executive Summary

Introduction

- 1.1 Broadband has become an increasingly important service for both business and residential consumers in the UK and 78% of all UK premises now access a fixed broadband service.¹ In addition, usage of broadband has grown significantly as consumers access the internet on a growing number of devices for a diverse range of activities, such as watching online content, gaming and video calling. Usage has increased from 58GB to 132GB per month per residential connection in the last two years, and broadband speeds have also increased, on average up from 23Mbit/s to 37Mbit/s over the same period.²
- 1.2 Effective retail competition has been an important enabler of these changes. Competition keeps prices low, ensuring broadband and data are affordable, and propels technological innovation. As the graph below demonstrates, consumers' usage of data has grown significantly over the last five years, while the cost of their broadband connections has only risen slightly in real terms. In addition, there have been significant increases in the speed of broadband connections over the same period.

Figure 1.1: Trends in broadband spend, speeds and data usage relative to 2011



Source: *Connected Nations and Infrastructure reports 2011-2016* (<https://www.ofcom.org.uk/research-and-data/infrastructure-research>) and *Ofcom Communications Market Report 2016*, figure 1.2 (https://www.ofcom.org.uk/data/assets/pdf_file/0020/26273/uk_context.pdf)

Notes: Base is 2011=100; spend data originally in 2015 prices adjusted for inflation (CPI).

¹ Ofcom, *Connected Nations Report 2016*, December 2016, https://www.ofcom.org.uk/data/assets/pdf_file/0035/95876/CN-Report-2016.pdf, page 1.

² Ibid and Ofcom, *Connected Nations Report 2015*, 1 December 2015, https://www.ofcom.org.uk/data/assets/pdf_file/0028/69634/connected_nations2015.pdf, page 1.

- 1.3 BT has the largest fixed telecoms network in the UK, covering almost all premises. Most telecoms providers offer retail broadband services to customers using this network, at least to some extent. Some providers, such as Sky and TalkTalk, have installed their own equipment in many of BT's exchanges, through a process known as Local Loop Unbundling (LLU), and this gives them a high level of control over the services they can offer. Providers who have chosen not to use LLU generally purchase wholesale broadband services from BT. Virgin Media is the only significant telecoms provider in the UK who does not rely on BT's network at all, as it owns and operates a cable network that it uses to provide broadband, alongside other services such as Pay TV and telephony.
- 1.4 The only region of the UK that is not served by BT is the Hull Area. In the Hull Area KCOM owns and operates the largest telecoms network. The remainder of this document is concerned with the UK *excluding the Hull Area*. Alongside this document we have published another consultation on our findings and proposals for improving broadband competition in the Hull Area.³

Strategic context of our market review

- 1.5 In February 2016, we published the initial conclusions from our Strategic Review of Digital Communications (DCR). In this we set out our strategy to:
- encourage the large-scale deployment of new ultrafast broadband networks, including fibre direct to homes and businesses (sometimes called 'full-fibre') – these networks would support very high speeds and should be more reliable than copper networks;
 - produce a step change in quality of service – to incentivise more reliable services for consumers and automatic compensation if things go wrong;
 - reform of BT's access network division (Openreach) – to ensure greater independence from BT so that it serves all wholesale customers equally;
 - work with Government to make decent, affordable broadband a universal right for every home and small business in the UK;
 - empower consumers to make informed choices; and
 - deregulate and simplify whilst protecting consumers.
- 1.6 This WBA market review is one of the tools we are using to deliver our strategy, alongside other initiatives such as the Wholesale Local Access (WLA) market review (including proposals to facilitate telecoms providers' access to BT's ducts and poles), the review of Openreach's quality of service requirements, reform of Openreach and proposals on automatic compensation published earlier this year.

Wholesale regulation supports retail competition

- 1.7 Use of BT's network by other telecoms providers plays a key role in promoting and maintaining effective retail competition in broadband, and it is the regulation we impose in wholesale markets that ensures this access for competing telecoms

³ Ofcom, *Wholesale Local Access and Wholesale Broadband Access Market Reviews: Review of competition in the Hull Area*, 22 June 2017, <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-broadband-access-market-reviews-hull>.

providers. One of the main ways we have sought to ensure effective retail broadband competition is through regulation we have imposed in the WLA market, which sets the rules for access to BT's infrastructure (ducts, poles, cables, etc.) that provides the connection to consumers' premises. Measures we have introduced in the WLA market include LLU, Virtual Unbundled Local Access (VULA), used to deliver standard and superfast broadband respectively over BT's network, and Physical Infrastructure Access (PIA). In March 2017, we published a consultation on our proposals for regulating the WLA market, aimed at maintaining the current levels of competition while supporting investment in full-fibre networks,⁴ while in April 2017 we published a consultation seeking input into the work we are doing to improve Openreach's duct and pole access product, which results from PIA and supports investment in ultrafast broadband networks.⁵

- 1.8 This document is concerned with the Wholesale Broadband Access (WBA) market, which sits between the WLA market and retail services.
- 1.9 Historically BT's WBA products have played an important role in enabling telecoms providers to offer broadband services without having to invest in their own equipment, in some cases with the intention of building a customer base prior to investing. However, the use of WBA products by telecoms providers other than BT has steadily fallen over the last decade. The larger telecoms providers have unbundled BT's exchanges (using LLU) and invested in their own equipment. These providers now use LLU in the vast majority of the UK to supply retail broadband services.
- 1.10 We have consistently deregulated the WBA market in those parts of the UK where the presence of multiple operators using LLU and Virgin Media's cable network has meant that consumers have a choice of several broadband providers. In the 2010 WBA market review we only regulated areas accounting for around 22% of UK premises, and in the last review in 2014 we reduced this to less than 10% of UK premises.
- 1.11 Since the last review there has been some further use of LLU in the less competitive areas. However, of more significance, BT has upgraded its network to fibre in some of these areas which allows telecoms providers to serve more customers per exchange than they can using the existing copper network. The combination of these developments has reduced the number of areas of little or no broadband competition even further to around 2% of the country.
- 1.12 Retail competition in these areas of the UK (which we refer to as Market A) is limited and we do not expect that putting in place wholesale remedies to promote entry or expansion in this market would be likely to significantly increase retail competition. This is because a number of the main telecoms providers who operate nationally have told us that they have either stopped offering services in Market A or are not offering services to new customers. We consider this is likely to be due to the higher cost of serving these customers (due to location and the cost of running off-net systems for such a small number of potential customers) and the level of control that they have on the end-product compared to LLU and VULA services.

⁴ Ofcom, *Wholesale Local Access Market Review – Volume 1: Consultation on the proposed market, market power determinations and remedies, Consultation*, 31 March 2017, https://www.ofcom.org.uk/_data/assets/pdf_file/0033/99636/Vol1-Market-review.pdf.

⁵ Ofcom, *Wholesale Local Access Market Review: Consultation on Duct and Pole Access remedies, Consultation*, 20 April 2017, https://www.ofcom.org.uk/_data/assets/pdf_file/0008/101051/duct-pole-access-remedies-consultation.pdf.

1.13 Nevertheless, we consider it remains important to protect existing competition in Market A, otherwise consumers would have no choice (or limited choice) of broadband provider. Our proposals to achieve this objective are summarised below.

Our provisional conclusions and proposed regulation

Market definition and market power assessment

1.14 We have provisionally found that:

- services provided via copper, cable and fibre access networks are within the same market, but broadband services via mobile, wireless and satellite networks are outside the relevant market (consistent with the March 2017 WLA Market Review Consultation);
- all broadband speeds are in the same market;
- it is appropriate to now take superfast services provided over fibre access networks into account in the geographic market analysis; and
- taking account of competition delivered over copper, cable and fibre-access networks, the size of the geographic areas where consumers have limited choice of broadband provider has reduced significantly to around 2% of UK premises.

1.15 We have analysed the conditions of competition in these markets, our provisional findings are that:

- BT has SMP in the provision of WBA services in Market A (which accounts for around 2% of UK premises); and
- no operator has SMP in the provision of WBA services in Market B (which accounts for 97.3% of UK premises).⁶

Proposed regulation

1.16 As set out above, we have provisionally found that the size of Market A should reduce to 2%. In addition, we are proposing to put a number of measures in place to protect existing competition in Market A. In the particular circumstances of this market, we do not consider it is appropriate to put a charge control in place on any of the WBA services as we consider consumers are unlikely to face excessive retail prices in Market A as a result of indirect constraints from BT's retail national pricing and the level of competition in the rest of the country. This approach is consistent with our strategic aim to deregulate and simplify regulation where possible. Our proposed remedies are listed in Table 1.1 below.

⁶ The 0.7% remainder of UK premises are in the Hull Area and we are separately consulting on proposals for wholesale broadband regulation in this market.

Table 1.1: Overview of proposed regulation for WBA in Market A

Proposed regulation on BT in Market A
A requirement to provide network access on reasonable request and on fair and reasonable terms, conditions and charges
A prohibition against discriminating unduly in the supply of services, and a requirement to supply services on an Equivalence of Inputs (EOI) basis (except those existing services not currently provided on an EOI basis)
A requirement to publish a reference offer
A requirement to notify changes to terms, conditions or charges
A requirement to notify changes to technical information
A requirement to publish quality of service information
An accounting separation obligation
A cost accounting obligation

Consultation and next steps

- 1.17 We invite comments from stakeholders on the proposals in this document. The consultation runs for 12 weeks and the deadline for responses is 14 September 2017. Annex 1 provides further details of how to respond.
- 1.18 We aim to publish our final conclusions in March 2018 for the market review period from 1 April 2018 to 31 March 2021.

Section 2

Introduction

Scope and purpose of this review

- 2.1 In this review, we assess the state of competition in the Wholesale Broadband Access (WBA) market. Where competition is not effective we consider how best to regulate the behaviour of any company we find to have Significant Market Power (SMP), which is a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.
- 2.2 The WBA market is positioned between retail broadband services, i.e. the market for services that consumers buy, and the Wholesale Local Access (WLA) market, which relates to the physical connections to consumers' premises. We published a consultation on our review of the WLA market in March 2017.⁷
- 2.3 This consultation focuses on the WBA market in the UK excluding the Hull Area.⁸ It sets out our proposals on product and geographic market definition, Significant Market Power (SMP) and appropriate remedies.
- 2.4 In addition, we have today published a separate document consulting on our proposals in the Hull Area in both the WLA and WBA markets.

Background to this consultation

WBA product description

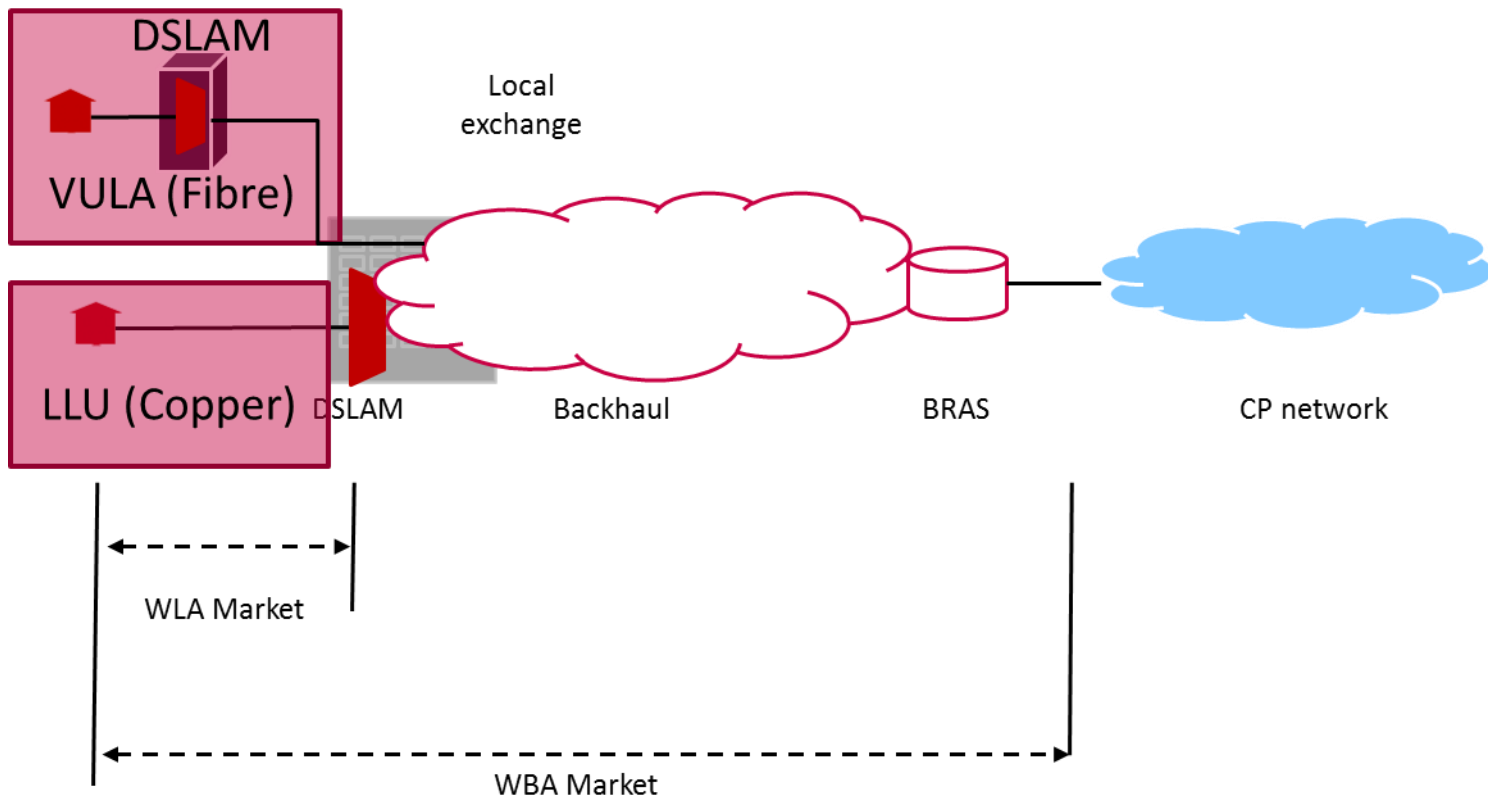
- 2.5 Figure 2.1 below shows WBA services provided over copper and fibre access networks using services falling within the WLA market. Local Loop Unbundling (LLU) and Virtual Unbundled Local Access (VULA) are the most widely used WLA services.
 - LLU enables providers to deliver standard broadband over BT's copper network through either Metallic Path Facility (MPF) or Shared Metallic Path Facility (SMPF).
 - VULA provides access to BT's fibre network through a virtual connection. BT meets this obligation through the provision of Generic Ethernet Access (GEA). It has variants: GEA-FTTC and GEA-FTTP. VULA allows telecoms providers to take ownership of the fibre connection and to integrate it into their network at the local exchange along with LLU.
- 2.6 Building an access network or using LLU and VULA services allows telecoms providers greater flexibility in the services that they offer to consumers. However, this also requires significant investment from telecoms providers. Purchasing a WBA product allows telecoms providers to offer retail services without having to undertake the level of investment in infrastructure required to build a network. However, as

⁷ Ofcom, Wholesale Local Access Market Review Consultation, 31 March 2017, <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>.

⁸ The 'Hull Area' refers to the area where KCOM operates as the incumbent and consists of the Kingston upon Hull City Council area and some parts of the East Riding of Yorkshire Council area.

WBA services aggregate traffic for handover at a limited number of connection points, this means that the telecoms provider taking the service has less flexibility. Therefore, product differentiation among telecoms providers who use WBA services is focussed more on retail level features.

Figure 2.1: WLA and WBA services using current generation copper access and next generation networks



2.7 The WBA products shown in Figure 2.1 are built using a number of elements:

- the access network considered in the WLA market review, which includes the connection from the customer's premise to the local exchange either using copper or a combination of copper and fibre;
- the broadband equipment at the local exchange (the Digital Subscriber Loop Access Multiplexor (DSLAM));⁹
- backhaul connectivity across the WBA provider's network; and
- the functionality of the Broadband Remote Access Server (B-RAS) which provides management of the consumer's internet sessions.

2.8 WBA products are provided to telecoms providers (including BT's retail divisions) by BT Wholesale but LLU and VULA are provided by Openreach. BT Wholesale provides a number of copper-based WBA services using the network architecture shown in Figure 2.1. The DSLAM located at the exchange may support ADSL (which

⁹ Telecoms providers may provide voice and broadband over the copper access line by deploying a Multi-Service Access Node (MSAN) rather than a DSLAM. However, the broadband service provided over the MSAN is equivalent to that provided via a DSLAM.

offers a maximum headline speed of 8Mbit/s downstream) or ADSL2+ technology offering headline speeds of up to 24Mbit/s.

- 2.9 Using ADSL2+ technology, BT provides the Wholesale Broadband Connect (WBC) product. BT uses ADSL to provide its IPstream product. IPstream is generally now only offered where BT has not deployed WBC and is being withdrawn in exchanges where WBC is provided. BT has informed us that it is planning to deploy WBC to replace IPStream services in the remainder of its exchanges (which currently cover between 500,000 and 600,000 premises).¹⁰
- 2.10 BT has also deployed fibre to the cabinet (FTTC) and fibre to the premises (FTTP).
- FTTC means that the DSLAM is located in the street cabinet (which is closer to the customer than the local exchange). The cabinet is then connected to the network using fibre while the copper network remains in place between the customer's premises and the cabinet. The DSLAM in the cabinet uses very high bit rate DSL (VDSL2) technology.
 - FTTP replaces the access connection between the customer's premises and the network completely with fibre and no DSLAM is needed.¹¹
- 2.11 Some of BT's WBA services are based on FTTC and FTTP technology. These offer headline speeds of up to 80Mbit/s for FTTC and up to 330Mbit/s for FTTP.
- 2.12 The characteristics of WBA services determine the main features of the retail broadband offers that they support.
- The maximum downstream speed is constrained by the specific equipment deployed by the WBA provider. For services that use the copper access network or Fibre to the Cabinet (FTTC), the distance between the customer premises and the local exchange or cabinet respectively is a limiting factor on the speed of connection.
 - As well as the maximum downstream speed available, retail services can also be differentiated by maximum download limits and, potentially, lower speed during peak hours. The telecoms provider purchases capacity on the WBA provider's network and so can control the quality provided to their end customers by the amount of capacity they purchase.

The findings of the last WBA market review

- 2.13 In June 2014, we published our findings from the last WBA market review.¹² In that review we concluded that the relevant product market was:

“Asymmetric broadband access and any backhaul as necessary to allow interconnection with other communications providers which

¹⁰ BT presentation to Ofcom on 7 June 2017, BT response to 2nd WLA/WBA Information request dated 14 June 2017.

¹¹ FTTP is an access network structure in which the optical fibre network runs from the local exchange to the customer's house or business premises. The optical fibre may be point-to-point – there is one dedicated fibre connection for each home – or may use a shared infrastructure such as a gigabit passive optical network (GPON).

¹² 2014 WBA Market Review Statement. Ofcom, *Review of the wholesale broadband access markets: Statement on market definition, market power determinations and remedies*, 26 June 2014, https://www.ofcom.org.uk/_data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf

provides an always on capability, allows both voice and data services to be used simultaneously and provides data speeds greater than a dial up connection. This market includes both business and residential customers.”

- 2.14 We considered the extent to which different competitive conditions existed in different geographic locations. We concluded that the key determining factor in this assessment was the number of Principal Operators (POs) – that is, operators which we considered were large enough to impose a material competitive constraint on the other operators, across the UK. We did not define POs via rigid thresholds, but designated as POs those operators which were relatively large, with a substantial presence across the UK, on the basis of network coverage. We considered five operators to be POs: BT, Sky, TalkTalk, Virgin Media and Vodafone.
- 2.15 We found that the country should be separated into three distinct geographic markets: areas where there were two or more POs in addition to BT providing WBA services to themselves or other telecoms providers (Market B); areas where there were only one or two POs providing WBA services (Market A); and the Hull Area.
- 2.16 Table 2.2 summarises the geographic markets (excluding the Hull Area) identified, the relevant SMP findings and provides an overview of the remedies imposed on BT in the 2014 WBA market review.¹³

Table 2.2: Geographic markets identified for the UK excluding the Hull Area, SMP findings and remedies in the 2014 WBA statement

Market	Operator with SMP	Remedy
Market A	BT	<p>Requirement to provide network access on reasonable request and on fair and reasonable terms, conditions and charges</p> <p>Requirement to provide network access on an Equivalence of Inputs (EOI) basis (supported by a requirement not to unduly discriminate in respect of services not provided on an EOI basis)</p> <p>Requirement to publish a reference offer</p> <p>Requirement to notify charges, terms and conditions</p> <p>Transparency as to quality of service</p> <p>Requirement to notify technical information</p> <p>Requirement for accounting separation</p> <p>Cost accounting</p> <p>Charge control¹⁴</p>
Market B	No operator holds a position of SMP	No remedies

¹³ See the 2014 WBA Market Review Statement for further details.

¹⁴ The charge control imposed in Market A applied to IPstream Connect only. See 2014 WBA market review Statement, paragraph 7.1 et seq.

Developments since the 2014 WBA market review

2.17 There have been numerous market developments since the 2014 WBA market review, especially in terms of changes to the fixed telecoms infrastructure available. We take these changes into account throughout our market analysis. Below we set out some of the most significant changes.

Investments in fixed broadband networks

- 2.18 There has been increased roll-out of infrastructure that facilitates superfast broadband (SFBB) offerings to consumers. We define what we consider to be SFBB below.
- 2.19 The largest provider of broadband services is BT with close to 100% coverage of the UK for standard broadband and around 90% of the UK for superfast.¹⁵ Virgin Media uses its own cable network to serve its customers, which covers around half of the UK. It has recently upgraded its network and offers speeds of up to 300 Mbps. Virgin Media has also announced that it plans to invest £3bn in connecting a further four million homes by 2020 (referred to by Virgin Media as ‘Project Lightning’). This would increase the coverage of its network to 60-65% of the UK. The majority of Virgin Media’s network expansion will be FTTP technology.
- 2.20 Some smaller telecoms providers, such as Keycom, Hyperoptic, CityFibre and Zen, are also rolling-out their own fibre networks in more localised areas and using these to provide SFBB to residential and/or business consumers.

Increases in retail broadband speeds

- 2.21 Investments in broadband networks have driven increases in the broadband speeds available to consumers. The main Internet Service Providers (ISPs) typically offer services with headline speeds ranging from 17 Mbit/s to 300 Mbit/s.
- 2.22 In our subsequent analysis we make a distinction between broadband services with download speeds as follows:¹⁶
- standard broadband (SBB): download speeds of up to 30 Mbit/s; and
 - superfast broadband (SFBB): download speeds from 30 Mbit/s up to 300 Mbit/s.
 - ultrafast broadband (UFBB): download speeds of 300 Mbit/s and above.¹⁷

¹⁵ Ofcom, Connected Nations Report 2016.

¹⁶ We also recognise that there are some ultrafast broadband services available. However, we do not consider these services to be of relevance to this review since they are generally unavailable in the geographic areas of most relevance to this review.

¹⁷ There is no standard definition of ultrafast. The UK Government currently defines ultrafast as 100 Mbit/s or greater. We also consider that the reliability with which the speed is delivered is an important attribute and expect the definition of ultrafast to evolve to take account of the importance of this reliability. We currently take ultrafast broadband services to be those that offer a minimum download speed of 300 Mbit/s or more (a factor of ten greater than that offered by superfast). These services also offer higher upload speeds than superfast broadband. Over time we expect ultrafast technologies to evolve towards providing gigabit speeds and above – 1 Gbit/s or more.

- 2.23 Different technologies underpin the differences in headline speeds. FTTP can be used to provide UFBB speeds, FTTC or cable usually deliver SFBB speeds, while copper-loop based access normally delivers SBB speeds.¹⁸

Government initiatives

- 2.24 The UK Government has previously expressed a commitment to the UK having the best SFBB network in Europe.¹⁹ In 2013 the Government made £530 million of public funding available with a view to enabling the roll-out of superfast broadband networks to communities which may not have been served by purely commercial developments as part of the Broadband Delivery UK (BDUK) programme. The combination of this scheme and commercial deployments has resulted in SFBB being made available to around 90% of UK homes in 2016 and the UK Government retains a target to increase this to 95% by December 2017.²⁰
- 2.25 The UK Government has also set out its intention to introduce a broadband Universal Service Obligation (USO) with a download speed of at least 10Mbit/s.²¹ Ofcom published technical advice to support the Government's design of the USO in December 2016, including advice on the minimum speed, quality and other more detailed requirements.²² The Government is now considering how best to meet its objectives for delivering universal broadband in light of our technical advice.

Mobile services, including the growth of 4G services

- 2.26 Since the last review, the take-up and use of mobile data services has grown significantly. This growth has been facilitated by increasing take-up of smartphones. The proportion of UK adults that have a smartphone is now 71%, up from 61% when we last conducted a review of the WBA market in 2014.²³ The growth in the use of mobile data services has also been facilitated by the introduction, rapid growth, and increased speeds of, 4G services. 4G coverage is also now comparable to that of 3G; with outdoor coverage at 97.8% for 4G compared to 99.6% for 3G.²⁴ All of these factors have contributed to a significant increase in the use of mobile data with average usage now 1.3GB per month, an increase of 137% since the last review in

¹⁸ Typical technologies used in FTTC and cable networks are VDSL (and evolutions) and Docsis 3.0 respectively, while the typical technology now used in copper loop-based access networks is ADSL2+.

¹⁹ BIS (now BEIS) and DCMS, *The UK's superfast broadband future*, December 2010, P3, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78096/10-1320-britains-superfast-broadband-future.pdf.

²⁰ Mr Ed Vaizey MP, 9 March 2016, <https://hansard.parliament.uk/Commons/2016-03-09/debates/1603096000001/BTServiceStandards>

²¹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/510148/Broadband_Universal_Service_Obligation.pdf

²² <https://www.ofcom.org.uk/consultations-and-statements/category-1/broadband-uso>

²³ CMR 2016, https://www.ofcom.org.uk/_data/assets/pdf_file/0024/26826/cm_r_uk_2016.pdf p1.

²⁴ CMR 2016, Figure 1.3

2014.²⁵ However, this is still significantly lower than the 132GB average monthly usage per household over a fixed broadband connection.²⁶

Use of regulated WBA products

2.27 Since the last review, the composition of WBA customers in regulated areas (i.e. Market A as defined in the 2014 WBA Statement) has changed. For example, Virgin Media (November 2014) and TalkTalk (February 2015) have both sold their off-net customer bases (i.e. areas where they do not have their own networks and/or LLU) which means that they have in effect withdrawn from use of BT's WBA products.²⁷ Virgin Media sold its off-net customers to TalkTalk which in turn sold its off-net customers to Fleur, a division of Daisy. We also understand from Sky it intends to shortly stop offering retail services based on BT's WBA services to new customers. Therefore, there are fewer users of regulated WBA products than was the case in 2014.

The regulatory framework

2.28 The regulatory framework for electronic communications is based on a suite of EU Directives, which have been implemented into national legislation in the Communications Act 2003 (the "Act").²⁸ It imposes a number of obligations on the relevant national regulatory authorities (NRAs), such as Ofcom. One of these obligations is to carry out periodic reviews of specified markets.

2.29 This market review process is carried out in three stages:

- we identify and define relevant markets;
- we assess whether the markets are effectively competitive, which involves assessing whether any operator has SMP in any of the relevant markets; and
- where we find SMP, we assess the appropriate remedies, based on the nature of the competition problems identified in the relevant markets.

2.30 We set out the market review process, and the regulatory framework, in more detail in Annex 6.

²⁵ Ofcom, *Connected Nations 2016*, 16 December 2016, https://www.ofcom.org.uk/_data/assets/pdf_file/0035/95876/CN-Report-2016.pdf, page 45.

²⁶ Ofcom, *Connected Nations 2016*, 16 December 2016, https://www.ofcom.org.uk/_data/assets/pdf_file/0035/95876/CN-Report-2016.pdf

²⁷ TalkTalk, Annual Report 2015, P6 and P77 <https://www.talktalkgroup.com/dam/jcr:04037e42-6a6d-4fcf-9bea-8f339240d0ba/Annual%20Report%202015%20Final.pdf>. TalkTalk, Annual Report 2016, P8 P89 and P90 <https://www.talktalkgroup.com/dam/jcr:3ae87c83-4e84-4464-a9df-06dd76eb293d/TalkTalk%20Telecom%20Group%20PLC%20Annual%20Report%202016.pdf>.

²⁸ The harmonised EU regulatory framework for electronic communications was amended in 2009. Those amendments to the Directives were transposed into national legislation and came into effect from 26 May 2011.

Relevant documents

The 2014 EC Recommendation

2.31 The Relevant Markets Recommendation sets out those product and service markets which, at a European level, the Commission has identified as being susceptible to *ex ante* regulation.²⁹ These markets are identified on the basis of the cumulative application of three criteria:

- the presence of high and non-transitory barriers to entry;
- a market structure which does not tend towards effective competition within the relevant time horizon; and
- the insufficiency of competition law alone to adequately address the market failure(s) concerned.

2.32 We, as the national regulatory authority in the UK, in accordance with competition law and taking due account of the 2014 EC Recommendation, have defined the proposed relevant markets appropriate to our national circumstances in Sections 3 and 4 of this consultation. The WBA market corresponds to Market 3b in the Commission's Recommendation. In defining relevant markets we have also considered the Commission's explanatory note to the 2014 EC Recommendation.³⁰

The EC SMP guidelines

2.33 The EC SMP Guidelines include guidance on market definition, assessment of SMP and SMP designation.³¹ In Section 5 of this consultation, we set out how we have taken the EC SMP Guidelines into account in reaching our proposals.

BEREC common position

2.34 In December 2012, BEREC adopted a revised Common Position on best practice in remedies on the markets for WBA.³² In 2014 BEREC also adopted a Common

²⁹ <https://ec.europa.eu/digital-single-market/en/news/commission-recommendation-relevant-product-and-service-markets-within-electronic-communications>

³⁰ Commission Staff Working Document, *Explanatory Note accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services*, (SWD(2014) 298).

http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=7056

³¹ <http://ec.europa.eu/competition/sectors/telecommunications/legislation.html>

³² BEREC, Revised BEREC common position on best practice in remedies on the market for wholesale broadband access (including bitstream access) imposed as a consequence of a position of significant market power in the relevant market, December 2012, http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/comm_on_approaches_positions/1126-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-broadband-access-including-bitstream-access-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market.

Position on geographical aspects of market definition.³³ BEREC Common Positions are intended to assist national regulatory authorities in designing the most effective remedies to address the competition problems identified in their respective national markets, in pursuit of the objectives of the regulatory framework for electronic communications and services. To the extent that any of our proposals depart from the BEREC Common Positions, we have set out our reasons in this document.

Relevant legal tests and statutory duties

- 2.35 Where we propose that a market is not effectively competitive, we identify the undertaking(s) with SMP in that market and propose what we consider to be appropriate SMP obligations. When proposing a specific SMP obligation, we need to demonstrate that the obligation in question is based on the nature of the problem identified, proportionate and justified in the light of the policy objectives as set out in Article 8 of the Framework Directive.³⁴
- 2.36 Specifically, we explain why we consider each of the conditions we are proposing satisfies the test set out in section 47 of the Communications Act 2003 (the Act), namely that the obligation is:
- objectively justifiable in relation to the networks, services or facilities to which it relates;
 - not such as to discriminate unduly against particular persons or against a particular description of persons;
 - proportionate to what the condition or modification is intended to achieve; and
 - transparent in relation to what is intended to be achieved.
- 2.37 Additional legal requirements also need to be satisfied depending on the SMP obligation in question. For example, when we propose a charge control, we must consider whether there is a relevant risk of adverse effects arising from price distortion; and the appropriateness of the control for the purpose of promoting efficiency; sustainable competition; and conferring the greatest possible benefits on customers of public electronic communications services.
- 2.38 We also explain why we consider the performance of our general duties under section 3 of the Act would be secured or furthered by our proposed regulatory intervention. Our principal duty, in this regard, is to further the interests of citizens in relation to communications matters and consumers in relevant markets, where appropriate by promoting competition. We explain why we are acting in accordance with the six Community requirements under section 4 of the Act. This is also relevant to our assessment of the likely impact of implementing our proposals.
- 2.39 Consistent with our duties under section 4A of the Act and under Article 3(3) of the BEREC Regulation, we have also taken due account of the applicable EC recommendations and utmost account of the applicable opinions, common positions, recommendations, guidelines, advice and regulatory best practices adopted by BEREC relevant to the matters under consideration in this consultation document.

³³ BEREC Common Position on geographical aspects of market analysis (definition and remedies) BoR (14) 73, para 86.

³⁴ See Article 8(4) of the Access Directive.

Impact assessment and equality impact assessment

- 2.40 Section 7 of the 2003 Act generally requires us to carry out impact assessments where our proposals would be likely to have a significant effect on businesses or the general public, or to involve a major change in Ofcom's activities. In addition, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions.
- 2.41 The analysis presented in this document constitutes an impact assessment as defined in section 7 of the 2003 Act.
- 2.42 We have set out the Equality Impact assessment that we have conducted for the purpose of this review in Annex 9. Ofcom is required by statute to assess the potential impact of all our functions, policies, projects and practices on race, disability and gender equality. EIAs also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 2.43 It is not apparent to us that the outcome of our review is likely to have any particular impact on any equality group. More generally, we do not envisage the impact of any outcome to be to the detriment of any group of society. Nor do we consider it necessary to carry out separate EIAs in relation to additional equality groups in Northern Ireland.

Document structure

- 2.44 In this consultation, we begin by analysing the retail market, we then use our retail market assessment to inform our analysis at the wholesale level and the relevant product market (Section 3). We next discuss the scope of the relevant WBA geographic markets. We look at the level of competition across the UK and consider if it varies to the extent that it is appropriate to define separate markets (Section 4).
- 2.45 We then set out our assessment on whether any telecoms provider has SMP in the relevant markets identified in sections 3 and 4 (Section 5). In Section 6 we first set out our provisional view on the competition problems we have identified as arising from BT's SMP in Market A and then set out our proposals for remedies to address these. Finally, we set out our views on what specific regulatory financial reporting requirements are appropriate to support our proposed remedies in Section 7.
- 2.46 Annex 4 provide supporting information and analysis for our proposals. Annexes 4 and 5 contain the draft legal instruments proposed for BT.

Section 3

Product Market Definition

Summary

- 3.1 In this section, we set out our proposals on the definition of the product market for WBA.
- 3.2 We start by analysing the retail market and provisionally conclude that retail fixed line broadband services are only weakly constrained by retail broadband services provided over other types of network infrastructure.
- 3.3 We then use our retail market assessment to inform our analysis at the wholesale level. We provisionally define the relevant product market for WBA services as:
- “Asymmetric broadband access and any backhaul as necessary to allow interconnection with other telecoms providers, which provides an always-on capability and allows both voice and data services to be used simultaneously.”
- 3.4 This means that broadband services provided to business and residential customers via copper, cable and fibre access networks at all speeds are within the same market, including SFBB services (which we define as 30Mbit/s or faster). We propose to find that broadband access provided via mobile, wireless and satellite networks are outside the market.

Introduction

- 3.5 Ofcom’s general approach to market definition is set out in Annex 7. In analysing the product market, we start by examining the retail level because demand for WBA is derived from demand for retail broadband services. Thus, products which are deemed to be strongly substitutable at the retail level are generally included in the same market at the wholesale level. We have adopted this approach for all previous WBA market reviews.
- 3.6 In our analysis, we apply the ‘Modified Greenfield approach’, meaning that we assume a hypothetical scenario in which there are no *ex ante* SMP remedies in the WBA market, but that SMP remedies in the upstream WLA market continue to exist (for example, LLU and VULA).
- 3.7 Under this approach, we recognise that the WBA services sold to third parties today would not necessarily be provided commercially. There may be some commercial provision of WBA services to third parties in the absence of *ex ante* regulation in the WBA market, but only where it is in the access provider’s interest. This may occur if there are telecoms providers which can add value at the retail level, for example from the strength of their brand or a greater ability to provide bundled services. These retail providers may be able to expand sales or command a higher price for their retail products, relative to the access provider’s own sales, and this may ultimately translate into greater wholesale revenue for the access provider. However, particularly where wholesale competition is limited, the extent of wholesaling activities is likely to be more limited and/or provided on less favourable terms without regulation.

- 3.8 Under the Modified Greenfield approach, we also take account of telecoms providers offering retail services using the upstream access products regulated under the WLA review (e.g. Sky, TalkTalk and Vodafone) and telecoms providers offering retail broadband services entirely over their own networks (e.g. BT and Virgin Media). We consider that the retail services of both types of telecoms provider will be substitutes to retail services provided using WBA products and therefore will act as an indirect constraint at the wholesale level.

Position in the WBA market review 2014

- 3.9 In the WBA market review 2014 we defined the relevant WBA product market as:

“Asymmetric broadband access and any backhaul as necessary to allow interconnection with other communications providers, which provides an always on capability, allows both voice and data services to be used simultaneously and provides data at speeds greater than a dial-up connection. This market includes both business and residential customers.”³⁵

Retail market analysis

- 3.10 Our 2017 WLA Consultation considered the substitutability of retail broadband products in detail and the extent to which these products exert an indirect constraint on wholesale products.³⁶ While WBA sits downstream from WLA, it is part of the same supply chain, such that both WLA services and WBA services are ultimately used to provide retail broadband services. As such, we consider that the retail market analysis conducted in the 2017 WLA Consultation is equally relevant to this WBA market review.

Residential and business services

- 3.11 We noted in our 2017 WLA Consultation that many providers of broadband services offer distinct residential and business packages at the retail level.³⁷ The distinction between these services is often the “service wrap” (e.g. customer support) around the business service, which is typically an addition at the retail level, i.e. added downstream from the WBA market.
- 3.12 For these reasons, we do not consider it necessary to analyse retail substitutability between residential and business services.

Copper, fibre and cable

- 3.13 In the 2017 WLA Consultation, we took fixed broadband internet services as our starting point.³⁸ Fixed line broadband services can be provided over copper, fibre and

³⁵ 2014 WBA Market Review Statement, paragraph 3.203.

³⁶ For the evidence and analysis underpinning our provisional conclusion on indirect constraints in our Wholesale Local Access Review, see Ofcom, 2017 WLA Consultation, Volume 1, Section 3, paragraphs 3.8 - 3.88, https://www.ofcom.org.uk/_data/assets/pdf_file/0033/99636/Vol1-Market-review.pdf

³⁷ Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.11 - 3.13.

³⁸ Ofcom, 2017 WLA Consultation, Volume 1, paragraph 3.10.

cable but at the retail level the services they support all have the same intended use with similar or overlapping download speeds.³⁹ For the same reasons as in the 2017 WLA Consultation, we therefore provisionally conclude that services provided over copper, fibre and cable are all strong substitutes for each other.

Different broadband speeds

3.14 In the 2017 WLA Consultation we provisionally found the following regarding the current degree of substitutability between SBB and SFBB:⁴⁰

- Continued high take-up of SFBB, with SFBB expected to account for around three-quarters of broadband lines by the end of the review period. This migration suggests that SFBB is likely to be a good substitute for SBB and that the constraint of SBB on SFBB is weakening.
- Many households' broadband use requires SFBB, especially those using multiple broadband based services at the same time, those using services needing high bandwidths, and households whose SBB speed is low. As demand for bandwidth continues to grow, the number of households requiring SFBB will rise further.
- SBB customers are far more likely to upgrade than SFBB customers are to downgrade. This again suggests SFBB is attractive to SBB users but SBB is a weaker substitute for existing SFBB users.
- There is a significant premium for SFBB products, and BT's price premium has been increasing. This again suggests that SBB has become a weaker substitute for SFBB.

3.15 As such we provisionally find that SFBB is likely to be a stronger constraint on SBB during the review period and SBB is likely to exert a diminishing constraint on SFBB.⁴¹

Alternative infrastructures

3.16 In the 2017 WLA Consultation we also analysed the extent to which broadband services provided over other infrastructures were substitutable at the retail level and we draw on that analysis here.

3.17 For mobile services, we provisionally conclude that neither mobile broadband access nor internet access via smartphones will be strong substitutes for fixed broadband access over the course of the review period. We consider that most consumers will

³⁹ Services provided over fibre and cable can offer similar speeds. Services provided over copper offer lower speeds, however at the time of this consultation they remain the most common fixed broadband service used in the UK and are the predominant means of fixed broadband access in the geographic areas of most interest to this review (which we provisionally conclude should be defined as a separate geographic market, which we refer to as Market A — see Section 4).

⁴⁰ For the evidence and analysis underpinning this provisional conclusion, see Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.15 – 3.52.

⁴¹ Ofcom, 2017 WLA Consultation, Volume 1, paragraph 3.46.

continue to use mobile broadband and/or internet access via smartphones in addition to fixed broadband.⁴²

- 3.18 For leased line services, given the large price differences between leased lines and fixed broadband services we provisionally conclude that they are not close substitutes at the retail level.⁴³
- 3.19 For fixed-wireless services we provisionally conclude that for most customers fixed wireless is unlikely to be a close substitute for broadband services over copper, fibre or cable for this market review period.⁴⁴ However, we propose to investigate the marketing and consumer use of fixed-wireless services further in our ongoing WLA market review and will reflect any findings in our WBA market review and our market review of WLA and WBA in the Hull Area. Additionally, we note there are innovations that may increase the substitutability of fixed-wireless services to fixed broadband in the longer term. These developments include:
- the planned auction of higher frequency spectrum which may be suited to small cell, limited distance, high bandwidth applications; and
 - 5G standards, due to be established in 2017, may lead to the availability of higher speed mobile data services from 2019.
- 3.20 For satellite services, we provisionally conclude that they are only a weak substitute for fixed line broadband.⁴⁵

Bundling

- 3.21 Telephony and pay TV Retail services are increasingly provided in bundles comprising double-, triple- and quadruple-play packages.⁴⁶ That is, broadband services can be bundled with different combinations of fixed voice telephony, mobile services and pay TV.
- 3.22 The increasing trend towards bundles was noted in the Explanatory Note to the 2014 EC Recommendation. However, it noted that:

“[D]espite the fact that bundling is one of the dominant trends observed at the retail level, this Recommendation does not propose to define a separate retail market for bundles because evidence to date has not indicated that there is a need for *ex ante* regulation of bundles, which may contain a previously regulated input. Furthermore, even if an NRA would define a retail market for triple play, for example, the wholesale inputs needed to compose this bundle would remain separate and non-substitutable, such as for example local access, higher-level access and termination.”⁴⁷

- 3.23 We agree that the existence or otherwise of a bundled market would not affect our WBA market definition, because even where products are bundled at the retail level, they are not necessarily bundled at the wholesale level. In the WBA market today, if

⁴² For the evidence and analysis underpinning this provisional conclusion, see Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.56 - 3.68.

⁴³ See Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.69 - 3.70.

⁴⁴ See Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.71 - 3.76.

⁴⁵ See Ofcom, 2017 WLA Consultation, Volume 1, paragraphs 3.77 - 3.81.

⁴⁶ CMR 2016, page 13.

⁴⁷ Explanatory Note, page 18.

a telecoms provider were to provide both broadband and landline telephone services to a retail customer, with or without further bundled services, it would have to buy both a WLR and a WBA product. We therefore do not consider it relevant to evaluate whether there are separate markets for bundles at the retail level.

Wholesale product market analysis

Residential and business services

- 3.24 A WBA input that supports the provision of asymmetric broadband internet access services to residential customers is essentially the same as that used to support the provision of such services to business customers. This means that there is extremely limited scope for a provider of WBA services to discriminate between the provision of such services for business and residential end use.
- 3.25 Based on this, we propose to define a WBA market that includes services that would support both residential and business retail services. This is consistent with the approach we adopted in the 2010 and 2014 WBA market review statements.

Copper, Fibre and Cable

- 3.26 As explained in paragraph 3.15 above, retail fixed line broadband services can be provided over copper, fibre and cable and all have broadly the same intended use. We therefore consider that WBA products provided over copper, fibre and cable networks would fall within the relevant wholesale market due to demand-side substitution at the retail level.
- 3.27 We include within this WBA market the following:
- self-supply of copper and fibre-based WBA services by BT using its own network.
 - supply of copper and fibre-based WBA services by telecoms providers with their own infrastructure to third parties
 - cable services supplied by Virgin Media. While we are not aware of any current wholesaling of cable services, nevertheless this remains a possibility. In any case, since cable networks can be used to provide a substitutable retail service, indirect constraints suggest that they should be included in the wholesale market.
 - broadband services supplied to end-users by LLU and VULA operators. LLU and VULA are current remedies in the WLA market, upstream from the WBA market, that provide access to BT's network from the exchange to the customers' premises, and are designed to facilitate competition in retail broadband services. Where they are effective in achieving this aim, there is no further need for regulation at the WBA level. Thus, we consider it appropriate to include supply via LLU and VULA in the wholesale market. This is consistent with our previous treatment of the competitive constraints offered by operators using WLA services.

Different broadband speeds

- 3.28 As noted above, we consider that while SFBB is likely to be a stronger constraint on SBB during the review period, SBB is likely to exert a diminishing constraint on SFBB.⁴⁸
- 3.29 This indirect constraint carries over to the geographic market analysis in that areas where there are limited SBB providers but sufficient SFBB providers, such areas are likely to be effectively competitive.
- 3.30 In relation to the constraint from SBB on SFBB, we propose to find the same as in the WLA review, that SBB is likely to exert a diminishing constraint on SFBB. We do not consider that this changes our proposed wholesale product market definition, but does have a bearing on remedies which we discuss in Section 6. We therefore propose to define a single WBA market containing WBA services of all speeds. In our geographic market analysis and market power assessment we will therefore take account of competition from SFBB speeds (which are provided over fibre or cable at the upstream network level), as well as competition among wholesale services offering only SBB speeds (which are provided over copper connections at the wholesale network level).

Alternative infrastructures

- 3.31 We have discussed above demand-side substitutability between retail fixed line broadband services provided over copper, fibre and cable and retail services delivered over alternative infrastructures. The retail level analysis captures the indirect constraints present between broadband services provided over different infrastructures and as such the constraints found at the retail level map onto the wholesale level.
- 3.32 Therefore, our provisional conclusion is that the indirect constraints from mobile broadband, leased line services, fixed wireless access and satellite broadband are not sufficient to widen the market definition for WBA beyond asymmetric broadband services provided over copper-loops, fibre and cable. Specifically, we provisionally conclude that mobile broadband, leased line services, fixed wireless access and satellite broadband are outside the relevant WBA market.

Provisional conclusions

- 3.33 Based on our assessment outlined above, for the purposes of the WBA market review, we propose to define the relevant market as:

“Asymmetric broadband access and any backhaul as necessary to allow interconnection with other telecoms providers, which provides an always-on capability and allows both voice and data services to be used simultaneously.”

Consultation question

Question 3.1: *Do you agree with Ofcom’s proposed product market definition? Please provide reasons and evidence in support of your views.*

⁴⁸ Ofcom, 2017 WLA Consultation, Volume 1, paragraph 3.46.

Section 4

Geographic market definition

Summary

- 4.1 In this section, we provisionally conclude that there are two distinct geographic markets in the UK excluding the Hull Area (99.3% of UK premises)⁴⁹:
- Market A (2.0% of premises) – areas in the UK where there is limited or no network competition (exchange areas which are BT-only or BT+1PO); and
 - Market B (97.3% of premises) – areas in the UK where there is reasonable network competition (exchange areas which are at least BT+2POs).

Introduction

- 4.2 The purpose of this section is to define the scope of the WBA geographic markets. We look at the level of competition across the UK and consider if it varies to the extent that it is appropriate to define separate markets.
- 4.3 Our approach is based on that adopted in the 2014 WBA Statement. However, we have updated our approach to take account of fibre roll-out, and our analysis reflects recent market developments, in particular, further LLU and fibre roll-out. One of the significant features of fibre roll-out is that fibre can carry signals further than copper and therefore is not as distance limited as copper. Due to this, BT's access network for fibre-based services involves fewer local exchanges (c.1,100) than copper based services (c. 5,500).⁵⁰
- 4.4 The remainder of this section is structured as follows:
- we summarise our approach to geographic market definition;
 - we summarise the approach we took in our 2014 WBA Market Review Statement;
 - we consider competitive conditions at the retail level;
 - we consider competitive conditions at the wholesale level; and
 - we present our proposed geographic market definitions.

Approach to geographic market definition

- 4.5 The purpose of market definition is to structure and inform our forward-looking assessment of whether SMP exists in the WBA market. As noted in Annex 7,

⁴⁹ The remaining 0.7% of UK premises are in the Hull Area. As explained in Section 2, this consultation focuses on the WBA market in the UK excluding the Hull Area. We have today published a separate document consulting on our proposals for SMP and remedies in the Hull Area in both the WLA and WBA markets.

⁵⁰ 89% of premises in the UK are now able to get superfast speeds (over 30mbit/s). Ofcom, Connected Nations 2016, https://www.ofcom.org.uk/_data/assets/pdf_file/0035/95876/CN-Report-2016.pdf

paragraph A7.5, market definition is not an end in itself, but is intended to assist the competition assessment in order to understand whether broadband customers are protected by effective competition, or whether *ex ante* regulation is required. Our general approach to market definition is set out in Annex 7.

Position in the 2014 WBA market review

- 4.6 We found that the conditions of competition were appreciably different between exchange areas where BT and at least another 2 POs were present (BT+2PO exchange areas) and exchange areas with a lower PO presence.
- 4.7 We took account of POs using copper or cable infrastructure. We did not include POs using fibre-based products because we felt at the time that there was uncertainty about the competitive impact of these products.
- 4.8 We concluded that the relevant geographic markets for WBA products (excluding the Hull area) were:⁵¹
- Market A: exchanges where there were no more than two POs present, or forecast to be present, with either copper or cable (9.5% of UK premises); and
 - Market B: exchanges where there were three or more POs present, or forecast to be present, with either copper or cable (89.8% of UK premises).

Retail geographic assessment

- 4.9 It is relevant for us to assess the competitive conditions at the retail level since they will affect competitive conditions in the WBA market. However, since our primary interest is in the wholesale market, it is not necessary for us to conclude on the precise scope of the retail geographic market for the purpose of this review.

Demand- and supply-side substitution

- 4.10 In general, when assessing the geographic scope of fixed line communications markets, the application of demand-side and supply-side substitution through the hypothetical monopolist test can lead to very narrow geographic market definitions. This is because consumers are unlikely to move premises to benefit from lower prices, thus demand-side substitution between different areas is not possible. Moreover, supplying a new area, either by unbundling a new exchange or extending an existing network, can require significant sunk costs, limiting supply side substitution.
- 4.11 We therefore consider that while demand- and supply-side substitution would tend to imply narrow (sub-national) geographic markets, the relevance of this evidence is limited.

Homogeneity of competitive conditions

- 4.12 Areas which are not linked by supply- and demand-side substitution can nevertheless be included in the same market if there is homogeneity of competitive conditions. We have therefore examined the availability of retail level services across the UK.

⁵¹ 2014 WBA Market Review Statement, paragraph 4.1.

- 4.13 First, we have observed that BT offers services under its main 'BT' brand across the whole of the UK (excluding the Hull Area).
- 4.14 Next, we have examined the offerings of the main competitors to BT (i.e. POs – see paragraphs 4.38 - 4.42). We have found that for each of the non-BT POs (Sky, TalkTalk, Virgin Media and Vodafone) there are areas where they do not offer services.⁵² These areas appear to coincide with their off-net areas, which largely cover the areas we subsequently propose to define as Market A. This is consistent with previous responses to us in which TalkTalk told us that it does not supply retail residential broadband services in its off-net areas⁵³ and Sky noted that it intended to withdraw from offering new services to off-net customers.⁵⁴
- 4.15 We consider that TalkTalk, Sky, Virgin Media and Vodafone's approach of not offering services in certain areas indicates that there is geographic variation in the retail level competitive constraints that apply across different parts of the UK (excluding the Hull Area), as where providers are not present they cannot provide a direct competitive constraint on BT.

Common pricing constraint

- 4.16 Areas can also be included in the same market if they are linked by a common pricing constraint. We have therefore examined the retail broadband prices of telecoms providers in different geographic areas. In its Common Position on geographic market analysis,⁵⁵ BEREC has suggested that the pricing strategies of both the incumbent provider and rival providers are relevant for this kind of analysis.⁵⁶
- 4.17 BT offers services under its main 'BT' brand across the whole of the UK (excluding the Hull Area) at a uniform national price.⁵⁷ BT did not identify any plans or analysis in relation to their national pricing policy, including any discussion of departing from this policy, when asked as part of a statutory information request.⁵⁸
- 4.18 In contrast to the pricing approach of BT's main brand, we have found that BT's subsidiaries – Plusnet and EE – both state that they vary their prices by region and a

⁵² Based on a review of broadband offers from each provider's website as of 17 May 2017 as offered in three postcodes (in Gwynedd, Suffolk, Scottish Borders) in the area we subsequently propose to define as Market A in this review, three postcodes (in Powys, Clackmannanshire, West Midlands) in the area defined as Market A in 2014 but we now propose to be Market B, and three postcodes (in London, South Ayrshire and Carmarthenshire) which we defined as in Market B in 2014 (and which we propose remains in Market B). None of the POs offered services in one postcode in the Scottish Borders that we examined and only TalkTalk offered services in postcodes in Gwynedd and Suffolk that we examined.

⁵³ TalkTalk response to Q4.3(e) of s135 notice dated 19 October 2015.

⁵⁴ Sky response to Ofcom 1st Informal Notice Requiring the Provision of Information Dated 7 March 2016.

⁵⁵ BEREC Common Position on geographical aspects of market analysis (definition and remedies) BoR (14) 73.

⁵⁶ BEREC Common Position on geographical aspects of market analysis (definition and remedies) BoR (14) 73, paragraph 49.

⁵⁷ BT's standard monthly price, including line rental and excluding introductory discounts, for its most basic broadband package (up to 17 Mbps, unlimited usage) was £40.99 as of 2 June 2017, although a 30% introductory discount was available for a limited period.

⁵⁸ BT response to Q5.4(a) of s.135 notice dated 8 October 2015.

higher price or surcharge is levied in some areas (typically those falling into Market A).⁵⁹ This is consistent with EE's earlier response to a statutory information request in which it told us that it did differentiate prices geographically for SBB (but not for SFBB).⁶⁰

- 4.19 We have also examined the pricing approaches of the largest competitors to BT (Sky, TalkTalk, Virgin Media and Vodafone). We found that in general BT's competitors tend to offer uniform prices across the areas in which they offer services. However, as noted above, BT's main competitors do not offer services in some parts of the UK, so we do not consider that their pricing policies represent a uniform national price. Rather they represent uniform pricing across their network areas only.
- 4.20 We consider that the evidence on a common pricing constraint at the retail level is mixed, given BT's national pricing policy for its main brand contrasts with BT's subsidiaries varying their prices, and BT's main competitors do not offer services in all areas in the UK (excluding the Hull Area). On balance, we do not consider that there is sufficiently compelling evidence of a common pricing constraint at the retail level across the UK (excluding the Hull Area).

Provisional conclusion on retail geographic assessment

- 4.21 Overall, we consider that the evidence on retail level constraints points towards variations in competitive conditions in different areas in the UK (excluding the Hull Area) and hence sub-national markets. We consider that barriers to demand-side substitution and supply-side substitution are consistent with sub-national retail markets.
- 4.22 While we consider that the evidence on a common pricing constraint at the retail level is mixed, on balance we do not think that the available evidence indicates that there is a common pricing constraint across the UK (excluding the Hull Area).
- 4.23 Since this review is concerned with wholesale level competition, we place most weight on the variation in the presence of providers across the country, which indicates that the conditions of competition vary and therefore that the retail level constraints differ across geographic areas.

Wholesale geographic market definition

- 4.24 With regard to the geographic scope of the wholesale market in the UK (excluding the Hull Area), we use a similar approach as in 2014. In this approach, competitive conditions are assessed at the level of the local exchange area, and exchange areas are then aggregated into wider geographic markets that form the basis of the subsequent SMP assessment. Exchange areas are grouped together if competitive

⁵⁹ Plusnet's website states that "You can get Plusnet broadband almost everywhere in the UK. But in some places our prices are a bit higher" <https://www.plus.net/help/broadband/broadband-prices-around-the-uk/>, accessed 17 May 2017. EE's website states that "If you don't live in an EE Standard Broadband network area you can still get a broadband plan with an inclusive call package for an extra £15 each month on top of our non-discounted pricing" [http://ee.co.uk/content/dam/ee-help/Help-PDFs/Business-PDFs/Standard%20Broadband%20%26%20Fibre%20Broadband%20Plans%20from%2026%20August%202016%20\(.pdf%20109%20KB\).pdf](http://ee.co.uk/content/dam/ee-help/Help-PDFs/Business-PDFs/Standard%20Broadband%20%26%20Fibre%20Broadband%20Plans%20from%2026%20August%202016%20(.pdf%20109%20KB).pdf), accessed 17 May 2017.

⁶⁰ EE response to Q1e of s135 notice dated 13 October 2015. EE noted its response reflects its pricing only up to the date at which the information was submitted and not beyond that date.

conditions in these areas are sufficiently homogeneous, or placed in different geographic markets if competitive conditions are appreciably different.

4.25 The following sub-section is structured as follows:

- we explain why we consider the appropriate geographic unit to be exchanges from which copper services are supported;
- we identify our list of main competitors, i.e. POs;
- we take account of competitive constraints from POs' copper services within each local exchange area;
- we take account of competitive constraints from other infrastructure including cable and competing POs' use of BT's fibre roll-out;
- we explain how we aggregate exchange areas into geographic markets by considering the impact copper, cable and fibre providers have on competitive conditions, and aggregating areas where competitive conditions are similar; and
- we summarise our geographic market definition.

The local exchange area for copper services as the geographic unit

4.26 In the 2008, 2010 and 2014 WBA market reviews, we considered that local exchange areas (based on copper services) were the most suitable geographic unit on which to base the geographic analysis. This was because these areas align exactly with LLU, an upstream regulatory remedy, which was a significant driver of competition in the WBA market.

4.27 The increased deployment of fibre raises the question of whether an alternative geographic unit would now be appropriate. As well as its copper network, BT also deploys fibre between local exchanges and street cabinets (FTTC), or in some cases between the exchanges and consumers' premises (FTTP). Most LLU exchange areas have several street cabinets, and fibre may either be deployed to all or only some of the cabinets within the copper local exchange area. Therefore, an alternative option for the geographic unit could be to use BT fibre cabinet areas.

4.28 The Explanatory Note⁶¹ states that NRAs should ensure that these units for geographic analysis are:⁶²

- a) of an appropriate size, i.e. small enough to avoid significant variations of competitive conditions within each unit yet big enough to avoid a resource

⁶¹ *Commission Staff Working Document, Explanatory Note accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (SWD(2014) 298).*

http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=7056

⁶² Explanatory Note, page 14.

intensive and burdensome micro-analysis that could lead to a fragmentation of markets;

- b) able to reflect the network structure of all relevant providers; and
 - c) have clear and stable boundaries over time.
- 4.29 These criteria broadly overlap with those recommended in the BEREC Common Position on geographical aspects of market definition, which also adds that they should be mutually exclusive and less than national.⁶³
- 4.30 Regarding the first criterion, competitive conditions over copper-based infrastructure are unlikely to vary significantly within most local exchange areas. For the majority of exchanges the competitive conditions will be determined by whether or not multiple providers have rolled-out LLU at that exchange. Where providers have done so, they will be able to serve the whole exchange area using LLU and hence competitive conditions are unlikely to vary significantly within that exchange area.
- 4.31 In theory, competitive conditions could vary within a local exchange area where there is limited LLU roll-out and only partial coverage by cable or fibre infrastructure. For fibre, this could occur in two different ways.
- 4.32 First, when BT rolls-out fibre from an exchange to cabinets, it does not necessarily roll-out fibre to every cabinet within that exchange area. In these situations, there will be variation in the presence of fibre within that exchange area.
- 4.33 Second, as explained in paragraph 4.3, BT uses fewer local exchanges to provide fibre-based services than it uses to provide copper-based services. Therefore, fibre-based access products available at a particular exchange can typically cover a wider geographic area than the copper-based access products at that same exchange. This means that in some areas it is possible to offer fibre-based services from a fibre-enabled exchange to a fibre-enabled cabinet that sits within a second local copper exchange area, even if the CP is not present in that second copper exchange. In such situations, the competitive constraints may be stronger in parts of the second exchange area where fibre is present, and weaker where it is not present.
- 4.34 We have considered whether either approach could lead to a burdensome micro-analysis, as referred to within the first criterion. We believe that the exchange area approach has an advantage over the fibre-cabinet approach. There is a risk that a cabinet-based approach might lead to unduly burdensome regulation, in the event that SMP is found and remedies are required. Under a cabinet based approach each cabinet would need to be separately defined as falling within Market A or Market B, and any remedies would apply at the level of each cabinet. This could lead to the situation of cabinets within the same vicinity being regulated or unregulated, which may be impractical to implement for the SMP provider and its customers (e.g. potentially needing to provide two sets of terms and conditions or prices for WBA services offered from the same exchange). Further, the fibre-cabinet approach creates a greater burden on telecoms providers in terms of data delivery and on Ofcom in terms of data analysis.
- 4.35 Both the exchange level approach and cabinet level approach meet the second criterion (i.e. reflect the network structure of BT to which access seekers have rolled

⁶³ BEREC Common Position on geographical aspects of market analysis (definition and remedies) BoR (14) 73, paragraph 86.

out their own network or infrastructure) and third criterion (i.e. have clear and stable boundaries).

- 4.36 In addition to the criteria outlined above, we believe that the geographic unit ought to reflect the area at which competition might be expected to take place in a competitive market. Currently BT prices its WBA services at an exchange level, albeit there is regulation in place in Market A which influences this. We cannot observe the unit at which it would price absent regulation but it is plausible that it would continue to be at the exchange level.
- 4.37 Overall, there could be a case for using either a cabinet level approach or an exchange level approach. However, on balance we consider that an exchange level approach is preferable since a cabinet level approach risks leading to more burdensome regulation without this necessarily better reflecting competitive market outcomes or delivering more effective downstream competition to the benefit of consumers.

Determining POs

- 4.38 In carrying out our assessment, we have restricted our attention to the providers that are likely to exert a substantial competitive constraint on the other providers, across the UK. This is captured by our definition of a PO, a concept we also used in the 2014 and 2010 WBA Market Review Statements.
- 4.39 In order to assess which providers to categorise as POs, we calculated the network coverage (in terms of UK premises) for each of the largest providers.⁶⁴ We also calculated their national WBA share of connections.⁶⁵ These results are shown in Table 4.1 below.

Table 4.1: Coverage and national wholesale shares of broadband connections

Provider	Network coverage of UK (excl Hull)	National WBA share of connections
BT	100%	[><] <40%
TalkTalk	[><] >95%	[><] 15-25%
Sky	98%	[><] 15-25%
Vodafone	[><] 90-95%	[><] <5%
Virgin Media	[><] 40-50%	[><] 15-25%

Source: Ofcom calculations based on data provided by BT and Virgin Media.

- 4.40 There are a number of providers covering a substantial proportion of UK premises. Only four of them have a substantial share of connections at the national level: BT, TalkTalk, Sky and Virgin Media. These four providers are large vertically integrated

⁶⁴ As determined by providers with >10% national coverage and >100,000 lines.

⁶⁵ Here we mean the share of active broadband connections supplied by the relevant PO. Active connections include broadband connections provided via MPF and SMPF on BT's copper network (either by BT or by an LLU operator), via VULA on BT's fibre network (either by BT or by a VULA operator) or by Virgin Media using its cable network.

companies and are well established in several telecommunications markets. We therefore propose to include them in the list of POs.

- 4.41 Vodafone has a high coverage level but a lower share of connections than the other POs. Vodafone is currently actively marketing its residential broadband services after entering this segment in 2015. It therefore has the potential to expand its customer base. We therefore propose to also include Vodafone as a PO. In any case, Vodafone's presence as a PO has very little impact on our analysis. In particular, it made little difference to the classification of exchanges as Market A or Market B as it was almost always only present where there were already BT+2POs.
- 4.42 We therefore propose our list of POs to be BT, TalkTalk, Sky, Virgin Media and Vodafone. This is consistent with the 2014 WBA market review.

Accounting for copper based competition within the local exchange areas

- 4.43 For each local exchange area we examine whether POs are present on the basis of LLU. Using data provided by BT we are able to determine whether a CP has any active lines in a given exchange. Where a provider has more than two active lines from that exchange we deem them to be present in that exchange area.⁶⁶
- 4.44 We have also assessed whether providers plan to increase their coverage by further LLU roll-out during this review period. As explained in paragraphs A8.30 – A8.32, we take account of providers' committed roll-out plans. Evidence gathered during the course of this review indicates that none of the POs are currently planning further significant roll-out of LLU.⁶⁷ One potential explanation for this is that major LLU providers have already entered exchanges that are large enough to justify the sunk costs required for unbundling.

Accounting for cable

- 4.45 We account for the competitive impact of Virgin Media's cable network by matching its network footprint onto BT's exchange areas. We do this by matching the postcodes where Virgin Media has rolled-out its network, to postcodes served by BT exchanges. Ultimately this process allows us to estimate the proportion of premises within a given BT exchange area that Virgin Media can serve.
- 4.46 The proportion of premises that Virgin Media can serve based on its current network footprint varies across exchange areas. Therefore, we consider that we should set a threshold for the proportion of premises within an exchange area that are capable of being served by Virgin Media in order to consider Virgin Media to be present in that exchange area.
- 4.47 As noted in paragraph 2.19, Virgin Media is currently planning a significant degree of additional roll-out ('Project Lightning'). We have not taken any of Virgin Media's forecast rollout into account as Virgin Media was unable to confirm the location of the roll-out to a sufficient level of detail for us to factor these forecasts into our analysis. In any case, given that most of Virgin Media's network is in exchange areas in which at least three other POs (including BT) are present, we would expect that most of its expansion would fall into Market B and so have little impact on our market definition.

⁶⁶ We use the criteria of more than two active lines to avoid defining presence where a provider only has one or two test lines.

⁶⁷ Based on TalkTalk, Sky and Vodafone, response to Q1.1 of s.135 notice, October 2015.

- 4.48 In the 2008, 2010 and 2014 WBA Statements, we concluded that Virgin Media should be considered to be 'present' in an exchange area if its network was able to supply at least 65% of the premises in that exchange area. Our reasoning in the 2014 WBA market review was that if the coverage threshold is set at 65% and above, Virgin Media could serve a clear majority of premises in the exchange area. In addition, we considered that this was sufficient to be confident that Virgin Media would impose a competitive constraint on BT in that exchange area.⁶⁸
- 4.49 We have analysed whether changes in the coverage threshold for Virgin Media have an impact on our proposed geographic market definition. We find that Market A remains unchanged in size if we reduce our coverage threshold to 50% (i.e. no exchange areas move from Market A to Market B due to the lowering of the cable coverage threshold).⁶⁹ Conversely, an equivalent increase in the cable coverage threshold to 80% only increases the size of Market A by one exchange. Therefore, accounting for competition from cable has relatively little effect on our geographic market definition.
- 4.50 We therefore propose to continue to use 65% as the appropriate cable coverage threshold for determining whether Virgin Media would count as a PO with presence in an exchange area.

Accounting for fibre

- 4.51 In our product market analysis (see paragraphs 3.28 - 3.30), we provisionally conclude that SFBB services (typically provided over fibre) are in the same market as SBB services. In the 2014 WBA market review we decided not to take account of fibre for the purposes of geographic market analysis because the roll-out of fibre was still relatively recent and we thought that its competitive impact was uncertain. We said:

"We have concluded that while such [fibre] roll-out is likely to cover a large proportion of Market A by the end of the market review period, the strength of the competitive constraint imposed on BT by POs offering fibre based broadband is uncertain. For this reason, we have concluded that it is not appropriate for us to modify the geographic market definition on the basis of existing or planned fibre rollout in this market review."⁷⁰

- 4.52 We also said:

"We expect the uncertainty over the competitive impact of fibre in our proposed BT-only and BT+1 exchange areas to diminish over time as fibre roll-out progresses, and further evidence emerges on the take up of fibre-based services by both consumers and CPs, as well

⁶⁸ 2014 WBA Statement, paragraph 4.69.

⁶⁹ A reduction in the coverage threshold means that Virgin Media needs to cover fewer premises in an exchange area to be considered a PO in that area. Where an exchange area has two POs (neither of which is Virgin Media), a reduction in the coverage threshold could make Virgin Media a PO in that exchange area, causing that exchange area to move from Market A to Market B.

⁷⁰ 2014 WBA Statement, paragraph 4.3.

as the competitive impact on BT in BT-only and BT+1 exchange areas.”⁷¹

- 4.53 In line with our expectation in the 2014 WBA market review, we consider that the uncertainty about the competitive impact of fibre has now been resolved. BT has continued to deploy fibre-based broadband services across the majority of the UK, including in many rural areas⁷² and there has been strong take-up of fibre-based services. Fibre now accounts for around 38% of all Openreach based connections⁷³ and is expected to grow further. We consider this is sufficient for us to consider that fibre-based competitors (including those using upstream access from BT via VULA) act as a competitive constraint on WBA services provided using ADSL technology. We therefore now consider it appropriate to take account of fibre-based services for the purposes of geographic market definition.
- 4.54 Consistent with our forward-looking approach for market reviews, we have sought to take into account both current fibre-deployment and roll-out that is planned to occur over the course of the market review period. We have obtained information from BT on its future fibre roll-out plans and its governance process for deciding on future fibre roll-out. We have taken into account fibre roll-out which Openreach plans to implement, where BT has told us that roll-out is planned to specific cabinets.⁷⁴
- 4.55 BT Wholesale also told us that it expects BT to cover [3<] of premises with fibre by the end of 2017. It estimated that, when combined with LLU take-up, this would lead to the areas identified as Market A falling to [3<] of the UK. However, during our engagement with BT Wholesale we have established that some of the intended fibre roll-out in its analysis has not yet been designated to specific cabinets.
- 4.56 We have therefore taken into account the evidence on future fibre-roll-out as provided by Openreach. This is a lower degree of roll-out than suggested by BT Wholesale as presented by Wholesale & Ventures to Ofcom on the 18th July 2016.
- 4.57 Assessing the impact of fibre faces similar challenges to that of cable. Clearly where a PO is present in an exchange via LLU it is already considered to be present in that exchange area and will continue to be so even if the exchange becomes fibre-enabled. However, if the roll-out of fibre from the first exchange extends to cabinets in second exchange areas then the PO may also be considered present in the second exchange areas. It may however only have partial coverage of the second exchange areas; particularly if the coverage could be achieved from one or more other fibre-enabled exchanges.

⁷¹ 2014 WBA Statement, paragraph 4.199.

⁷² Other providers are also deploying fibre in some areas, but we focus on BT here because it is the only provider to which an obligation to provide access to fibre services (VULA) currently applies, and hence POs have certainty they can obtain wholesale access to these services to increase their coverage if desired. The other providers that are rolling out fibre, tend to be smaller localised alternative networks, which are not judged to be POs (see paragraphs 4.38-4.42 above on how we have defined POs).

⁷³ BT KPIs, Q4 2016/17, Table 8. <http://www.btplc.com/Sharesandperformance/Quarterlyresults/2016-2017/Q4/Downloads/KPIs/q417-KPIs.pdf>

⁷⁴ We requested that Openreach provide us with information on each cabinet to which it planned to deploy FTTC until March 2021. BT response to Q3 of S135 notice dated request 2 November 2016.

- 4.58 This leads to situations where premises that might be classified as falling within Market A when only reviewing the presence of LLU providers in the relevant copper exchange area, may be considered as falling within Market B when accounting for fibre. This can occur where certain premises are within reach of fibre-enabled exchanges, despite the fact that LLU providers are not sufficiently present in the copper exchange area serving the premises.⁷⁵ As such, if we take account of competition from POs using fibre in our geographic market definition then this could alter the areas classified as Market A and Market B.
- 4.59 As was the case in considering the competitive impact of cable in our market analysis, we need to determine a threshold for the coverage of premises which is sufficient to consider a PO present in an exchange area via fibre even if it is not present in the copper exchange serving that area.
- 4.60 Ideally, we would like to analyse the extent to which the presence of competing providers using fibre in a proportion of an exchange area is sufficient to place a competitive constraint on BT across the whole exchange area. However, data on fibre-take up by CPs at the exchange level is not yet available in a sufficiently long time series to undertake a robust assessment of the constraint that fibre providers might pose on BT.
- 4.61 We recognise that, in the absence of clear evidence about the competitive impact of fibre providers on BT, we need to make a judgment about what threshold level can act as a reasonable proxy for the extent to which the presence of competing providers using fibre in an exchange area is sufficient as a competitive constraint. In principle, the greater the coverage area, the more likely it is that a provider will act as a competitive constraint, and therefore this is more likely to be the case if the provider could address a majority of customers.⁷⁶ In this context, we recognise that the lower the threshold the greater the risk of overstating the competitive alternatives while conversely the higher the threshold the greater the risk of understating the competitive alternatives, and therefore the choice of threshold is a balancing exercise involving regulatory judgement.
- 4.62 We consider that the type of competitive constraint fibre can exert on copper-based services is likely to be similar to that for cable, given that both providers competing via cable and fibre could be considered to be competing infrastructures to copper-based services, with only partial overlap with copper-based services in an exchange area. As with cable, we consider that a threshold of 65% fibre coverage would mean that a provider operating solely by fibre can address a clear majority of premises in an exchange area. It is therefore our judgement, recognising the absence of clear evidence, that coverage above this threshold is likely to be sufficient that fibre-based competitors would impose a significant competitive constraint on BT.
- 4.63 In order to test the sensitivity of this approach, Figure 4.2 below shows how the size of Market A would vary if we altered the fibre coverage threshold, holding everything else constant:

⁷⁵ In an exchange that has not already been unbundled, it is often easier for a provider to compete with BT for consumers by providing fibre broadband services than copper broadband services. This is because telecoms providers can use WLR+VULA to provide fibre broadband, which does not require investing in equipment in the copper exchange and is also more future proofed (i.e. provides greater scope to upsell higher speed services). To provide copper broadband, telecoms providers must purchase MPF or WLR+SMPF from BT, both of which require investment in exchange equipment.

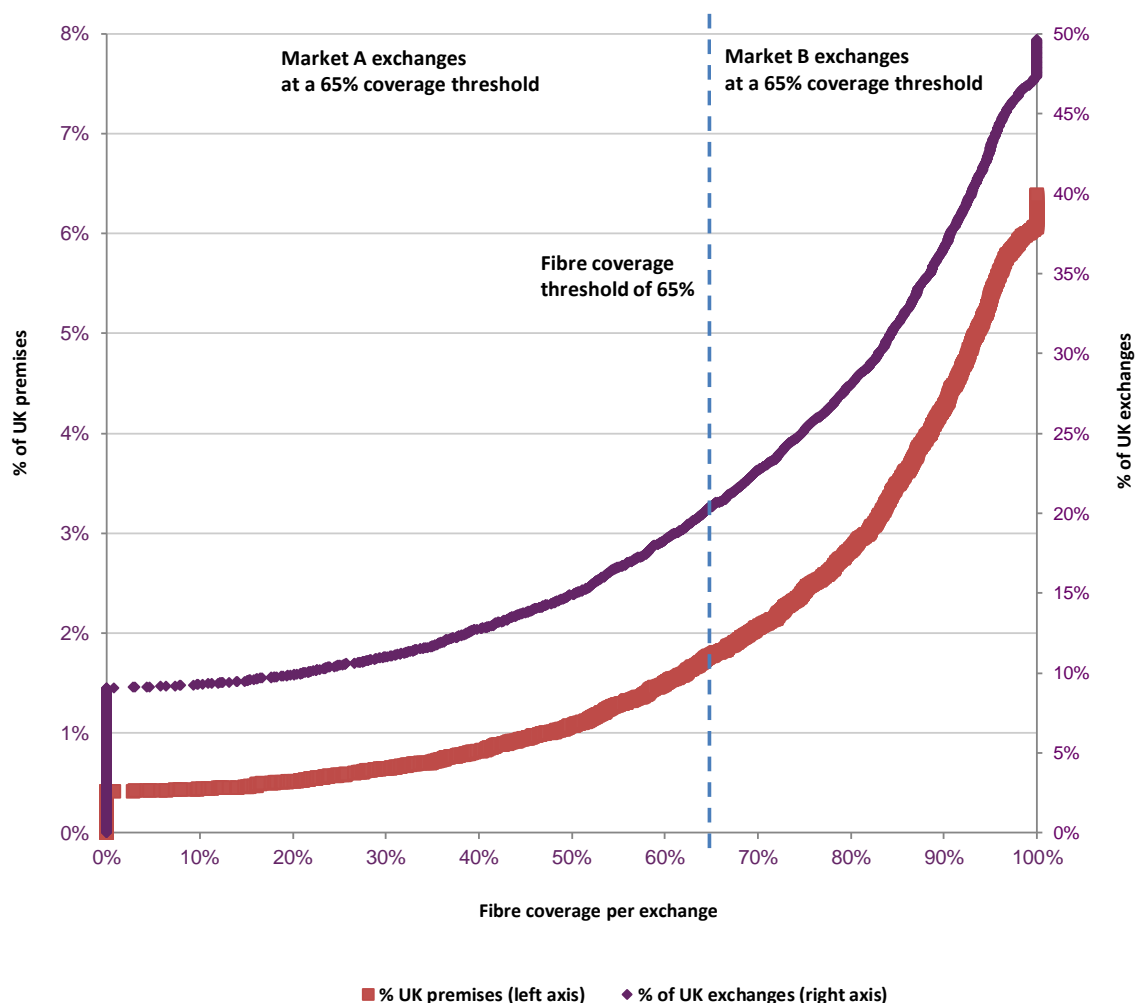
⁷⁶ We recognise that this threshold could be lower or higher in practice, depending on the specific circumstances

- Figure 4.2 shows all the exchange areas that we would classify within Market A if we were to take no account of fibre coverage. They represent around 6.5% of all UK premises and 50% of all UK exchange areas.
- As our base case, if we take a fibre coverage threshold of 65% (see paragraph 4.63), in line with our approach to cable, Market A corresponds to 2% of premises and 21% of all UK exchange areas.
- A reduction in the fibre coverage threshold to 50% results in a reduction in the size of Market A (relative to our base case).⁷⁷ Under this approach, Market A would correspond to 1.3% of premises.
- An increase in the fibre coverage threshold to 80% results in an increase in the size of Market A (relative to our base case). Under this approach, Market A would correspond to 3.0% of premises.
- At the upper extreme, if we took account of fibre coverage but only where an exchange area is completely covered by fibre (i.e. a 100% fibre coverage threshold), this would increase the size of Market A to 6% - i.e. very close to the size of Market A if competition from POs with access to fibre were ignored.⁷⁸

⁷⁷ As is the case for cable, a reduction in the fibre coverage threshold means that an operator needs to cover fewer premises in an exchange area to be considered a PO in that area. Where an exchange area has fewer than three POs (and so is in Market A), a reduction in the fibre coverage threshold could mean that fibre operators in that exchange area are now considered POs due to the lower threshold, causing that exchange area to move from Market A to Market B.

⁷⁸ This differs from the size of Market A taking no account of fibre coverage (6.5%) as there are a small number of exchange areas where based on LLU there are not two POs present in addition to BT, but that are completely covered by fibre.

Figure 4.2: Impact on Market A of changes to the fibre coverage threshold



Source: Ofcom calculations based on data provided by BT.

- 4.64 We recognise therefore that the size of Market A is sensitive to the fibre coverage threshold. The sensitivity to the fibre threshold is greater than the sensitivity to the cable coverage threshold because there is more fibre than cable present in the areas where LLU roll-out has been limited and where fibre is available there is usually more than one PO that takes it up, unlike cable which is used by only one PO.
- 4.65 We acknowledge that by using a threshold approach, some exchange areas classified as ‘non-competitive’ (Market A) are likely to have some premises that are served by fibre and vice versa. Nevertheless, this is an inevitable consequence of a threshold approach, having decided to use exchange areas as the geographic unit as explained in paragraphs 4.26 - 4.37, and for the reasons set out above, we consider that a 65% coverage threshold is reasonable in the circumstances.

Determining the presence of POs

- 4.66 Using the methodology for the different types of infrastructure discussed above, we next determine the number of POs that are present within each local exchange area. For copper we count the number of POs that have unbundled each exchange. Next we assess whether Virgin Media exceeds the 65% coverage threshold and if so add Virgin Media as an additional PO. Finally, we assess whether there are any POs with >65% coverage of premises in the copper exchange area using fibre based WLA

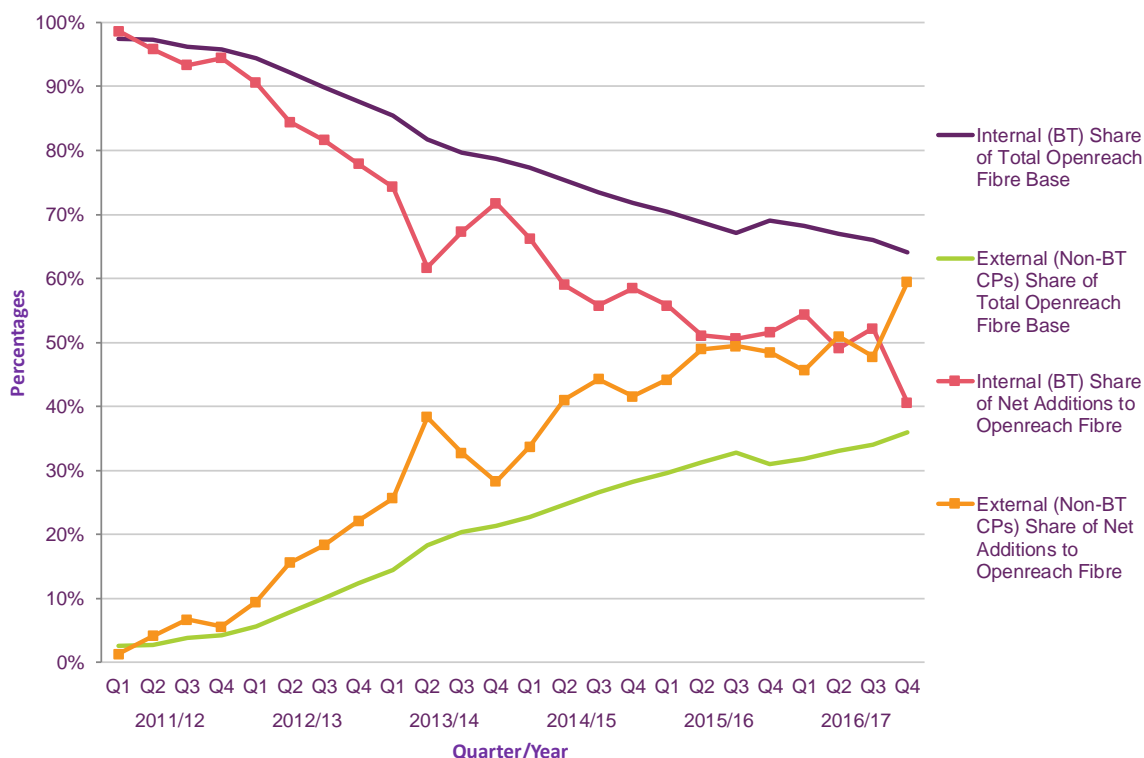
products and add them to the number of POs present (except if they already offer broadband using LLU from that exchange). This provides us with a final assessment of the number of POs present within each individual copper exchange area.

Criteria for assessing competitive conditions in each exchange

- 4.67 Having determined the number of POs present in an exchange area, we now consider the competitive conditions within each exchange area.
- 4.68 In the 2014 WBA Statement, we concluded that there were sufficiently similar competitive conditions in exchange areas where there were at least BT+2POs and that competitive conditions were materially different for exchanges which were BT-only or BT+1PO, which we considered fell within a separate geographic market. Even in those BT+2POs exchanges where BT previously had a high market share, we saw BT's market share fall to levels similar to that in exchanges with BT+3POs or more when a third PO has been present for four or more years.⁷⁹
- 4.69 We have considered whether the same effect (of declining BT market share following entry by rival POs) is likely to occur in exchanges where rival POs are only offering broadband services on the basis of fibre. However, data on fibre-take up at the exchange level (equivalent to the data we used for copper services in the 2014 WBA market review) is not yet available in a sufficiently long time series to assess the evolution of market shares based on fibre. Nevertheless, we have examined the national trend in the use of BT's fibre services (see Figure 4.3). This shows that BT's retail market share of fibre services over the Openreach network is declining over time and we consider that this supports the case that a similar effect to that seen for copper-based services is likely to occur for fibre-based services – namely that when at least 2 non-BT POs enter an exchange, BT's market share will decline to a level consistent with the level it has in other more competitive exchanges.

⁷⁹ We found that BT's share fell over time following LLU entry and said that this suggested that the conditions of competition in all BT+2 exchanges are similar to each other, as well as similar to exchanges where BT+3 or more POs are present. This was based on the observation that, BT's exchange level share is influenced by both the number of PO competitors in the exchange, and the period of time which the POs have been present. When entry was recent, BT's exchange share falls progressively and significantly over time (as a result of on-going end-user churn), and in BT+2 exchanges, after five years, falls to levels indicative of competitive conditions sufficiently similar to BT+3 or more PO exchanges. See 2014 WBA Statement, paragraphs 4.130 - 4.133, and Figure 4.6.

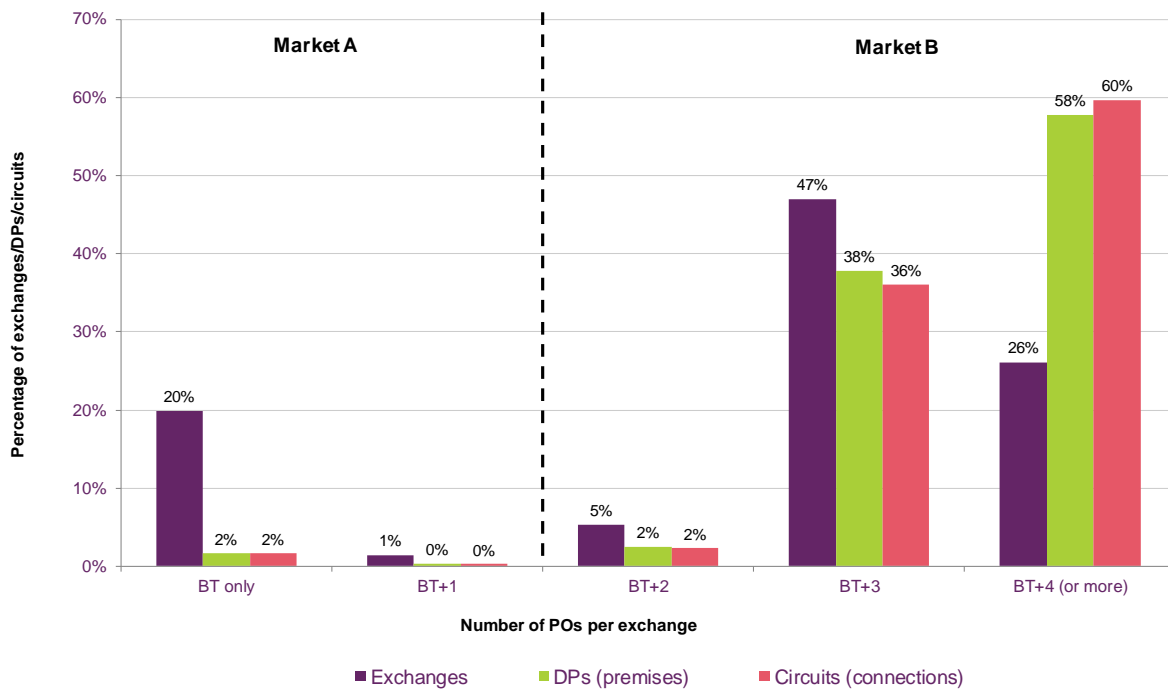
Figure 4.3: Share of Openreach fibre connections



Source: BT KPIs Q4, 2016/17, <http://www.btplc.com/Sharesandperformance/Quarterlyresults/>.

4.70 Overall, we propose that BT+2PO exchange areas have sufficiently different competitive conditions to BT only and BT+1 exchange areas that they should be defined as falling into separate markets. We reach this conclusion because of the evidence on the decline in BT’s copper-based market shares for BT+2PO exchanges and the national trend in fibre-take up implying a similar effect for fibre. On this basis we show the distribution and classification of exchange areas in Figure 4.4 below.

Figure 4.4: Number of POs per exchange



Source: Ofcom calculations based on data provided by BT and Virgin Media.

Estimating the size of the market

- 4.71 Having determined our proposals for different geographic markets, we next take a further step, by estimating the size of each market as a proportion of UK premises. We do this by allocating postcodes, for which we have data on the number of premises present, to exchange areas (see paragraphs A8.14 – A8.24).
- 4.72 There are situations where more than one exchange can serve a given postcode. This is the case for around 1.6% of premises nationally. Re-allocating these premises to a different exchange area could affect our estimates of the size of the areas of each geographic market (Market A and Market B).
- 4.73 We have undertaken further analysis of those postcodes that could be allocated to more than one exchange to determine whether, for each postcode, the possible exchange area allocations are all in Market A, all in Market B, or are in a mix of both Market A or Market B. Only in the latter case could reallocation of a postcode affect our estimate of the size of the areas we subsequently define as Market A and Market B.
- 4.74 We found that, for the large majority (90%) of premises that could be allocated to more than one exchange, these fell within the same Market – for example postcodes with a first exchange in Market B had a second exchange also in Market B. Less than 0.2% of premises nationally could be allocated to either Market A or Market B depending on the method of allocation.⁸⁰ The overall size of the impact on either Market A or Market B would likely be smaller still as any alternative allocation method would likely move some postcodes from Market A to Market B and move others from Market B to Market A.

⁸⁰ See Annex 8, paragraph A8.22 for more detail.

4.75 We therefore consider that premises which can be allocated to multiple exchange areas have a very limited impact on our estimates of the size of the market.⁸¹

Provisional conclusion

4.76 We therefore propose to classify exchange areas in the UK excluding the Hull Area (99.3% of UK premises) into separate geographic markets as follows:

- Market A (2.0% of premises) – areas in the UK (excluding the Hull Area) where there is limited or no network competition (exchange areas which are BT-only or BT+1PO); and
- Market B (97.3% of premises) – areas in the UK (excluding the Hull Area) where there is reasonable network competition (exchange areas which are at least BT+2POs).

Consultation questions

Question 4.1: *Do you agree with Ofcom's proposed geographic market definition? Please provide reasons and evidence in support of your views.*

⁸¹ Further, we do not consider it likely the allocation of these postcodes (the 0.2% of postcodes referred to in paragraph 4.74) would have any impact on the market definition itself. Their allocation could only potentially affect our market definition (and the definition of individual exchange areas) if their allocation altered the estimated percentage fibre or cable coverage in an exchange area, such that the estimated coverage fell on a different side of the threshold. See Annex 8, A8.23.

Section 5

Market Power Assessment

Summary

- 5.1 In this section, we set out our assessment on whether any telecoms provider has SMP in the relevant markets identified in sections 3 and 4.
- 5.2 Based on our analysis we provisionally conclude that in:
- Market A (2.0% of UK premises) – BT has SMP; and
 - Market B (97.3% of UK premises) – no provider has SMP.⁸²

Approach to market power assessment

- 5.3 Within the defined markets, we consider whether any telecoms provider has SMP – essentially this means the ability to act, to an appreciable extent, independently of competitors, customers and consumers. We do this in order to determine whether a market is effectively competitive, and where a market is not effectively competitive because we find there is SMP, we consider the *ex ante* remedies appropriate in order to address potential competition concerns arising from that SMP.
- 5.4 In conducting our SMP analysis we have followed the approach set out in Annex 6. In particular, taking due account of the Commission’s SMP Guidelines, we have considered the following criteria on the basis that they appear to us to be most relevant for the purposes of this review:
- current and future potential market shares;
 - pricing and profitability;
 - barriers to entry and expansion;
 - countervailing buyer power.
- 5.5 When assessing SMP, it is appropriate to take account of the existing regulation that is upstream of the market which is being considered. As explained in paragraph 3.6, in the context of this review, we have assumed that LLU and VULA remedies will continue to be in place in the WLA market during the next review period (as proposed in the 2017 WLA Market Review Consultation).⁸³

⁸² The remaining 0.7% of UK premises are in the Hull Area. We have set out our proposals in relation to the Hull Area in a separate consultation also published today <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-broadband-access-market-reviews-hull>

⁸³ See <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>.

Proposal on SMP in Market A

5.6 As explained in Section 4, Market A comprises those BT local exchange areas where there are no more than two POs (including BT) present or forecast to be present based on committed roll-out plans, over the period of the market review.

Market shares

5.7 Our calculation of market shares corresponds to the share of active broadband connections supplied by each telecoms provider. Active connections include broadband connections provided via MPF and SMPF on BT's copper network (either by BT or by an LLU provider), via VULA on BT's fibre network, or by Virgin Media using its cable network. In doing so, we include telecoms providers who might not actually offer a WBA product to third parties, but rather are self-supplying (as we understand to be the case with Virgin Media). We consider that it is appropriate to include such self-supply because of the indirect constraint from the retail sales accounted for by such connections. Moreover, absent regulation there may not be any direct wholesale supply to third parties and in such a case retail sales would be the only relevant metric.

5.8 Our market share calculations take account of current and committed LLU and VULA roll-out to the extent it exists.⁸⁴ We assume that an LLU or VULA provider can migrate customers onto its own network within the review period after entering an exchange area. Therefore, where LLU or VULA roll-out is forecast we have assumed that a PO's WBA customer base will be transferred to an LLU- or VULA-based product and we have therefore included such connections in the PO's market share.

Current market shares

5.9 Table 5.1 shows wholesale market shares within Market A based on our calculations using data from BT and Virgin Media. BT holds a share of [X]. The combined share of all other providers in Market A is [X] with the single largest of these having a share of [X].

Table 5.1: Market A WBA shares, October 2016

Provider	Market A Shares
BT	[X] >90%
Other providers	[X] <10%

Source: Ofcom calculation from data provided by Openreach and Virgin Media.⁸⁵

5.10 BT's market share is above 90% [X], which is above the 50% threshold referred to in the SMP Guidelines which gives rise to a presumption of dominance.

⁸⁴ See Annex 8, paragraph A8.30-A8.32 and paragraphs 4.54 - 4.56 respectively.

⁸⁵ Ofcom calculations based on BT's responses throughout November 2016 to S135 Notice, dated 2 November 2016 and Virgin response to Q2.5 of s135 notice 16 October 2015.

Future market shares

- 5.11 We do not believe that it is likely there will be substantial market share gains by the POs that are currently, or planned to be, present in Market A areas via LLU or VULA. Only a small number of Market A premises (16%) have, or are expected to have over this review period, another PO present and even if they significantly increased their customers in those areas, this would not have a significant impact on overall Market A shares. As discussed in paragraphs 4.44 and 4.54 above, this takes into account committed LLU and fibre roll-out and therefore we do not expect entry into the market to substantially affect market shares.
- 5.12 Overall, we interpret BT's likely high future market share over the course of the market review period as strong evidence that BT will hold a position of SMP in Market A. Nevertheless, it is appropriate to consider other factors.

Pricing and profitability

- 5.13 As explained in Annex 6, the ability to price at a level persistently and significantly above the competitive level is, in principle, an indicator of market power.
- 5.14 With respect to wholesale prices, BT has been constrained by a cost-based charge control on a reference (IPStream) service in Market A. We note that BT has been pricing close to the level of the charge control for almost all of the IPStream services. This suggests that absent regulation BT may be able to increase charges which would be consistent with it holding SMP (unless the charge control had been set below the competitive level, which we do not believe to be the case) for the reasons below.
- 5.15 On the face of it, BT's reported return on capital employed for WBA services in Market A (as defined in 2014) appears high at around 70%.⁸⁶ However, given the heavily depreciated nature of certain assets in Market A, we do not consider that these accounting returns represent an accurate picture of the economic returns in this market. Adjusting for this in a similar way to the way we set the current charge control on IPStream, BT's RFS indicate that returns in Market A (as defined in 2014) would be around 26% in 2015/16 (rather than 70%),⁸⁷ which remains above the benchmark cost of capital (i.e. the WACC of 10.8% pre-tax nominal applicable in 2015/16).⁸⁸
- 5.16 On a forward looking basis we note that, there are a number of factors that are likely to affect BT's returns in Market A, potentially having opposing effects. As discussed in Section 2, BT is planning to upgrade all exchanges to WBC by the end of 2018. This product currently has higher returns than the legacy IPStream service and there may also be cost savings associated with decommissioning the IPStream network

⁸⁶ BT, RFS, 2015/16, Table 5.1 shows an estimate of the return on mean capital employed for WBA services of around 70% in 2015/16.

⁸⁷ This is based on returns calculated using a hypothetical ongoing network (HON) adjustment, consistent with our anchor pricing approach when imposing the charge control in 2014. On this basis the return on mean capital employed on WBA using the 2014 definition of Market A was 26% in 2015/16 (BT, RFS 2015/16, Appendix 3.2). In addition, we note that BT will be making some changes to the 2015/16 RFS which are likely to reduce these adjusted Market A returns from 26% to around 21% (see BT's 31 March 2017 Change Control Notification <https://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2017/ChangeControlNotification201617.pdf>).

⁸⁸ We have taken the benchmark cost of capital corresponding to the same year as the returns (2015/16). See, BT, RFS, 2015/16, page 7.

within the review period. However, costs may be higher due to the fact that new WBC assets will replace depreciated IPStream assets. In addition, as discussed in Section 4, we have provisionally found that the size of Market A has significantly reduced compared to the 2014 review (which forms the basis of the reported returns in BT's current RFS). In this area the unit costs are likely to be higher due to the fact that the remaining customers in Market A are likely to be located in more remote and less densely populated geographic areas.

- 5.17 Overall, it is very difficult for us to estimate what BT's profitability on WBA products in Market A will be over the review period, in view of the changes to the technology and the smaller size of Market A. However, given BT is pricing close to the level of the cap and currently earning more than its cost of capital, we consider, on balance, that this evidence on pricing and returns supports the presumption of SMP that would follow from BT's high market share and barriers to entry in this market.

Barriers to entry

- 5.18 We now consider whether there is the prospect of competitive constraints stemming from future PO entry.
- 5.19 There are two broad options available to a telecoms provider wishing to compete in the WBA market. The first is to build a local access network, which could serve consumers directly. This would incur both the costs of providing individual access and the costs of the supporting infrastructure. The costs of the supporting infrastructure are likely to be sunk costs – costs which must be incurred in order to enter a market but which cannot be recovered on exit. While we are aware of some providers deploying small local networks, we are not aware of any provider that is considering such investment in Market A of a scale that would change our conclusions, as set out below.⁸⁹
- 5.20 The second option for those wishing to compete in broadband markets is to take advantage of the upstream access remedies. These remedies, imposed in the WLA market, mean that providers seeking to enter downstream broadband markets, such as WBA, do not have to incur the costs of building a local access network. Instead, such providers can purchase regulated access to BT's network on a wholesale basis and use this to provide broadband services for their own use or for supply to third parties. However, this can still require significant sunk costs, including co-location at BT's exchanges and securing access to backhaul services.
- 5.21 The significant sunk costs incurred through unbundling exchanges mean that LLU entry is unlikely to be profitable in exchanges where the number of customers served by the exchange is small. We recognise that over time, the costs associated with unbundling such as equipment costs (i.e. MSANs) have been falling, lowering the sunk costs required for LLU and therefore the barriers to LLU entry. However, the exchanges which form Market A (which have not been unbundled by more than one telecoms provider and most of which have not been unbundled at all) serve an average of 517 premises, and the majority (89%) serve fewer than 1,000.⁹⁰ This compares to an average of just under 7,000 premises for Market B exchanges (see

⁸⁹ This contrasts with other areas of the UK where significant network investment is taking place. For example, Virgin Media's project lightning aims to reach 4m additional homes by 2020.

⁹⁰ Ofcom calculations based on BT's responses to the s.135 notice dated 2 November 2016.

paragraph 5.33). Due to the small size of exchanges in Market A, their geographical locations (which tend not to map well to POs' backhaul networks) and the increasing focus on fibre broadband, we believe it is unlikely to be economically attractive for POs to seek to roll-out LLU in these exchanges over the market review period. The allocation of exchanges to Market A already takes account of POs' committed LLU roll-out plans, to the extent that they have such plans. We explain how we have decided what roll-out to account for in our market definition in Annex 8.⁹¹

- 5.22 POs may also be able to offer services to more premises in Market A if there is additional fibre roll-out by BT (facilitating the availability of VULA). We set out how we take into account fibre roll-out in Section 4 above.⁹²
- 5.23 Given our approach to considering further rollout in our geographic market analysis (see section 4 above), we consider that, for the period of this review, entry into Market A substantial enough to over-ride a presumption of SMP is very unlikely.

Countervailing buyer power

- 5.24 The relevant consideration in assessing the impact of buyer power on the ability of the seller to set a price is whether a buyer would have choice or, in other words, the benefit of an 'outside option'. BT's position in Market A is unlikely to be constrained by countervailing buyer power. No other providers have any significant presence in Market A on the basis of their own infrastructure (or actual or expected use of upstream WLA services provided by BT). Therefore, buyers do not have a credible alternative source of supply thereby harming the negotiating position of retail providers. As a result, a retail provider wishing to serve Market A via WBA would still have no choice but to purchase from BT in the vast majority of Market A.

Provisional conclusion on SMP in Market A

- 5.25 Given BT's substantial market share, the expected limited further roll-out of LLU, the lack of certainty of further fibre roll-out, the lack of countervailing buyer power, and evidence on pricing and returns, we consider that BT has (and will continue to have for the duration of the market review period) a position of economic strength in Market A affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. We therefore propose to find that BT has SMP in the market for the provision of WBA services in Market A.

Proposal on SMP in Market B

- 5.26 Market B comprises those BT exchange areas where there is BT and at least two more POs present. As set out in Section 4, we have taken into account "committed" roll-out of LLU, cable and fibre during the period of the market review. Taking these into account, 4,370 exchanges fall into Market B. These exchanges serve 97.3% of UK premises (excluding the Hull Area). The main competitive constraints in Market B are likely to come from POs using LLU and VULA and cable.

⁹¹ Annex 8, paragraphs A8.30 – A8.32.

⁹² See section 4, paragraphs 4.53 - 4.56.

Market shares

Current market shares

5.27 Table 5.2 shows shares in Market B based on October 2016 volume data.⁹³ No PO, including BT,⁹⁴ has a market share greater than the 40% threshold referred to in the SMP Guidelines above which concerns about single firm dominance normally arise.⁹⁵ We therefore interpret this as an indication that it is likely that no telecoms provider holds a position of SMP in Market B.

Table 5.2: Market B WBA shares by provider, October 2016

Provider	Market B Shares
BT	[X] <40%
Sky	[X] 15-25%
TalkTalk	[X] 15-25%
Virgin Media	[X] 15-25%
Other providers	[X]

Source: Ofcom calculation from data provided by Openreach and Virgin.⁹⁶

Future market shares

5.28 Given the current distribution of market shares and the level of competition within the market, we do not expect the future market shares to change over the course of the market review to the extent that any telecoms would have a share in excess of 50%, thereby leading to a presumption of SMP.

Pricing and profitability

5.29 We have examined the level of WBA prices in Market B and compared them to the regulated prices in Market A. Figure 5.3 shows that prices for copper-based WBC products in Market B are [X] those in Market A. While prices for IPStream are [X] in

⁹³ Ofcom calculations based on BT's responses throughout November 2016 to the s135 Notice dated 2 November 2016.

⁹⁴ BT's share of residential and small business broadband connections at the end of Q4 2016 was 32.8%. See Ofcom, Telecommunications market data tables Q4 2016, 27 April 2017, https://www.ofcom.org.uk/_data/assets/pdf_file/0014/101408/telecoms-data-update-q4-2016.pdf

⁹⁵ See paragraph 75 of the SMP Guidelines.

⁹⁶ Ofcom calculations based on BT's responses throughout November 2016 to S135 Notice, dated 2 November 2016 and Virgin response to Q2.5 of s135 notice 16 October 2015.

Market B than in Market A,⁹⁷ IPStream is very much a minority product in Market B, with WBC being of significantly greater importance.⁹⁸

- 5.30 BT is continuing to roll out its WBC product and is progressively removing IPStream services after WBC has been implemented.⁹⁹ IPStream is now only utilised in just over 5% of those exchange areas defined as Market B in our 2014 review,¹⁰⁰ with the total number of lines supported by IPStream being [X] across internal and external end user access rentals,¹⁰¹ out of over [X] BT wholesale circuits in Market B. Across the 23m active connections in Market B, this constitutes less than 1% of broadband lines.
- 5.31 By contrast, WBC is much more widely used in Market B, with a take-up of [X] lines. WBC bandwidth and rental prices are also typically [X] in Market B than in Market A ([X]).¹⁰² Therefore, overall (i.e. on average across IPStream and WBC services), wholesale prices in Market B are [X] than those in Market A. While a simple comparison is not straightforward since the costs per connection are also likely to be lower in Market B than Market A, this pricing evidence is nevertheless consistent with constraints on pricing in Market B being stronger and therefore supportive of a lack of SMP in Market B.
- 5.32 We have not examined the level of profitability in Market B since we consider the evidence on pricing and other factors to be sufficient to suggest effective competition, such that evidence on profitability would not alter our provisional conclusion.

Figure 5.3: Comparison of Market A and Market B copper-based WBA prices (2014/15) in £ per year

[X]

Note: [X]

Source: BT, RFS, 2014/15 and BT's response, dated 29 January 2016, to question 4 of the section 135 notice dated 7 January 2016.

Barriers to entry

- 5.33 Barriers to entry and expansion in Market B are much lower than in Market A. For example, Market B exchanges tend to serve a much larger number of premises than Market A exchanges – on average, a Market B exchange serves just under 7,000 premises, in contrast to a Market A exchange which serves on average just 517

⁹⁷ Prices for IPStream in Market A have also fallen further in the last year due to the charge control.

⁹⁸ Higher prices for IPStream in Market B may also stem from BT's desire to encourage IPStream customers to move to its WBC services (which are both lower cost for BT to provide and generally allow for higher speed connections to consumers). See for example: BT Wholesale, About IPStream Connect, <https://www.btwholesale.com/pages/static/products-services/ipstream-connect.htm>. Accessed 4 May 2017.

⁹⁹ As noted above, BT intends to replace all IPStream equipment with WBC equipment across the country by the end of 2018.

¹⁰⁰ BT response dated 22 November 2016 to question 7 of the 2nd WBA request s135 request dated 2nd November 2016.

¹⁰¹ BT response dated 29 January 2016 to question 4.1 of the 2nd WBA/WLA s135 request dated 7th January 2016.

¹⁰² BT response dated 29 January 2016 to question 4.1 of the 2nd WBA/WLA s135 request dated 7th January 2016.

premises.¹⁰³ Therefore, there is not such a barrier to entry for providers entering or expanding in Market B using LLU and VULA. There is also more infrastructure competition in Market B – for example, Virgin Media has a significant presence in Market B but only has enough of a presence to be classified as a PO in two exchange areas in Market A.

Countervailing buyer power

5.34 Given the number of POs present in Market B and their wide coverage, any potential buyer of WBA services has several potential suppliers from which it could seek access. This will give buyers some degree of negotiating power when seeking to obtain access. For example, the Post Office moved supplier from BT to TalkTalk in the financial year 2013/14.¹⁰⁴

Provisional conclusion on SMP in Market B

5.35 Given the significant amount of entry that has occurred across Market B exchanges and the success of the LLU and VULA POs and Virgin Media in securing market share, we provisionally conclude that no provider has (or will have during the market review period) a position of economic strength in Market B affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

5.36 We therefore propose to find that no provider has SMP in the market for the provision of WBA services in Market B.

Provisional conclusions on SMP

5.37 In summary, we provisionally conclude that:

- BT holds a position of SMP in the provision of WBA services in Market A; and
- No provider holds a position of SMP in the provision of WBA services in Market B.

Consultation questions

Question 5.1: Do you agree with Ofcom's proposal that BT holds SMP in Market A? If not, please provide reasons and evidence in support of your views.

Question 5.2: Do you agree with Ofcom's proposal that no provider has SMP in Market B? If not, please provide reasons and evidence in support of your views.

¹⁰³ Based on our proposed geographic market definition for the forthcoming review period.

¹⁰⁴ TalkTalk Annual Report 2014, Page 8.

Section 6

Remedies

Summary of proposals

- 6.1 In this section we set out the competition concerns that we have identified as a result of our competition assessment and provisional finding that BT has SMP in Market A. We then consider whether competition law would be sufficient to address these concerns, and discuss the options for remedies including our proposals for consultation.
- 6.2 In summary, we are proposing to impose the following remedies on BT in Market A:
- provision of network access on reasonable request (including on fair and reasonable terms, conditions and charges);
 - no undue discrimination and Equivalence of Inputs (EOI);
 - publication of a reference offer;
 - notification of changes to charges, terms and conditions;
 - notification of changes to technical information;
 - publication of quality of service information (if directed to by Ofcom);
 - accounting separation; and
 - cost accounting.
- 6.3 We are not, however, proposing to impose a charge control on a reference WBA product.

Introduction

- 6.4 In this section, we first set out our provisional view on the competition problems we have identified that arise from BT's SMP in Market A and then set out our proposals for remedies to address these. We consider that the proposed remedies would achieve our statutory duties and would satisfy the relevant legal tests. In reaching these proposals, we have taken account of our regulatory experience from previous market reviews, recent developments in these markets, and expected developments over the course of the market review period. We also reflect our long term vision for ensuring the quality and availability of communication services in the UK, as set out in our Strategic Review of Digital Communications.¹⁰⁵ Of particular importance for this WBA review is our strategy to deregulate and simplify regulation where possible, whilst ensuring consumers are protected.

¹⁰⁵ Ofcom, Making communications work for everyone – Initial conclusions from the Strategic Review of Digital Communications, 25 February 2016 (see https://www.ofcom.org.uk/_data/assets/pdf_file/0016/50416/dcr-statement.pdf).

- 6.5 As set out in Section 2, WBA remedies in the UK have previously been used to support investment in LLU roll-out by allowing telecoms providers to build up a customer base in geographic areas before investing in their own equipment to unbundle the relevant exchanges. This was successful but we have now reached the point where we consider that further LLU roll-out is unlikely. Our approach to remedies has therefore focused on protecting existing competition in Market A, rather than promoting further entry – including by telecoms providers that might use WBA on the ladder of investment towards greater network control (e.g. via LLU or other forms of upstream wholesale access).

Assessment of the competition issues in Market A

Potential competition concerns

- 6.6 In light of our SMP analysis set out in Section 5 above, we consider that in the absence of appropriate *ex ante* regulation, BT would have the incentive and ability to:
- refuse to provide network access to other providers (or refuse to provide access on reasonable terms, conditions and charges), which could restrict competition in the provision of retail services to the detriment of consumers;
 - discriminate in favour of its downstream retail businesses to the detriment of competition in retail broadband services (including by price and/or non-price discrimination), and ultimately to the detriment of consumers; and
 - fix and maintain some or all of its WBA prices at an excessively high level or engage in a price squeeze.
- 6.7 We set out in more detail below why we consider that each of the remedies that make up the package of *ex ante* remedies we are proposing helps to address the competition problems we have identified. As set out in Article 8(4) of the Access Directive, our package of *ex ante* remedies must be based on the nature of the competition problems identified and must be proportionate and justified in light of the objectives in Article 8 of the Framework Directive.

Effectiveness of competition law

- 6.8 Prior to imposing any *ex ante* remedies in a market where we have found a telecoms provider to have SMP, we first need to consider whether the competition concerns we have identified could be sufficiently addressed through competition law. To do this we have considered whether competition law would be effective in responding to the competition concerns identified above.
- 6.9 Competition law would focus on preventing the abuse of a dominant position, and may not place sufficient obligations on BT to facilitate and sustain effective downstream competition. In contrast, our experience is that *ex ante* regulation at the wholesale level can better promote effective downstream competition. Secondly, *ex ante* regulation can be better tailored to the particular circumstances in the market and services provided in order to address the competition concerns during the review period.
- 6.10 Thirdly, we consider that providing certainty in the wholesale market is important, both to BT and to its competitors, as this underpins competition in the retail market, which delivers benefits for consumers. We consider this is best achieved through *ex*

ante regulation which, in comparison to reliance on *ex post* competition law remedies alone, would:

- provide greater clarity on the type of behaviour that is/is not allowed; and
- can facilitate more timely enforcement due to the greater certainty and specificity provided by *ex ante* obligations.

6.11 In the present circumstances of Market A, we consider that competition law remedies alone would be insufficient to address the competition problems we have identified.

Provisional conclusion following assessment of the competition concerns

6.12 In light of our market analysis, in particular our SMP assessment, and the anticipated insufficiency of competition law, we consider that SMP regulation is necessary in order to address the competition concerns identified. We next consider the potential impact of the reform of Openreach and our assessment of the appropriate remedies.

The impact of Openreach reform

6.13 On 17 March 2017 we published an update setting out the detail of further voluntary commitments that BT has made regarding the reform of Openreach under section 89C of the Communications Act 2003.¹⁰⁶ We explained that BT's revised notification should provide an effective and long-term solution to address the competition concerns identified in our Strategic Review and that we were no longer proceeding with a formal notification to the European Commission to impose separation.

6.14 As we explained in our 17 March update, we consider that, overall, the new arrangements established by BT's further section 89C notification provide Openreach with significantly more independence to take its own decisions about the strategic direction and operation of the network, acting with a clear focus on the equal treatment of all its customers, not just the needs of BT Group. In particular, we explained our view that BT's further section 89C notification addresses those areas in which its previous proposals (contained in a section 89C notification submitted in July 2016) were deficient.

6.15 We also consulted in that document on a proposal to release BT from the Undertakings it gave to Ofcom in 2005 under the Enterprise Act 2002, and which established Openreach as a functionally separate access and backhaul division of BT operating on an Equivalence of Inputs (EOI) basis.

6.16 Having received the section 89C notification from BT, we are required by section 89C(4) of the Communications Act 2003 to consider, as soon as reasonably practicable, the impact on SMP conditions set in relation to markets, which in our opinion, will be affected.

6.17 WBA is provided to BT's retail divisions and other telecoms providers by BT Wholesale (rather than Openreach), and therefore we do not consider that the new arrangements introduced under the section 89C notification would have a direct impact on the way in which BT provides WBA services. However, WBA services are based on inputs supplied by Openreach. In addition, WLA products and services supplied by Openreach, such as LLU and VULA, are a key input into our competition

¹⁰⁶ Ofcom March 2017. *Delivering a more independent Openreach*.

https://www.ofcom.org.uk/_data/assets/pdf_file/0035/98855/Openreach-consultation-2017.pdf.

assessment and the level of competition for WBA services in different geographic areas. We have therefore considered whether the arrangements set out in BT's section 89C notification will impact the SMP conditions we are proposing to put in place in this consultation.

- 6.18 In accordance with the Undertakings and existing SMP regulation in the WLA market, Openreach currently provides WLA products on an EOI basis to the rest of BT (including BT Wholesale) and other telecoms providers. The new arrangements build upon and enhance the current functional separation of Openreach (through the creation of Openreach Limited with a majority independent board which should secure greater operational and strategic independence for Openreach). As we explain in the WLA Consultation, we are proposing to continue to impose SMP conditions, including EOI, on BT in the WLA market, and we consider that the arrangements under BT's section 89C notification will sit alongside and complement such new SMP regulation.
- 6.19 Consequently, we do not consider that the arrangements being put in place under BT's section 89C notification are likely to have a material impact on the need for, or the way in which BT provides, WBA services in Market A. To the extent the WBA market is affected to any extent, we do not consider that the Commitments will have an impact on the SMP conditions that we are proposing for BT in Market A for the reasons set out below. Stakeholders are invited to express their views on this position as part of any representations made on the substance of our proposals.

Assessment of appropriate remedies in Market A

- 6.20 In this subsection, we set out our proposed remedies for Market A that have been designed to address the competition concerns identified above. We assess each potential remedy in turn by setting out:
- the existing regulation (if any);
 - our analysis;
 - our proposal/s; and
 - our consideration of the relevant legal tests for imposing the proposed regulation.
- 6.21 The draft legal instruments that would give effect to our proposed remedies are set out in Annexes 4 and 5.

Requirement to provide network access on reasonable request and to provide such access on fair and reasonable terms, conditions and charges

Current regulation

- 6.22 BT is currently required to provide WBA services in Market A on reasonable request and on fair and reasonable terms and conditions. In addition, BT is subject to a charge control in relation to one of its WBA products and related services

(IPStream)¹⁰⁷ and is subject to a fair and reasonable requirement for all other WBA charges.

Our analysis

- 6.23 Given BT's SMP in Market A, we are concerned that it might refuse to offer WBA services to other telecoms providers in Market A, engage in a price squeeze and/or set excessively high wholesale prices. We discuss each of these concerns in turn below.

Refusal to provide access

- 6.24 The level of investment required by a third party to replicate BT's broadband access network in Market A is a significant barrier to entry. This is particularly the case given the provisional reduction in the size of the market which has meant that the average number of premises reached by LLU per Market A exchange has reduced from 658 to 517. The investment case is stronger where fibre is available in an exchange as this allows telecoms providers to serve a higher number of premises. However, as set out in Section 4, only a small amount of fibre is included in our provisional definition of Market A and as such the average number of premises reached with LLU is an important factor in the investment decision for telecoms providers.
- 6.25 Given the limited prospect of infrastructure investment by third party telecoms providers in Market A, an obligation requiring BT to provide WBA network access to third parties on reasonable request is necessary in our view to protect effective competition in retail broadband services in Market A. We consider that, in the absence of such a requirement, BT would have both the incentive and ability to refuse access to WBA services thereby foreclosing the prospect of retail competition to the detriment of end consumers.
- 6.26 However, we do not consider that it is appropriate to require BT to provide any and all types of network access requested by third parties. A requirement to provide any type of network access could result in BT being requested to develop multiple products at potentially high costs with very limited benefits for end consumers. Therefore, we consider it is only appropriate to require BT to meet those requests that are reasonable (having regard to factors such as the expected customer demand, and cost of development).

Risk of price squeeze

- 6.27 As discussed above, we consider there is a risk that, absent regulation, BT could engage in a price squeeze with the effect of foreclosing retail competition in Market A. Theoretically this could be through either increasing the wholesale price or decreasing its retail price so that an efficient operator could not compete. However, given the relative size of Market A (which is unlikely to have an impact on national pricing decisions – which are set on a uniform basis for BT's main brand), we consider that a price squeeze is more likely to be as a result of increases in wholesale prices.

¹⁰⁷ The charge control on IPStream services lapsed at the end of March 2017. In the interim period before we decide on proposals for the WBA markets, BT has voluntarily committed to maintaining current prices (CPI – CPI) for IPStream services until 31 December 2017. See <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/narrowband-broadband-fixed>).

- 6.28 Given the lack of retail competition in Market A and the objective of our regulation to protect existing competition, we consider it is appropriate to put a requirement on BT to ensure that network access is provided on fair and reasonable charges to address the risk that BT may seek to engage in a price squeeze.
- 6.29 When considering the differential between retail and wholesale prices, we propose adopting an approach to the evaluation of costs and margins consistent with that which would be adopted in a margin squeeze assessment under competition law. We consider this would mean allowing for a minimum of a retail margin sufficient to cover the long-run incremental retail costs (including customer acquisition), assessed by reference to an equally efficient operator (EEO) standard.

Risk of excessive pricing

- 6.30 There remains a risk that BT would have the ability and incentive to fix and maintain some or all of its WBA prices at an excessively high level (as noted at paragraph 6.6 above). However, for the purpose of determining whether a remedy (such as a wholesale charge control) is required to address this risk, the most important consideration for Market A in this market review is the impact that wholesale charges may have for retail consumers in Market A, i.e. whether high wholesale prices would be likely to result in adverse consequences for retail consumers, such as high retail prices for a sustained period.
- 6.31 We consider the risk of consumers and businesses paying excessively high retail prices in Market A is low. BT currently has a national retail price for its main 'BT-branded' broadband services. If it maintains this national pricing approach, consumers in Market A will be protected by competition for broadband services in Market B. While it is possible that BT could look to exploit its market power in Market A and raise its retail (and wholesale) prices in Market A only, we consider this is unlikely as:
- BT has maintained its retail national price (for its main branded product) even when the size of Market A, and therefore the benefit of disaggregating its prices, was significantly higher. Given our provisional finding on the size of Market A now (circa 2% of UK premises), the additional revenue it could now earn from disaggregating retail prices for its main brand would be relatively small.
 - There would be additional marketing and sales costs to BT in offering different tariffs in Market A, particularly as the geographic areas that make up Market A are in non-contiguous pockets of low customer density areas around the country.
 - There would be a risk to BT's brand reputation if it were to follow such a strategy, due to the potential for negative publicity from significant price increases in certain largely remote and rural geographic areas. The speed and quality of rural broadband is already of concern to consumers and politicians.
- 6.32 Therefore, although BT does have different prices and/or speed offerings for its Plusnet and EE brands and for some business services between Market A and Market B, we consider the likelihood that consumers and small businesses will pay excessively high retail prices in Market A as a result of BT de-averaging its main-brand retail prices in future is low (and lower than in the last review).
- 6.33 Further, a wholesale charge control only constrains retail pricing if there is sufficient entry using the access product which, in turn, drives retail price competition. The current wholesale charge control and other remedies that we have in place have

resulted in limited retail broadband competition in Market A. In contrast, retail competition in the rest of the UK excluding the Hull Area (i.e. Market B) – including from competitors using cable infrastructure and charge controlled access to WLA services (i.e. LLU and VULA) – should act to constrain BT's retail pricing for broadband, in view of its national pricing for its main 'BT' brand. Given the likely size of Market A for the next review period, and the fact that the areas are geographically remote and segregated, a wholesale charge control is unlikely to be effective in constraining retail prices.

- 6.34 While in some circumstances there can be benefits to a charge control compared to a condition which requires access to be fair and reasonable, we do not consider that those circumstances hold in the case of WBA Market A. For example, a charge control provides a clear limit on wholesale price increases and would be likely to provide telecoms providers with greater certainty over the control period. However, in the present circumstances, we do not expect that even if we put a wholesale charge control in place, this would result in significantly greater retail competition in Market A going forward (as it has not done so to date when the market was around five times larger than now estimated). Moreover, with a reduced size of Market A it is possible that the unit costs of serving customers may be higher for the remaining premises served in Market A. There is therefore a risk that if we were to put a charge control in place that it might compromise incentives to invest (e.g. to complete the decommissioning of IPStream assets and roll-out of higher quality broadband infrastructure – whether copper-based and/or fibre-based services). Therefore, on balance, we do not consider that a wholesale charge control would provide significant additional benefits to retail consumers compared to the form of fair and reasonable charges condition we are proposing.
- 6.35 If BT were to start charging differential retail prices between Markets A and B for its main brand in the future, we would review the degree of consumer harm in Market A and reconsider the effectiveness of our proposed WBA remedies, including whether alternative forms of regulation would better protect retail consumers.

Our proposals

- 6.36 We are proposing an SMP obligation requiring BT to provide network access¹⁰⁸ on reasonable request and on fair and reasonable terms, conditions and charges. In considering what fair and reasonable means in relation to charges, we would expect to assess this on the basis that charges were not set at such a level so as to not constitute a price squeeze.
- 6.37 In addition, we propose that BT provide access in accordance with such terms, conditions and charges as Ofcom may from time to time direct and comply with any direction Ofcom might make under this condition. We consider that it is appropriate for this SMP condition to include the power for Ofcom to make directions in order that we can secure the supply of services and, where appropriate, fairness and reasonableness in the terms, conditions and, charges of network access. The proposed condition includes a requirement for the dominant provider to comply with any such direction(s), so any contravention of a direction would constitute a

¹⁰⁸ Network access is defined in sections 151(3) and (4) of the 2003 Act. We consider that a requirement to provide network access would, therefore, include any ancillary services as may be reasonably necessary for a third party to use the services. To make this clear, we have proposed to include a specific obligation to this effect in the proposed SMP condition – see Annex 4, Schedule 1.

contravention of the condition itself and would therefore be subject to enforcement action under sections 94-104 of the Act.

- 6.38 We envisage that this obligation would apply to all WBA services in Market A whether supplied using ADSL/copper or VDSL/fibre services. In practice, however, these requirements will largely apply to copper WBA products as there are limited handover points for fibre services within Market A.

Legal tests

- 6.39 Section 87(3) of the 2003 Act authorises Ofcom to set SMP conditions requiring the dominant provider to provide such network access as Ofcom may from time to time direct. These conditions may, pursuant to section 87(5), include provision for securing fairness and reasonableness in the way in which requests for network access are made and responded to and for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. Section 87(9) of the 2003 Act also authorises Ofcom to set SMP conditions imposing on the dominant provider price controls and rules on the recovery of costs and cost orientation connected with the provision of network access (subject to the conditions of section 88 being satisfied).
- 6.40 We consider that the proposed condition meets the criteria set out in section 47(2) of the 2003 Act. The proposed condition is:
- objectively justifiable, as it will secure effective competition by ensuring third parties are able to obtain WBA services where they are unable to replicate BT's network;
 - not unduly discriminatory, as it would be imposed on BT and BT is the only provider which we propose to find holds SMP in Market A;
 - proportionate, as it is directly targeted at addressing the market power we consider that BT holds in this market and does not require BT to provide access where it is not technically feasible or reasonable; and
 - transparent, in relation to what it is intended to achieve as it is clear that the intention of the proposed condition is to ensure that BT provides access to its networks in order to facilitate competition.
- 6.41 We have also taken into account the factors set out in section 87(4) of the 2003 Act. In particular, the proposed obligation would require BT to meet requests that are reasonable only, for example because the terms of access are technically and economically viable, and feasible. The requirement on BT only to meet reasonable network access requests also ensures that due account is taken of the investment made by BT initially in providing the network whilst seeking to ensure that effective competition is secured in the long term.
- 6.42 We are also required to ensure that the proposed condition satisfies the tests set out in section 88 of the 2003 Act as the requirement places controls on network access pricing, insofar as charges are required to be fair and reasonable.
- 6.43 Section 88(1)(a) of the 2003 Act requires that Ofcom must not impose price control conditions unless it appears to them from the market analysis carried out for the purpose of setting that condition that there is a relevant risk of adverse effects arising from price distortion. We have discussed above that we consider that, in the absence

of price regulation requiring prices to be 'fair and reasonable', BT may impose a price squeeze so as to have adverse effects for end-users of public electronic communications services, and therefore propose that there is such a risk. However, for the reasons set out above, we do not consider there is a relevant risk of adverse effects for end-users from BT fixing or maintaining its WBA prices at an excessively high level.

- 6.44 Section 88(1)(b) of the 2003 Act provides that Ofcom must not set a price control condition unless it appears to them that the setting of the condition is appropriate for the purposes of:
- promoting efficiency;
 - promoting sustainable competition; and
 - conferring the greatest possible benefits on the end users of public electronic communications services.
- 6.45 We consider that the provision of network access on fair and reasonable terms, conditions and charges will: promote efficiency and sustainable competition in that it would help protect existing competition in Market A, in particular by providing a safeguard against the risk of a price squeeze. We also consider that, in the particular circumstances of WBA in Market A, a charge control would not have a significant impact on retail prices paid by consumers. Therefore, it would not, in the circumstances, be proportionate to require a charge control in Market A in addition to such a condition.
- 6.46 We are also required, under section 88(2) of the 2003 Act, to consider the extent of investment by BT in the matters to which the condition relates. Given BT's current pricing and expected returns (against accounting costs) in this market, we do not consider that a fair and reasonable charges obligation to avoid a price squeeze would compromise BT's ability to recover the cost of past investments in this market (and would not require BT to increase retail prices). This proposed condition is therefore an appropriate basis upon which to control BT's prices.
- 6.47 We have considered our duties under section 3 of the 2003 Act and consider that the proposed condition will further the interests of citizens and consumers in relevant markets by the promotion of competition.
- 6.48 We have considered the Community requirements as set out in section 4 of the 2003 Act. We consider that the proposed obligation will promote competition in relation to the provision of electronic communications networks by enabling providers of wholesale services in Market A to compete at the downstream level and by protecting against distortions/restrictions of competition, resulting in the maximum benefit for retail consumers of broadband internet access services.
- 6.49 In addition, we consider that the proposed condition is consistent with the BEREC Common Position on WBA,¹⁰⁹ including the best practice remedies falling under the

¹⁰⁹ BEREC, *BEREC common position on best practice in remedies on the market for wholesale broadband access (including BitStream access) imposed as a consequence of a position of significant market power in the relevant market*, BoR (12) 128, 8 December 2012,

objectives “Assurance of access” (BP1 to BP9), “Assurance of co-location at delivery points” (BP10), and “Fair and coherent access pricing” (BP42).

- 6.50 We believe that our proposed approach is consistent with BP41¹¹⁰ in particular. We believe that the constraints set out alongside the combination of remedies in terms of network access on fair and reasonable terms and charges mitigate the risk of excessive wholesale charges having an adverse effect for end-users of public electronic communication services and that an additional *ex ante* pricing obligation, including a cost-based charge control is not required in this case.
- 6.51 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in accordance with section 87(1) of the 2003 Act.

Requirement not to discriminate unduly and Equivalence of Inputs (EOI)

Current remedies

- 6.52 BT is required to provide network access on an EOI basis in respect of all services that it already provided on an EOI basis at the time of the 2014 WBA market review and not to unduly discriminate in respect of all other services.

Our analysis

- 6.53 A non-discrimination obligation is intended as a complementary remedy to the network access obligation, principally to prevent the dominant provider from discriminating in favour of its own downstream divisions and to ensure that competing providers are placed in an equivalent position. Without such an obligation, BT could have an incentive to provide the requested wholesale network access service on terms and conditions that discriminate in favour of its own retail divisions. For example, BT could provide the same services but within different delivery timescales, which could have an adverse effect on competition.
- 6.54 Discriminatory behaviour by BT in the supply of WBA products and services could undermine a level playing field in the related downstream markets to the detriment of competition and consumers. A non-discrimination remedy would help to maintain a level playing field between BT’s downstream businesses and other CPs who wish to use BT’s WBA services in Market A.
- 6.55 Non-discrimination can have different forms of implementation. A strict form of non-discrimination – i.e. a complete prohibition of discrimination – would result in the SMP provider providing exactly the same products and services to all CPs (including its own downstream divisions) on the same timescales, terms and conditions (including price and service levels), by means of the same systems and processes and by providing the same information. Essentially, the inputs available to all CPs (including the SMP CP’s own downstream divisions) would be provided on a truly equivalent basis, an arrangement which has become known as equivalence of inputs (EOI). An EOI obligation removes any degree of discretion accorded to the nature of the

http://bereg.europa.eu/eng/document_register/subject_matter/bereg/download/0/1126-revised-bereg-common-position-on-best-pr_0.pdf

¹¹⁰ BP41 “An *ex ante* pricing obligation may not be necessary if there is no risk on excessive pricing due to strong (in)direct constraints and/or because the NRA imposes an effective combination of remedies on markets 4 and 5 guaranteeing equivalence of access and a margin squeeze test.”

conduct. The concept of EOI was first identified in the Strategic Review of Telecoms in 2004/05 as one of our key policy principles to ensure that regulation of telecommunication markets is effective. Following this review, a specific form of EOI was implemented in 2005 through the BT Undertakings.

- 6.56 On the other hand, a less strict implementation of non-discrimination than EOI – for example, a requirement not to discriminate unduly against particular persons or classes of persons – may allow for some flexibility and result in a more practical and cost-effective implementation of wholesale inputs in cases where it is economically justified (sometimes called equivalence of outcome (EEO)). Such a more flexible non-discrimination obligation does, by its very nature, allow for certain discriminatory conduct provided that the discrimination in question is not undue. Whether specific conduct amounts to a breach of the undue discrimination obligation can only be determined on a case-by-case basis.
- 6.57 We have considered what form of non-discrimination obligation would be appropriate for WBA products and services in Market A. As set out above, BT is already required to provide network access for its WBA products and services on an EOI basis, except for those which it was not providing on an EOI basis at the time the 2014 WBA Statement entered into force. Any services not provided on an EOI basis are subject to a no undue discrimination (NUD) obligation.¹¹¹
- 6.58 Although our provisional analysis indicates that Market A is now smaller than in 2014, we consider it is necessary to have some form of non-discrimination obligation to protect existing competition and choice for retail consumers in Market A. Absent regulation, BT could discriminate and distort competition both on a price and a non-price basis (e.g. through charging higher prices to competitors than its retail divisions or providing better quality services).
- 6.59 We have therefore considered whether it is appropriate and proportionate to continue requiring current and new products to be provided on an EOI basis (aside from those not provided on an EOI basis prior to the 2014 WBA Statement). As set out in our recent consultation on the WLA Market Review, we consider EOI is the most effective form of non-discrimination.¹¹² It generates better incentives on the dominant undertaking to improve the products it offers to competitors and provides greater transparency. We also consider that it improves certainty for BT's competitors on the products and services offered by BT and addresses the issue of information asymmetry. If it was just subject to a no undue discrimination obligation, it may be necessary for Ofcom to determine whether any differences in the services were undue on a case-by-case basis. This could lead to greater uncertainty for telecoms providers over the price and/or terms and conditions of WBA products (particularly if there was a time lag in resolving any issues of what is undue discrimination) and may undermine existing competition in the market.
- 6.60 In principle, we do not consider that it will be costly or disproportionate for BT to develop any new WBA products on an EOI basis. Developing a new product on an EOI basis should be no costlier than if BT were to create separate internal and external variants of a service on a non-EOI basis. However, we consider it is important, following consent from Ofcom, to allow for flexibility in the application of

¹¹¹ At the time of the 2014 WBA market review, BT provided certain WBA products, including IPStream and IPStream Connect, as well as successor products (including WBC) on an EOI basis by virtue of its obligations under the 2005 BT Undertakings.

¹¹² See March 2017 WLA market review consultation, paragraph 5.66.

EOI for a new product where circumstances warrant it. This is consistent with the approach taken in the 2014 WBA market review.

- 6.61 In addition, we do not consider that it would be unduly onerous for BT to continue to provide existing services on an EOI basis (where this is already the case). It would not require BT to re-engineer existing systems or processes or give rise to any material compliance costs.
- 6.62 However, we do not consider that it would be proportionate to require BT to re-engineer services which it already provides on a non-EOI basis, as this would be costly for BT. This is only likely to be the case for a small number of products that existed prior to the June 2014 statement. However, we continue to consider it is necessary for these services to be subject to a NUD obligation to protect against the incentive and ability for BT to engage in discriminatory pricing and/or non-pricing practices.
- 6.63 In coming to this view we have taken utmost account of the EC's Costing and Non-discrimination Recommendation. This notes that EOI is, in principle, the best way to ensure effective protection from discrimination from a vertically integrated dominant entity but recognises that EOI might not be appropriate for legacy services. In addition, we note that this Recommendation also provides for the application of a technical replicability test, whether undertaken by the SMP operator and passed to the NRA or undertaken by the NRA itself, to ensure that access seekers can technically replicate new retail offers of the downstream business of the SMP operator. Given our proposals to have most current and new WBA services provided on an EOI basis,¹¹³ we are satisfied that the proposed regulation on WBA services will ensure that telecoms providers can replicate BT's WBA based retail services in Market A.¹¹⁴

Our proposals

- 6.64 We therefore consider it important to protect existing competition from the threat of BT unduly discriminating against its own retail divisions. We are proposing to require that:
- any existing WBA products that were provided on an EOI basis at the time of the 2014 WBA Statement (and therefore are currently subject to an EOI obligation) should continue to be provided on an EOI basis;
 - any new WBA products are provided on an EOI basis (unless Ofcom otherwise consents to the provision of network access on a non-EOI basis in a particular case); and
 - any other existing WBA products not provided on an EOI basis should continue to be subject to a no undue discrimination obligation.

¹¹³ Unless, following an application from BT, Ofcom has consented to allow the new services to be provided on a non-EOI basis. It is likely that replicability of downstream services would be a relevant consideration in any such assessment.

¹¹⁴ EC, September 2013. Commission recommendation of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2013/c_2013_5761_en.pdf.

Legal tests

- 6.65 Section 87(6)(a) of the 2003 Act gives us a power to impose “a condition requiring the dominant provider not to discriminate unduly against particular persons, or against a particular description of persons, in relation to matters connected with network access to the relevant network or with the availability of the relevant facilities”.
- 6.66 We have considered our duties under section 3, and all the Community requirements set out in section 4, of the 2003 Act. The proposed obligation is aimed at promoting competition and furthering the interests of consumers through the maximisation of choice in downstream markets by seeking to ensure a level playing field and by preventing BT from leveraging its SMP through discriminatory behaviour into related downstream markets, and therefore preventing distortions of competition.
- 6.67 We also consider that the proposed condition meets the criteria set out in section 47(2) of the 2003 Act. The proposed condition is:
- objectively justifiable, as it provides a safeguard to prevent BT from favouring its own retail businesses, to the disadvantage of its competitors, and to prevent BT from favouring particular telecoms providers over others who lack any available substitutes;
 - not unduly discriminatory, as it would be imposed on BT and BT is the only provider which we are proposing to find has SMP in Market A;
 - proportionate, in that it would enable telecoms providers to compete effectively with BT at the retail level for the benefit of consumers, and BT would not incur any further costs in complying with the condition, given that it already supplies network access on an EOI basis and the ongoing costs of providing these services on an EOI basis are likely to be low. In addition, we consider it is unlikely to be more costly or time consuming to develop new services on an EOI basis (compared to creating different systems for its retail and wholesale services). Any services not supplied on an EOI basis at the time of the 2014 WBA Statement will only be subject to a no undue discrimination requirement; and
 - transparent, in relation to what it is intended to achieve as the proposed condition is clear that the intention is to prevent undue discrimination.
- 6.68 In making our proposals, we have taken due account of the EC’s Costing and Non-Discrimination Recommendation. There are three recommendations relevant in this regard:
- that NRAs should ensure that the SMP operator provides wholesale inputs on at least an EOO basis;
 - that NRAs should ensure that when a non-discrimination obligation is imposed, access seekers can use the relevant systems and processes with the same degree of reliability and performance as the SMP operators’ own downstream retail arm;
 - that NRAs should require SMP operators subject to a non-discrimination obligation to provide access seekers with regulated wholesale inputs that allow the access seeker to effectively replicate technically new retail offers of the

downstream retail arm of the SMP operator, in particular where EOI is not fully implemented.

6.69 We consider that the EOI and no undue discrimination obligations we are proposing to re-impose are consistent with the Costing and Non-discrimination Recommendation. This makes clear that we should ensure that whatever the systems and processes used by access seekers, the end result provides the same degree of reliability and performance to that enjoyed by the SMP operator's own downstream retail division.

6.70 We also consider that the proposed condition is consistent with the BEREC Common Position on WBA. In relation to achieving the objective of a level playing field, the BEREC Common Position identifies, amongst other things, as best practice that:¹¹⁵

“BP13 NRAs should impose an obligation on SMP operators requiring equivalence, and justify the exact form of it, in light of the competition problems they have identified.

BP13a NRAs are best placed to determine the exact application of the form of equivalence on a product-by-product basis. For example, a strict application of EOI is most likely to be justified in those cases where the incremental design and implementation costs of imposing it are very low (because equivalence can be built into the design of new processes) and for certain key legacy services (where the benefits are very high compared to the material costs of retro-fitting EOI into existing business processes). In other cases, EOO would still be a sufficient and proportionate approach to ensure non-discrimination (e.g. when the wholesale product already shares most of the infrastructure and services with the product used by the downstream arm of the SMP operator.”

6.71 For all the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in accordance with section 87(1) of the 2003 Act.

Transparency and notification obligations

6.72 We propose that BT should be subject to a set of obligations designed to promote transparency, reduce the risk of undue discrimination and ensure that CPs are able to make effective use of the dominant provider's network access. The proposed obligations, discussed in more detail below, are:

- a requirement to publish a reference offer;
- a requirement to notify changes to charges, terms and conditions at least 28 days in advance;

¹¹⁵ See

http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/common_approaches_positions/1126-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-broadband-access-including-bitstream-access-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market, pages 7-8.

- a requirement to notify changes to technical information at least 90 days in advance; and
- a requirement on BT to publish information on quality of service (if directed by Ofcom).

Requirement to publish a reference offer

Current remedies

6.73 BT is currently required to publish a reference offer in relation to the provision of network access in Market A. There were a number of minimum requirements for the reference offer which are discussed in more detail below.

Our analysis and proposals

6.74 The main reasons for requiring the publication of a reference offer are:

- to assist transparency for the monitoring of potential anti-competitive behaviour; and
- to give visibility to the terms and conditions on which other providers will purchase wholesale services.

6.75 We consider a requirement on BT to publish a reference offer would help maintain competition in Market A as it would offer confidence to those customers that are already using WBA products in Market A that they can continue to buy those products on non-discriminatory terms and conditions. It potentially allows for quicker negotiations and for possible disputes to be avoided.

6.76 We propose to retain the condition on BT to publish a reference offer for the provision of WBA services in Market A. Consistent with BT's current requirements, the proposed condition would require that the reference offer includes at a minimum:

- a clear description of the services on offer, including technical characteristics;
- terms and conditions for the provision of network access, including charges, terms of payment and billing procedures, ordering and provisioning procedures, dispute resolution procedures, details of relevant intellectual property rights, details of duration and renegotiation of agreements and confidentiality provisions;
- information relating to technical standards for network access, interfaces and points of interconnection and conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases); and
- conditions relating to maintenance and quality e.g. service level agreements and guarantees, timescales for acceptance or refusal of a request for supply and delivery of services and support services, compensation payable and provisions on limitation of liability and indemnity and procedures for service alterations.

Legal tests

6.77 Section 87(6)(c) of the 2003 Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such a manner as Ofcom may direct,

the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(d) also permits the setting of SMP services conditions requiring the dominant provider to include specified terms and conditions in an access contract. Finally, section 87(6)(e) permits the setting of SMP services conditions requiring the dominant provider to make such modifications to the reference offer as may be directed from time to time.

- 6.78 For the reasons set out above and summarised below, we are satisfied that the proposed condition meets the relevant tests set out in the 2003 Act.
- 6.79 We consider that the proposed condition satisfies our duties under section 3, and all the Community requirements set out in section 4, of the 2003 Act.
- 6.80 The requirement to publish a reference offer would, in combination with the proposed non-discrimination obligations, facilitate service interoperability and protect existing competition in the market. Further, the obligation would enable buyers to adjust their downstream offerings in competition with BT in response to changes in BT's terms and conditions. Finally, the obligation would make it easier for Ofcom and other telecoms providers in the relevant market to monitor any instances of discrimination. Therefore, we consider that the proposed condition would further the interests of consumers in relevant markets by promoting competition in accordance with section 3 of the 2003 Act.
- 6.81 We also consider that the proposed condition meets the Community requirements set out in section 4 of the 2003 Act. In particular, the condition would promote competition and encourage the provision of network access and service interoperability for the purpose of securing efficiency and sustainable competition for the maximum benefit of consumers. The publication of a reference offer will mean that other telecoms providers will have the necessary information readily available to allow them to understand the terms, conditions and charges upon which WBA services will be offered and facilitate decisions relating to providing retail services in Market A.
- 6.82 Section 47(2) of the 2003 Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is:
- objectively justifiable, in that it requires that terms and conditions are published in order to encourage competition, provide stability in markets and helps us to monitor compliance with the non-discrimination obligations;
 - not unduly discriminatory, in that it is proposed only for BT which is the only provider we are proposing to find has SMP in Market A;
 - proportionate, in that only information that is considered necessary to allow providers to make informed decisions about competing in downstream markets is required to be provided; and
 - transparent, in that it is clear in its intention to ensure that BT publishes details of its WBA service offerings.
- 6.83 We consider that the condition is consistent with the BEREC Common Position on WBA, including the best practice remedies falling under the objectives "Transparency" (BP21 and BP22); "Reasonable quality of access product – technical issues" (BP23 and BP24); and "Reasonable quality of access product – operational quality" (BP25 and BP26).

- 6.84 Article 9(4) of the Access Directive requires that where network access obligations are imposed, NRAs shall ensure the publication of a RO containing at least the elements set out in Annex II to that Directive. We are satisfied that the requirements we are imposing will ensure that this requirement is met.
- 6.85 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in accordance with section 87(1) of the 2003 Act.

Requirement to notify changes to charges, terms and conditions

Current remedies

- 6.86 BT is required to give 28 days' notice before making changes to its charges or terms and conditions for the provision of existing or new network access in the WBA market.

Our analysis and proposals

- 6.87 A remedy that required BT to notify changes to terms, conditions and charges would complement the proposed network access and non-discrimination requirements to address the competition concerns arising from our proposed finding that BT has SMP in WBA Market A.
- 6.88 Notification of changes to charges at the wholesale level would have the joint purpose of assisting transparency for the monitoring of potential anti-competitive behaviour, and giving advance warning of changes to the charges for competing providers who buy WBA services. The latter purpose ensures that competing providers have sufficient time to plan for such changes, as they may want to restructure the prices of their downstream retail offerings in response to price increases at the wholesale level. We consider that such a requirement will help to maintain existing competition in Market A.
- 6.89 There may be some disadvantages to such notifications, particularly in markets where there is some wholesale competition. It can lead to a 'chilling' effect where other CPs follow the dominant provider's prices rather than acting dynamically to set competitive prices. Given the limited wholesale competition in Market A, we do not consider, on balance, that this consideration undermines the rationale for imposing a notification of charges condition in this market.
- 6.90 It is also appropriate to require the notification of changes to terms and conditions as we consider this will also ensure transparency and provide advance warning of changes, in order to allow competing providers sufficient time to plan for them.
- 6.91 We consider that 28 days remains an appropriate period of notice because it will allow other CPs sufficient time to plan for changes to charges, terms and conditions and adjust their own offerings without being a significant burden on BT (or unduly holding up its changes).
- 6.92 We therefore propose to retain the obligation on BT to give 28 days' notice of changes to its charges, terms and conditions for its WBA products and services by providing its WBA customers a WBA Access Change Notice which sets out:
- a) a description of the network access in question;

- b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that network access;
- c) the current and proposed new charge and/or current and proposed new terms and conditions (as the case may be); and
- d) the date on which, or the period for which, the WBA Access Change will take effect.

Legal tests

- 6.93 Section 87(6)(b) of the 2003 Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as Ofcom may direct, all such information, for the purpose of securing transparency. Section 87(6)(c) of the 2003 Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such a manner as Ofcom may direct, the terms and conditions on which it is willing to enter into an access contract.
- 6.94 For the reasons set out above and summarised below, we are satisfied that the proposed condition meets the relevant tests set out in the 2003 Act.
- 6.95 We consider that the proposed condition satisfies our duties under section 3, and all the Community requirements set out in section 4, of the 2003 Act. In particular, the condition is aimed at promoting competition, and securing efficient and sustainable competition and the maximum benefits for consumers. This is achieved by ensuring that CPs have the necessary information about changes to terms, conditions and charges sufficiently in advance to allow them to make informed decisions about competing in downstream markets.
- 6.96 Section 47(2) of the 2003 Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is:
- objectively justifiable, in that there are benefits from the notification of changes in terms of ensuring that providers are able to make informed decisions within an appropriate time frame about competing in downstream markets;
 - not unduly discriminatory, as it is proposed only for BT which is the only provider we are proposing to find has SMP in Market A;
 - proportionate, as a 28-day notification period allows other telecoms providers sufficient time to plan for changes to charges, terms and conditions and to adjust their own offerings, while not being unduly burdensome on BT; and
 - transparent, in that it is clear in its intention to ensure that BT provides notification of changes to its charges, terms and conditions.
- 6.97 We consider that the proposed condition is consistent with the BEREC Common Position on WBA, including the best practice remedies falling under the objective "Transparency" (BP21).
- 6.98 For the reasons set out above, we consider that the proposed conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the 2003 Act.

Requirement to notify changes to technical information

Current remedies

- 6.99 BT is currently subject to a requirement to publish any new or modified technical characteristics, points of network access and technical standards within a reasonable time period and at least 90 days in advance of BT entering into a contract to provide new network access in Market A or making changes to existing network access and changes to technical information for WBA services (unless Ofcom consents otherwise).

Our analysis and proposals

- 6.100 Any requirement to notify changes to technical information would complement the proposed requirement to publish a reference offer and ensure that telecoms providers buying WBA services in Market A were provided with appropriate advance notification of changes to technical characteristics. This is to ensure that telecoms providers have sufficient time to respond to changes that may affect them. For example, a provider may need to introduce new equipment, or modify existing equipment or systems, to support a new or changed technical interface. Similarly, a provider may need to modify their network in order to support changes in the points of network access or configuration.
- 6.101 We consider this remedy is important in the WBA market to ensure that telecoms providers who compete in downstream markets are able to make effective use of existing or new wholesale services provided by BT. Technical information therefore includes new or amended technical characteristics, including information on network configuration, locations of the points of network access and technical standards (including any usage restrictions and other security issues).
- 6.102 We therefore propose to retain the requirement on BT to publish technical information as set out above. We consider that it is appropriate for BT to give its customers at least 90 days' notice in order to give them sufficient time to modify their network to support a new or changed technical interface, or support a new point of access or network configuration.

Legal tests

- 6.103 Section 87(6)(b) of the 2003 Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as Ofcom may direct, all such information, for the purpose of securing transparency. Section 87(6)(d) also permits the setting of SMP services conditions requiring the dominant provider to include specified terms and conditions in the reference offer.
- 6.104 For the reasons set out above and summarised below, we are satisfied that the proposed condition meets the relevant tests set out in the 2003 Act.
- 6.105 We consider that the proposed conditions satisfy our duties under section 3, and all the Community requirements set out in section 4, of the 2003 Act. In particular, the proposed condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefits for consumers by ensuring that providers have sufficient advance notice of technical changes to WBA services to enable them to compete in downstream markets.

- 6.106 Section 47(2) of the 2003 Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is:
- objectively justifiable, in that it enables telecoms providers to make full and effective use of network access to be able to compete in downstream markets;
 - not unduly discriminatory, as it is proposed only for BT which is the only provider we are proposing to find has SMP in Market A;
 - proportionate, in that a 90 day notice period allows telecoms providers sufficient time to react to proposed changes without imposing an unnecessarily long notification period on BT that may restrict its ability to develop and deploy new features or products; and
 - transparent, in that it is clear in its intention that BT must notify changes to technical information in advance.
- 6.107 We consider that the proposed condition is consistent with the BEREC Common Position on WBA, including the best practice remedies falling under the objective “Transparency” (BP22). We consider that it is also consistent with BP 16 requiring the timely availability of relevant information according to lead times relating to new wholesale products.
- 6.108 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in line with section 87(1) of the 2003 Act.

Requirement to publish quality of service information

Current remedies

- 6.109 BT is currently subject to a requirement to publish such quality of service information that Ofcom may from time to time direct for the purpose of securing transparency in the quality of service provided to all telecoms providers.

Our analysis and proposals

- 6.110 As discussed in our March 2017 consultations on the Quality of Service for WLR, MPF and GEA and Automatic Compensation,¹¹⁶ we have concerns about the overall quality of broadband and telephone services. While many of these concerns relate to service failures in the WLA and Narrowband markets, some of the issues that could lead to such service failures could also lead to service failures for end customers of WBA services, given the WBA services are in large part based on the same infrastructure.
- 6.111 While the remedies we are looking to put in place in the WLA and Narrowband markets are expected to be sufficient to address any quality concerns at that level, it is still possible that there could be some WBA specific quality concerns; for example,

¹¹⁶ See <https://www.ofcom.org.uk/consultations-and-statements/category-1/quality-of-service> and https://www.ofcom.org.uk/_data/assets/pdf_file/0030/98706/automatic-compensation-consultation.pdf.

if BT were to take a long time to migrate end customers from its own retail operations to telecoms providers who are competing in Market A using WBA services, or in the rate at which it upgraded wholesale customers from legacy to new WBA services.¹¹⁷ Given this risk and the importance we placed on improving quality of service for end users in our Strategic Review, we consider it appropriate to maintain our power to direct BT to publish quality of service information.

- 6.112 We have also considered whether we should impose a requirement on BT to provide KPIs under this proposed requirement. In reaching our view, we have taken utmost account of BP27 of the BEREK Common Position on WBA, as well as due account of points 19 to 25 of the Costing and Non-Discrimination Recommendation. These provide that NRAs should impose a generic requirement on SMP operators to provide KPIs as a means to monitor compliance with a non-discrimination obligation.
- 6.113 We recognise that, in the absence of KPI data, it may be difficult for telecoms providers to assess whether to raise complaints regarding the provision of services on a non-discriminatory basis. However, given that no telecoms provider has raised any specific concern relating to quality of service or discrimination for WBA services with us, it would be difficult to design KPI data that would address potential future concerns in relation to WBA services. We are also mindful that any requirement on BT to publish information should be applied proportionately in response to a specific competition concern. It should be noted that, as set out above, BT currently provides the significant majority of its WBA services on an EOI basis. As such, we expect concerns relating to the provision of these services in a non-discriminatory fashion to be raised via this mechanism. Therefore, we do not consider it proportionate to require BT to publish KPI information at the current time.
- 6.114 With regard to point 26 of the Costing and Non-Discrimination Recommendation, we would intervene if we had reasonable grounds to suspect that BT was not complying with its EOI obligation in relation to quality of service issues.
- 6.115 We are therefore proposing to retain the requirement on BT to publish such quality of service information that Ofcom may from time to time direct for the purpose of securing transparency in the quality of service provided to all telecoms providers.

Legal tests

- 6.116 Section 87(6)(b) of the 2003 Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as Ofcom may direct, all such information, for the purpose of securing transparency.
- 6.117 For the reasons set out above and summarised below, we are satisfied that the proposed condition meets the relevant tests set out in the 2003 Act.
- 6.118 We consider that the proposed condition satisfies our duties under section 3, and all the Community requirements set out in section 4, of the 2003 Act. In particular, the proposed condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of consumers by ensuring that if there were to be an issue in relation to quality of services in the future all telecoms providers would have sufficient transparency over BT Wholesale's quality of service

¹¹⁷ If this was as a result of BT favouring its own retail services over other telecoms providers, we consider that this would be addressable through our proposed conditions in relation to EOI and no undue discrimination.

performance. This would likely allow them to identify any issues of undue discrimination and general poor performance in relation to quality of service.

6.119 Section 47(2) of the 2003 Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is:

- objectively justifiable, in that it would provide sufficient transparency to telecoms providers over BT's quality of service for WBA services if a specific problem were identified;
- not unduly discriminatory, as it is proposed only for BT which is the only provider we are proposing to find has SMP in WBA Market A;
- proportionate, in that is only imposed if we consider there is an issue in relation to quality of service; and
- transparent, in that it is clear in its intention that BT must publish its actual achieved quality of service if directed to by Ofcom.

6.120 We consider that the proposed condition is consistent with the BEREC Common Position on WBA, including the best practice remedies falling under the objectives "Transparency" (BP22).

6.121 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition and quality concerns identified, in line with section 87(1) of the 2003 Act.

Proposals regarding regulatory financial reporting requirements

6.122 As explained in the following sub-sections, we propose accounting separation and cost accounting requirements on BT in Market A. Our proposed approach is in line with the approach we took in the 2014 WBA market review. We propose to implement these obligations by way of a single SMP Condition (see Annex 5).

6.123 Our proposed accounting separation and cost accounting obligations are underpinned by detailed requirements for regulatory financial reporting which specify what information we require BT to provide in relation to Market A.

6.124 Our approach to BT's regulatory financial reporting in this review follows the approach set out in our 2014 Regulatory Financial Reporting Statement¹¹⁸ which sets out our conclusions on the regulatory financial reporting policy that should be applied to BT across all regulated markets and the changes to the framework for BT's regulatory financial reporting. In Annex 2 to the 2014 Regulatory Reporting Statement we set out pro-forma SMP conditions which would implement the decisions made in that statement. We explained that in order to preserve the integrity and consistency of BT's regulatory financial reporting, we considered that our starting point should be that the changes we proposed be implemented across all regulated markets, subject to this being appropriate in the light of the market analysis in each review. We noted that there were significant advantages to BT and stakeholders of

¹¹⁸ https://www.ofcom.org.uk/data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf.

BT applying one set of accounting rules across all markets and we also noted that BT was broadly supportive of the principle of applying a consistent approach across all markets.¹¹⁹

- 6.125 Consistent with this approach, we have therefore considered whether it is appropriate to impose regulatory financial reporting obligations on BT in WBA Market A and, to the extent that they are, whether the pro-forma SMP conditions are appropriate in the light of our market analysis. For the reasons explained below and noting the benefits of applying a consistent approach across all markets, our provisional view is that it is appropriate to impose regulatory financial reporting obligations in Market A.
- 6.126 In the 2015 Directions Statement¹²⁰ we set out the necessary directions to give effect to other decisions made in the 2014 Regulatory Reporting Statement about changes to BT's reporting requirements, including imposing directions on BT in respect of the WBA market.¹²¹ We discuss these further in Section 7.

Accounting separation requirements

Current remedies

- 6.127 BT is currently subject to accounting separation obligations in Market A. These are discussed in more detail below.

Our analysis

- 6.128 Paragraph 3 of Point 1 of the European Commission's 2005 Recommendation on accounting separation¹²² (the "2005 EC Recommendation") stated that:

"The purpose of imposing an obligation regarding accounting separation is to provide a higher level of detail of information than that derived from the statutory financial statements of the notified operator, to reflect as closely as possible the performance of parts of the notified operator's business as if they had operated as separate businesses, and in the case of vertically integrated undertakings, to prevent discrimination in favour of their own activities and to prevent unfair cross-subsidy".

- 6.129 In Ofcom's 2014 Regulatory Reporting Statement, we considered the purposes of regulatory reporting which is supported by the imposition of an accounting separation obligation. We said that regulatory reporting "should 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-

¹¹⁹ 2014 Regulatory Financial Reporting Statement, paragraphs 7.15 - 7.19

¹²⁰ Ofcom, *Directions for Regulatory Financial Reporting*, 30 March 2015, <http://stakeholders.ofcom.org.uk/binaries/consultations/financial-reporting/statement/statement.pdf>

¹²¹ These directions were set out in Annexes 1 to 8 to the 2015 Directions Statement.

¹²² European Commission, *Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications*, recital 2. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005H0698&from=EN>.

competitive practices”.¹²³ In addition, we said that it “should provide reasonable confidence to stakeholders that the SMP provider has complied with its SMP conditions and add credibility to the Regulatory Financial Reporting Regime”.¹²⁴ We consider that imposing an accounting separation obligation, together with a cost accounting obligation (see below), would help ensure that these regulatory reporting objectives are met.

- 6.130 In order to carry out our duties it is important that financial information is available on the services and markets that we regulate. The availability of this information helps us understand the volumes, revenues, costs and returns of services and markets, which allows us to monitor the impact and effectiveness of the remedies imposed as part of a market review and (for certain remedies) to help monitor compliance.
- 6.131 The accounting separation obligation also requires BT to account separately for internal and external sales which allows Ofcom and stakeholders to monitor that, where relevant, BT does not discriminate unduly in Market A in favour of its own downstream business and it complies with the EOI obligation. In practice this obligation requires BT to produce a financial statement that reflects the performance of Market A as though it were a separate business.
- 6.132 Requiring BT to produce a financial statement for Market A, combined with an obligation to attribute costs in a fair, objective and transparent way (via the cost accounting obligation) will help us to ensure that costs are not inappropriately loaded onto one set of regulated products to the benefit of another set of regulated or unregulated products.
- 6.133 We consider that the pro forma SMP condition set out in the 2014 Regulatory Reporting Statement will ensure that Ofcom and other stakeholders have the information they need.

Our proposals

- 6.134 We propose to re-impose an accounting separation obligation on BT in Market A.
- 6.135 In respect of the specific form of the accounting separation requirements we are proposing for BT in these markets, we propose to retain the form of condition set out in the 2014 Regulatory Financial Reporting Statement but modified to remove the reference to the Regulatory Accounting Guidelines.¹²⁵ This form of condition implements our policy decisions on regulatory financial reporting set out in that statement.¹²⁶

¹²³ Paragraph 2.28, 2014 Regulatory Reporting Statement.

¹²⁴ Paragraph 2.41, 2014 Regulatory Reporting Statement.

¹²⁵ As explained in the 2016 BCMR Statement (paragraph 8.175 and Annex 28), we no longer consider that it would be useful to establish high-level guidelines and accounting rules in the Regulatory Accounting Guidelines by way of direction. Where we find concerns about BT’s detailed application of cost attribution rules, in line with what we have done in the 2016 BCMR, we will direct BT as to the specific reporting requirements consistent with the Regulatory Accounting Principles arising from each regulatory decision. The wording of our proposed condition reflects our decision not to issue the Regulatory Accounting Guidelines. Each proposed condition therefore requires BT to prepare the RFS in accordance with the SMP conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents.

¹²⁶ 2014 Regulatory Financial Reporting Statement, page 1.

Legal tests

- 6.136 Sections 87(7) and 87(8) of the 2003 Act authorise Ofcom to impose appropriate accounting separation obligations on a dominant provider in respect of the provision of network access, the use of the relevant network and the availability of relevant facilities.
- 6.137 For the reasons set out above and summarised below, we are satisfied that the proposed condition (as set out in Annex 5) meets the various tests set out in the 2003 Act.
- 6.138 We consider that this proposal meets our duties under sections 3 and 4 of the 2003 Act. The imposition of an accounting separation obligation would promote competition in relation to the provision of electronic communications networks and services, ensuring the provision of network access and service interoperability for the purposes of securing efficient and sustainable competition and the maximum benefit for the persons who are customers of telecoms providers. This is because the imposition of the obligation would ensure that other obligations designed to curb potentially damaging leverage of market power, in particular the requirement not to unduly discriminate and to provide services on an EOI basis, can be monitored and enforced.
- 6.139 With regard to the Community requirements set out in section 4 of the 2003 Act, we believe that the proposed condition meets these requirements. Specifically, we believe section 4(8) is met, where the obligation has the purpose of securing efficient and sustainable competition in the markets for electronic communications networks and services, by helping to ensure that dominant providers comply with other obligations in particular non-discrimination requirements.
- 6.140 We also consider that this proposal meets section 47(2) of the 2003 Act which requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. We consider the proposed condition is:
- objectively justifiable, as it would ensure the proposed non-discrimination obligations are complied with which are intended to provide a safeguard to prevent BT from favouring its own retail businesses to the disadvantage of its competitors;
 - not unduly discriminatory, as we propose to impose it only on BT, which is the only telecoms provider which we propose to find has SMP in Market A;
 - proportionate, in that it is the least onerous obligation necessary as a mechanism to allow us and third parties to monitor potentially discriminatory behaviour by BT; and
 - transparent, in that it is clear that the intention is to monitor compliance with specific remedies and to provide transparency to users of BT's revenues, costs and profit for Market A. In addition, the particular accounting separation requirements of BT are clearly documented within the proposed SMP condition.
- 6.141 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in line with section 87(1) of the 2003 Act.

Cost accounting requirements

Current remedies

6.142 BT is currently subject to a cost accounting obligation in Market A.

Our analysis

6.143 Recital 2 of the 2005 Recommendation stated that the purpose of imposing the accounting separation and cost accounting obligations is “to make transactions between operators more transparent and/or to determine the actual costs of services provided”. Also, paragraph 2 of Point 1 of the 2005 Recommendation stated that:

“The purpose of imposing an obligation to implement a cost accounting system is to ensure that fair, objective and transparent criteria are followed by notified operators in allocating their costs to services in situations where they are subject to obligations for price controls or cost-oriented prices.”

6.144 A cost accounting obligation supports the accounting separation obligation, which requires BT to prepare and report financial information relating to individual markets and services, by ensuring that the rules attributing revenues and costs to individual markets and services are fair, objective and transparent. A cost accounting obligation is an important means of ensuring that:

- Ofcom and stakeholders can have confidence in the financial information prepared and provided by BT on individual markets and services since the attribution processes and rules supporting that financial information are fair, objective and transparent. Where we do not consider that the attribution process and rules are fair and objective, transparency (via publication of the processes and rules followed by BT) allows us to effectively challenge them.
- Revenues and costs are attributed to individual markets and services in a consistent manner. This mitigates the risk of double recovery of costs or that costs might be unfairly loaded onto particular products or markets.
- BT records all information necessary for the purposes listed above at the time that relevant transactions occur, on an ongoing basis. Absent such a requirement, there is a strong possibility that the necessary information would not be available when it is required, and in the necessary form and manner.

6.145 We consider that it is appropriate to impose cost accounting requirements on BT in Market A in order to ensure that the processes and rules used by BT to attribute revenues and costs to individual markets and services are fair, objective and transparent. This will help us and other telecoms providers to measure the impact of our regulatory proposals in Market A (if implemented) and, in particular, monitor compliance with the fair and reasonable charges condition.

Our proposals

6.146 We propose to re-impose cost accounting requirements on BT in Market A.

6.147 In respect of the specific form of the cost accounting requirements we are proposing for BT in Market A, we propose the form of condition set out in the 2014 Regulatory Financial Reporting Statement but modified to remove the reference to the

Regulatory Accounting Guidelines.¹²⁷ As noted above, this form of condition implements our policy decisions on regulatory financial reporting set out in that statement.

Legal tests

- 6.148 Section 87(9)(c) authorises conditions imposing such rules as we may make for the purposes of matters connected with the provision of network access to the relevant network, or with the availability of relevant facilities about the use of cost accounting systems. Such conditions include conditions requiring the application of presumptions in the fixing and determination of costs and charges for the purposes of the price controls, rules and obligations imposed by virtue of that subsection (section 87(10)). Where such conditions are imposed, section 87(11) imposes a duty on us to set an SMP condition which imposes an obligation to make arrangements for a description to be made available to the public of the cost accounting system used in pursuance of that condition; and to include in that description details of:
- the main categories under which costs are brought into account for the purposes of that system; and
 - the rules applied for the purposes of that system with respect to the allocation of costs.
- 6.149 In setting such conditions, we must be satisfied that the conditions about network access pricing set out in section 88 are also satisfied.
- 6.150 For the reasons set out above and summarised below, we are satisfied that the proposed condition meets the various tests set out in the 2003 Act.
- 6.151 We consider that the proposed condition fulfils our duty under section 87(11) in that the cost accounting conditions require the publication of a description of the cost accounting system used and the main categories of cost and the cost allocation rules applied.
- 6.152 We consider that imposing a cost accounting obligation is consistent with section 88; in particular, we consider that it is necessary to monitor whether our proposed fair and reasonable charges condition is effective.
- 6.153 We have considered our statutory obligations and the Community requirements set out in sections 3 and 4 of the 2003 Act. In particular, we consider that the imposition of the proposed cost accounting obligation is necessary and appropriate to promote competition in relation to the provision of electronic communications networks and services and to ensure the provision of network access (including supporting ancillary services) and service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefit for the persons who are customers of telecoms providers. This is because the imposition of the obligation will provide important information to assess whether other obligations designed to curb market power – such as the fair and reasonable charges obligation – can be monitored and enforced.
- 6.154 We have considered the Community requirements set out in section 4 of the 2003 Act and believe that the proposed cost accounting obligations promote competition in relation to the provision of electronic communications networks and encourage the

¹²⁷ See footnote 125 above.

provision of network access for the purpose of securing efficiency and sustainable competition in downstream markets for electronic communications networks and services, resulting in the maximum benefit for retail consumers.

6.155 We consider that the proposed condition meets the criteria set out in section 47(2) of the 2003 Act because it is:

- objectively justifiable, in that it is necessary to ensure the appropriate maintenance and provision of accounts in order to monitor BT's activities (where we propose that an obligation in relation to fair and reasonable terms and conditions in Market A should provide sufficient protection). It also provides transparency of the revenues, costs and margins BT is earning in Market A to other providers of retail services in these areas;
- non-discriminatory, in that BT is the only telecoms provider on which we propose a fair and reasonable terms and conditions obligation in Market A;
- proportionate, in that it requires only information that is no more than necessary to monitor BT's activities with regard to the impact of our proposed remedies; and
- transparent, in that it is clear in its intention to ensure the appropriate maintenance and provision of accounts for the purposes set out above and the particular accounting separation requirements of BT are clearly documented.

6.156 For the reasons set out above, we consider that the proposed condition is appropriate to address the competition concerns identified, in line with section 87(1) of the 2003 Act.

Question 6.1: *Do you agree with the remedies that we propose for BT in Market A? If not, please set out what alternative remedies you consider should be implemented and provide your reasons and supporting evidence.*

Section 7

Regulatory Financial Reporting

Introduction

- 7.1 BT is currently subject to regulatory financial reporting requirements designed 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.
- 7.2 As part of these requirements, each year BT prepares Regulatory Financial Statements (RFS). The RFS are prepared according to a defined framework and methodology and include published statements as well as information that is not published but submitted to us privately.
- 7.3 We set out our proposals in Section 6 to impose cost accounting and accounting separation obligations on BT in relation to Market A. In this section, we:
- set out our proposals on the regulatory financial reporting requirements we propose to impose, by way of directions, on BT in the WBA market, which are consistent with our policy decisions in the 2014 Regulatory Financial Reporting Statement;¹²⁸ and
 - set out our proposals on directions specifying the detailed reporting requirements for the RFS, in terms of the preparation, delivery, publication, form and content of the RFS, which we consider are appropriate in respect of WBA Market A. We also explain what information we need, why we need it and what needs to be provided publicly and privately, and set out other regulatory financial reporting requirements including the need for compliance information.
- 7.4 The draft directions in relation to our proposed regulatory financial reporting requirements and detailed reporting requirements for the RFS are included in Annex 5.
- 7.5 As explained further below, the main proposed changes follow from our proposals not to set cost based charge controls on WBA services, and to bring reporting requirements in Market A in line with that for other markets. We are not including in this consultation our proposals in relation to directions on providing a reconciliation report or network components, as we intend to consult on this as part of a separate consultation later this year.

¹²⁸ Ofcom, *Regulatory Financial Reporting: Final Statement*, 20 May 2014, https://www.ofcom.org.uk/data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

Directions to implement regulatory reporting requirements in WBA Market A

- 7.6 As explained in Section 6, we are proposing to impose on BT accounting separation and cost accounting obligations in relation to the WBA market. In the 2014 Regulatory Financial Reporting Statement, we also set out our reasoning and policy decisions about the more detailed requirements which we considered were appropriate for the RFS in all regulated markets and which we would implement by way of directions pursuant to the any accounting separation and cost accounting obligations we subsequently imposed in such markets.¹²⁹
- 7.7 The requirements currently imposed on BT in the WBA market were imposed in the 2015 Directions Statement.¹³⁰ These reporting directions specified requirements in relation to:
- the Regulatory Accounting Principles;¹³¹
 - preparing the RFS on a Regulatory Asset Value (RAV) basis;¹³²
 - consistency with regulatory decisions;¹³³
 - transparency;¹³⁴
 - audit of the RFS;¹³⁵
 - the reconciliation report;¹³⁶
 - network components;¹³⁷

¹²⁹ In the 2016 Business Connectivity Market Review Statement we took a policy decision to remove the reference to Regulatory Accounting Guidelines. We still consider this approach to be right as a matter of policy and the proposed conditions therefore do not reference the Regulatory Accounting Guidelines.

¹³⁰ Ofcom, *Directions for Regulatory Financial Reporting: Final Statement*, 30 March 2015, https://www.ofcom.org.uk/_data/assets/pdf_file/0018/59112/statement.pdf

The 2015 Directions Statement also imposed these directions on the WLA, WFAEL, ISDN30 and ISDN2, WCO, WCT and interconnect circuits. Further, these directions were imposed on the business connectivity markets in annex 35 of the 2016 BCMR Statement. For the avoidance of doubt, if we adopt the proposals set out in this chapter, the proposed directions would replace the existing regulatory financial reporting directions on BT in the WBA market.

¹³¹ The nature of this direction is explained at paragraphs 7.13 to 7.16 below.

¹³² The nature of this direction is explained at paragraphs 7.17 to 7.22 below.

¹³³ Regulatory Principle number four requires regulatory decisions to be reflected in the RFS to ensure the RFS is consistent with our regulatory decisions. In the 2015 Directions Statement, we explained that we would specify the consistency requirements arising from market reviews and would issue directions accordingly. In relation to the WBA market, we imposed a direction on BT which required certain adjustments to be made in connection with the charge control we imposed on BT in Market A in the 2014 WBA market review.

¹³⁴ The nature of this direction is explained at paragraphs 7.23 to 7.25 below.

¹³⁵ The nature of this direction is explained at paragraphs 7.26 to 7.28 below.

¹³⁶ The nature of this direction is explained at paragraphs 7.29 to 7.31 below.

¹³⁷ The nature of this direction is explained at paragraphs 7.32 to 7.34 below.

- BT's adjusted financial performance;¹³⁸ and
- the preparation, delivery, publication, form and content of the RFS.¹³⁹

Summary of our proposals

- 7.8 We are proposing to re-impose some of the requirements currently imposed in the same form as we remain of the view that they continue to appropriate in the context of Market A. These are requirements currently imposed under directions specifying requirements relating to:
- the Regulatory Accounting Principles;
 - preparing the RFS on an RAV basis;
 - transparency; and
 - audit of the RFS.
- 7.9 We are proposing to re-impose the requirement relating to the preparation, delivery, publication, form and content of the RFS with amendments that reflect our provisional view as to the appropriate requirements on BT in Market A.
- 7.10 For the purposes of this market review, we do not propose to give directions specifying requirements:
- for consistency with regulatory decisions; or
 - for reporting on BT's adjusted financial performance.
- 7.11 This is because we do not consider that they are relevant in the context of Market A for the purposes of this review. As explained in the 2014 Regulatory Financial Reporting Statement, these requirements are relevant where we consider regulatory decisions should be reflected in the RFS to ensure consistency, as per Regulatory Accounting Principle number four,¹⁴⁰ and we imposed such requirements on BT in connection with the WBA market in the 2015 Directions Statement to reflect certain adjustments we had made in connection with the charge control we imposed on BT in the 2014 WBA market review. In this consultation, we are not proposing to impose a cost-based charge control on WBA services in Market A. Thus, there is no requirement for us to direct BT to reflect any proposed changes to BT's costs because of our regulatory decisions within its RFS or in an Adjusted Financial Performance Schedule.

¹³⁸ In the 2015 Directions Statement, we noted that if not all regulatory decisions were reflected in the RFS, differences could arise between the reported view of BT's financial performance and the view we took when making regulatory decisions. We therefore decided that BT must prepare the Adjusted Financial Performance Schedules as part of its Regulatory Financial Reporting to show the impact of certain regulatory decisions not reflected in the RFS. In relation to the WBA market, we imposed a direction on BT which required BT to report on the impact of adjustments made in relation to the charge control we imposed on BT in Market A in the 2014 WBA market review.

¹³⁹ The nature of this direction is explained at paragraphs 7.35 to 7.36 below.

¹⁴⁰ Paragraphs 3.36 to 3.42, 2014 Regulatory Financial Reporting Statement.

- 7.12 We also do not set out any proposals to require BT to publish a reconciliation report or set requirements in relation to network components as part of this consultation. This is for the following reasons:
- We are currently considering whether we should make changes to the requirements relating to the reconciliation report, and whether it can be simplified, following a request by BT. We intend to consider this point separately as part of a wider regulatory financial reporting consultation that we will publish later this year.
 - We are currently considering updating the list of network components as part of our work relating to DPA, and we intend to consult on our proposals on this as part of the wider regulatory financial reporting consultation that we will publish later this year.

Regulatory Accounting Principles (RAP)¹⁴¹

- 7.13 The RAP as a concept was introduced in the 2014 Regulatory Financial Reporting Statement.¹⁴² The RAP are a set of guiding principles with which BT's Regulatory Financial Reporting must comply to preserve the integrity and consistency of the RFS. We consider that the RAP should be implemented across all regulated markets (to the extent that each market review considers this to be appropriate) as there are significant advantages to BT and other stakeholders of BT applying one set of principles across all markets. We consider that these principles are appropriate for WBA Market A and we therefore propose to implement these requirements by giving a direction to BT equivalent to the form set out in the 2015 Directions Statement in respect of WBA Market A. The direction we are proposing is set out at Annex 5.
- 7.14 We consider that giving the proposed direction specifying the RAP would fulfil our general duties under section 3 of the Act and meet the Community requirements set out in section 4 of the Act because:
- Our proposal is designed to give Ofcom a greater role in determining how BT should prepare its RFS, thereby ensuring the RFS are aligned with Ofcom's regulatory decisions and giving confidence to stakeholders about the absence of bias in the preparation of the RFS. It also ensures that the presentation and usability of the RFS is improved and that the obligations that are imposed on BT are proportionate.
 - The above proposal therefore seeks to ensure the RFS remain relevant, thereby increasing transparency. Ultimately, this helps to ensure that BT cannot leverage its market power in a way which could distort or restrict competition.
- 7.15 In proposing this change, we have taken into account all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in particular the 2005 EC Recommendation.
- 7.16 We also consider that this proposed direction meets the tests set out in section 49(2) of the Act in that it is:

¹⁴¹ The Regulatory Accounting Principles are 1. Completeness, 2. Accuracy, 3. Objectivity, 4. Consistency with regulatory decisions, 5. Causality, 6. Compliance with the statutory accounting standards, 7. Consistency of the RFS as a whole and from one period to another.

¹⁴² Paragraph 1.12 and section 3, 2014 Regulatory Financial Reporting Statement.

- Objectively justifiable because by specifying the Regulatory Accounting Principles we will establish the attributes for BT's regulatory financial reporting.
- Not unduly discriminatory because it reflects BT's market position in the UK excluding the Hull Area.
- Proportionate because our proposal is no more than is required to ensure an absence of bias and consistency with regulatory decisions. While we are establishing Regulatory Accounting Principles, BT retains an important role in determining the basis of preparation of the RFS, and can continue to put through methodology changes where this is in line with the Regulatory Accounting Principles and such changes have been notified to Ofcom.
- Transparent because it is clear that the intention of our proposal is to ensure we take a greater role in the basis of preparation of the RFS to ensure an absence of bias and consistency with regulatory decisions.

Preparing the RFS on a RAV basis

- 7.17 Regulatory Principle number four requires regulatory decisions to be reflected in the RFS to ensure the RFS is consistent with our regulatory decisions. This includes BT preparing its RFS on a RAV basis, consistent with our use of RAV valued access Duct assets across all markets.
- 7.18 In the 2015 Directions Statement¹⁴³ we explained that we would specify the consistency requirements arising from market reviews and would issue directions accordingly.
- 7.19 For the purposes of some price controls we use the RAV of access duct.¹⁴⁴ However, prior to the 2014 Regulatory Financial Reporting Statement BT valued duct on a current cost (CCA) basis, meaning that we had to make an adjustment for each charge control and investigation that included access duct to revalue it on a RAV basis. This made it difficult for stakeholders to see in the RFS the revised returns for markets where we apply the RAV adjustment. Therefore, in the 2014 Regulatory Financial Reporting Statement we decided that BT must prepare the RFS on a RAV basis.¹⁴⁵ To preserve the integrity and consistency of the RFS we consider that access duct associated with all regulated markets should be prepared on a RAV basis.¹⁴⁶ Given that WLA services supplied by BT on an EOI basis are used as an input to provide WBA services, and those WLA services in turn include RAV valued access duct, we therefore propose to implement these requirements by giving a direction to BT in relation to Market A. We consider it remains appropriate to give a direction in an equivalent form to that set out in the 2015 Directions Statement. For the reasons set out in paragraph 7.11 above, the form of the proposed direction has been amended to remove references to consistency with regulatory decisions.
- 7.20 Outside of the RAV, our proposal not to set a charge control on a reference WBA product (discussed in Section 6 above) means that we have not investigated WBA

¹⁴³ Paragraph 1.7, 2015 Directions for Regulatory Financial Reporting Statement.

¹⁴⁴ The RAV is the value ascribed by Ofcom to access duct which was in existence prior to August 1997 (i.e. assets which were in existence prior to the change in valuation method from historical cost accounting to current cost accounting). For further details, see section 6.2.5 of BT's 2015/16 Accounting Methodology Document.

¹⁴⁵ Paragraph 3.91, 2014 Regulatory Financial Reporting Statement.

¹⁴⁶ We note that BT's 2015/16 RFS was prepared on a RAV basis. See page 9 of the 2015/16 RFS.

costs. Since we do not propose any changes to BT's costs, we are not proposing to impose any other consistency requirements on BT.

7.21 We consider that giving the proposed direction specifying the RAV methodology would fulfil our general duties under section 3 of the Act and meet the Community requirements set out in section 4 of the Act. In proposing this change, we have taken into account all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in particular the 2005 EC Recommendation.

7.22 We also consider that this direction meets the tests set out in section 49(2) of the Act in that it is:

- Objectively justifiable because the requirements specifying the RAV methodology will establish further detail and will also provide BT with clarity as to the requirements which BT will need to follow to ensure that the RFS are prepared on the RAV basis.
- Not unduly discriminatory because it reflects BT's market position in the UK excluding the Hull Area.
- Proportionate because our proposals are no more than is required to ensure that BT is provided with clarity as to the requirements which it will need to follow to ensure that the RFS are prepared on the RAV basis.
- Transparent because it is clear that our proposals seek to provide BT with clarity as to the requirements which it will need to follow to ensure that the RFS are prepared on the RAV basis.

Transparency

7.23 One of the purposes of imposing a cost accounting obligation is to ensure that fair, objective and transparent criteria are used to prepare the RFS. The purpose of this direction is therefore to ensure that any information, material or explanatory document prepared by BT in respect of the RFS is sufficiently transparent such that a suitably informed reader can gain a clear understanding of the information presented. To preserve the integrity and consistency of the RFS we consider in principle that all markets should be subject to the same transparency direction. Our review has confirmed our in principle view of the appropriateness of such reporting in the WBA market, and we therefore propose to implement these requirements by giving a direction to BT in a form equivalent to that set out in the 2015 Directions Statement in respect of the proposed WBA market.

7.24 We consider that giving the proposed direction specifying the transparency requirements would fulfil our general duties under section 3 of the Act and meet the Community requirements set out in section 4 of the Act. In making this proposal, we have taken into account all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in particular the 2005 EC Recommendation.

7.25 We also consider that this direction meets the tests set out in section 49(2) of the Act in that it is:

- Objectively justifiable because the Accounting Methodology Documents now prepared by BT provide clarity on BT's accounting methodologies.

- Not unduly discriminatory because it reflects BT's market position in the UK excluding the Hull Area.
- Proportionate because the requirements are no more than is required to ensure that presentation of the basis of preparation is clear for users, and they reduce the regulatory burden on BT.
- Transparent because it is clear that the intention of our proposal is to ensure that presentation of the basis of preparation is clear for users.

Audit of the RFS

- 7.26 Audit of the RFS can help give users confidence that the information provides a fair reflection of financial performance, is free from material error and has been prepared following the accounting methodology statements published by BT and relevant directions issued by Ofcom.¹⁴⁷ To preserve the integrity and consistency of the RFS we consider that in principle all markets should be subject to the same audit direction. Our review has confirmed our in principle view of the appropriateness of such reporting in WBA Market A, and we therefore propose to implement these requirements by giving a direction to BT in the form set out in the 2015 Directions Statement in respect of the proposed Market A.
- 7.27 We consider that giving the proposed direction specifying the audit requirements would fulfil our general duties under section 3 of the Act and meet the Community requirements set out in section 4 of the Act. In making this proposal, we have taken into account all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in particular the 2005 EC Recommendation.
- 7.28 We also consider that this direction meets the tests set out in section 49(2) of the Act in that it is:
- Objectively justifiable because it is important for both stakeholders and Ofcom that an appropriate level of assurance is provided on the RFS.
 - Not unduly discriminatory because it reflects BT's market position in the UK excluding the Hull Area.
 - Proportionate because the audit requirements are no more than is necessary to ensure that an appropriate level of assurance is provided on the RFS.
 - Transparent because it is clear that the intention of our changes is to ensure that an appropriate level of assurance is provided on the RFS.

Reconciliation report

- 7.29 In the 2014 Financial Reporting Statement, we decided as a matter of policy that BT must publish the impact of all material changes and errors in an annual reconciliation report with an accompanying assurance report from their regulatory auditors.

¹⁴⁷ Chapter 5 of the 2014 Financial Reporting Statement explained the changes to audit requirements imposed on BT.

Changes to attribution methods or the correction of errors can affect all markets reported in the RFS. We gave a direction to this effect in the 2015 Directions Statement in respect of the WBA market.¹⁴⁸

- 7.30 BT has written to us¹⁴⁹ asking to change the form of the information provided within the reconciliation report. While we are minded to accede to this request, given that the reconciliation report requirement covers the RFS as a whole, rather than just the WBA market, we believe that it would be more appropriate to consult on any such changes within a wider regulatory financial reporting consultation for DPA products that we will look to publish later this year.
- 7.31 We therefore do not set out our proposals specifying the requirements in relation to the reconciliation report and the accompanying audit opinion in this consultation. We will instead consult on the proposed requirements and associated direction in the forthcoming wider regulatory financial reporting consultation for DPA products.

Network components

- 7.32 This direction specifies all the cost components used by BT to prepare the RFS. To preserve the integrity and consistency of BT's Regulatory Financial Reporting it is important that there is a single list of components used to attribute costs to services in regulated markets. We gave a direction setting the relevant network components in the WBA market in the 2015 Directions Statement.
- 7.33 The forthcoming wider regulatory financial reporting consultation for DPA products will include proposals for new network components to facilitate transparent reporting of DPA products within the WLA market. To preserve the integrity and consistency of BT's Regulatory Financial Reporting, we consider that any list of components proposed in the that consultation would also be appropriate for WBA Market A covered by this review.
- 7.34 We therefore do not set out our proposals on network components for WBA Market A in this consultation. We will instead consult on the proposed network components and associated direction in the forthcoming wider regulatory financial reporting consultation for DPA products.

The preparation, delivery, publication, form and content of the RFS

- 7.35 This proposed direction provides details of the financial information to be included in the published RFS and to be provided to Ofcom privately. It therefore plays an important role in ensuring the RFS provide relevant information to stakeholders. Some elements of the published RFS relate to all markets¹⁵⁰ while others are specific to particular markets. To preserve the integrity and consistency of the RFS we consider as a matter of principle that all markets should be subject to appropriate reporting requirements. Whether to include such requirements and their scope is a matter to be considered and determined in each market review.

¹⁴⁸ BT 2016 Reconciliation Report, <http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/index.htm>, Annex 1 Methodology Reversals 2016 impacts and Annex 2 Error Corrections 2015 Impacts.

¹⁴⁹ Letter from [redacted] (BT) to [redacted] (Ofcom) dated 23rd April 2017.

¹⁵⁰ For example, the reconciliation of the RFS to BT Group's statutory accounts.

- 7.36 Next we explain why such financial information is necessary and the categories of information we generally require. We then consider the information we propose to require BT to provide.

Form and Content of the RFS

- 7.37 It is important that BT maintains appropriate and reliable accounts that capture information on an ongoing basis relevant to its provision of services in WBA Market A. In the 2014 Regulatory Financial Reporting Statement, we said that regulatory financial reporting should 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.¹⁵¹
- 7.38 We also said that sufficient information should be published to enable stakeholders to contribute to the development of robust regulatory decisions; to review and challenge data on which those decisions are made; to assist us in monitoring compliance and to intervene in a timely fashion when required; and to have reasonable confidence that BT has complied with its SMP conditions.¹⁵² We said that we would consider and determine what level of information would provide reasonable confidence in any particular case, following input from stakeholders.¹⁵³ We also set out in the 2014 Regulatory Financial Reporting Statement that cost, volume and revenue information published in the RFS should reflect the level of the remedy.¹⁵⁴
- 7.39 Consistent with the approach set out in the 2014 Regulatory Financial Reporting Statement, we have considered what specific regulatory accounting requirements are required to support the remedies we have proposed in this review. We set out our proposals relating to reporting requirements for public and private reporting.

Public information

- 7.40 This is information that we consider should be published in BT's RFS on the basis that it would give stakeholders reasonable confidence that BT has complied with its SMP conditions, allow them to contribute to the regulatory regime and is consistent with the level of the remedy. For example, if the remedy is in the form of a charge

¹⁵¹ Paragraph 2.28, 2014 Regulatory Financial Reporting Statement.

¹⁵² Paragraphs 2.29 to 2.41, 2014 Regulatory Financial Reporting Statement. We also said that publishing financial information supports stakeholders' contribution to an informed regulatory framework and adds credibility to the regulatory accounting system. We said that this was consistent with the guidance in the 2005 EC Recommendation which states that: "regulatory accounting information serves national regulatory authorities and other parties that may be affected by regulatory decisions based on that information, such as competitors, investors and consumers. In this context, publication of information may contribute to an open and competitive market and add credibility to the regulatory accounting system". See Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications, Official Journal L 266, 11/10/2005 P. 0064 - 0069, Annex – Guidelines on reporting requirements and publication of information ("the 2005 EC Recommendation").

¹⁵³ Paragraph 2.39, 2014 Regulatory Financial Reporting Statement.

¹⁵⁴ Paragraphs 4.76 to 4.85, 2014 Regulatory Financial Reporting Statement.

control on individual services or baskets of services, information should be published relating to those services or baskets of services.¹⁵⁵

Private information

7.41 This is information that we do not require BT to publish in its RFS, but we receive privately from BT. We may require this information in order to, for example, 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.

Current requirements relating to public information in the RFS

7.42 In the published RFS, financial information on regulated markets broadly falls into three categories: market level information, service level information and cost components for reported services. In the case of WBA Market A, BT also currently publishes information on a fourth area: EOI Inputs.

Market level information.

7.43 This is information on the revenues, operating costs, capital employed and returns on MCE for a specific market. It is presented in the “performance summary by market”, “attribution of wholesale current costs” and “attribution of wholesale current cost mean capital employed” schedules of the RFS. In the 2015/16 RFS,¹⁵⁶ this information is set out in the schedules on pages 21, 25 and 28 for the 2015/16 financial year. For example, in 2015/16, these schedules show that revenue in the WBA Market A was £453m and the return on MCE was 70.2%. The schedules also show a breakdown of operating costs and capital employed.¹⁵⁷

Service level information.

7.44 BT publishes information on WBA services provided in Market A (as defined in 2014) on the internal and external revenues, volumes, prices and FAC for those relevant services, in the “WBA (Market A) summary” schedule. For example, in relation to Market A, page 102 of the 2015/16 RFS gives this information for 12 WBA services provided in that market.

7.45 In addition, this section of the RFS also sets out information on EOI inputs into the reported WBA services. EOI inputs are inputs supplied from other parts of BT (i.e. Openreach) which are themselves subject to regulation as part of the WLA market, including EOI obligations, and which are used to provide WBA services. For the purposes of reporting on those inputs in the RFS, BT is currently required to set out

¹⁵⁵ In certain circumstances, we may decide that BT needs to publish regulatory financial data that goes beyond the level of the remedy to give stakeholders reasonable confidence that BT has complied with its SMP conditions and allow them to contribute to the regulatory regime. For example, in the 2016 BCMR Statement, given the broad baskets used in that charge control, we decided that BT must publish financial information on certain individual services (see paragraphs 16.44 - 16.46 and 16.52 – 16.61). For the WBA Market A, we consider that all the information we propose that BT should publish is consistent with the level of the remedy.

¹⁵⁶

<http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2016/CurrentCostFinancialStatements2016.pdf>

¹⁵⁷ Operating cost and capital employed are broken down by what BT calls ‘sectors’ on pages 25 and 28 of the 2015/16 RFS. These sectors provide a high-level view of the types of operating costs and assets associated with the relevant market.

how much of each input is consumed and the regulated price (not the FAC cost) of each input supplied under an EOI obligation for each relevant WBA service. See the columns 'Internal EOI', 'External EOI' on page 102 of BT's 2015/16 RFS.

Cost components for reported services.

- 7.46 In BT's cost attribution system, costs are ultimately attributed to cost components, which in turn are attributed to services. BT publishes in the "WBA (Market A) calculation of FAC based on component costs and usage factors" a list of how the service level FAC information is broken down by cost component. For example, in relation to WBA Market A, page 103 of the 2015/16 RFS shows which cost components are used by each reported WBA service.

EOI Information

- 7.47 In relation to WBA services, there is currently a fourth schedule relating to EOI input information. The "WBA (Market A) EOI" schedule sets out, in respect of the relevant WBA services provided in Market A, a list of all the inputs to those services that are supplied by other parts of BT on an EOI basis as a result of regulation in the WLA market, and the volumes and unit cost which those inputs make up as a proportion of each relevant WBA service. For example, this is set out on page 105 of the 2015/16 RFS.

Proposed requirements for public information in the RFS

- 7.48 In light of our review of the WBA market and consistent with our policy decisions in the 2014 Regulatory Financial Reporting Statement, we propose that it is appropriate to impose the following requirements on BT in relation to the provision of public information for Market A.

Market level information

- 7.49 We propose that BT must publish the revenue, operating costs, capital employed and returns for Market A. In practice this means that Market A will continue to be included in the 'performance summary by market' schedule in the RFS and the 'attribution of wholesale current costs and mean capital employed' schedules.¹⁵⁸ Trends in market level financial performance are informative in the context of considering the impact and effectiveness of the remedies we propose in Market A. Market level cost information also provides transparency regarding how BT has allocated costs between regulated markets (and between regulated and unregulated markets).
- 7.50 We see this as facilitating stakeholder confidence that such costs have been allocated consistently and appropriately. It also mitigates against the risk of double recovery of costs or that costs might be unreasonably loaded onto services or markets. We consider it is proportionate to require BT to publish this information to understand and demonstrate the overall reliability and robustness of the RFS.

Service level information

- 7.51 As discussed above, we are not proposing to impose a cost-based charge control on BT in Market A. However, we are proposing to impose a fair and reasonable charges obligation on BT. In order to ensure that stakeholders have appropriate transparency in relation to Market A we propose to require BT to disclose revenue, volume,

¹⁵⁸ See pages 21, 25 and 28 of the 2015/16 RFS.

average price and total FAC information for the main WBA services telecoms providers purchase within Market A.

7.52 We consider that the current level of service reporting in the Market A can be simplified slightly to ensure it represents the main WBA services within Market A. We therefore no longer consider that it is necessary to publicly report IPstream Connect Max and Premium services separately from other services, or to publicly report IPstream Connect Regrades, IPstream Connect Migrations and IPstream Connect cancellations due to the relatively low volumes of these services.

7.53 We therefore propose that BT should publish revenue, volume and average price FAC information on the following main services:

- IP Stream Connect End user access – rentals
- IP Stream Connect bandwidth
- Other IPstream Connect services
- WBC Connections
- WBC End user access – rentals
- WBC – bandwidth
- WBC - other services
- Other wholesale broadband access charges

7.54 As noted above, BT is also currently required to report on EOI inputs into WBA services as part of this section of the RFS, i.e. where there are inputs from WLA services which are subject to an EOI obligation under regulation in the WLA market. The purpose of such WBA reporting in relation to services where there are EOI inputs from the WLA Market is primarily in order to provide transparency relating to BT's compliance with, and the effectiveness of, the EOI remedies imposed on the relevant WLA services. In order to provide transparency on how that remedy is working, it is necessary for stakeholders to understand which downstream regulated services consume those EOI inputs and how they are accounted for. We believe that it is likely to remain appropriate for BT to continue to report on EOI inputs into WBA services for these reasons, however, as these requirements are in support of our remedies in the WLA market, we consider it is more appropriate to consult on our proposals in relation to this as part of the forthcoming DPA financial reporting consultation (as discussed at paragraph 7.30 above).

Cost components for reported services

7.55 We propose that FAC component cost information at the service level is no longer published in the RFS. This is because we are not proposing to impose a FAC-based charge control on BT in Market A, and we consider that it would therefore not be appropriate for BT to publish this level of detailed FAC cost information. However, as explained below, we propose this information be provided to Ofcom as part of the private information contained in the RFS.

EOI information

7.56 For the same reasons as set out at paragraph 7.54 above, we intend to consult on our proposals in relation to this as part of the forthcoming DPA financial reporting consultation (as discussed at paragraph 7.30 above).

Proposed requirements for private information to be provided to Ofcom

7.57 As explained above, in addition to information reported in the published RFS, BT also provides information to Ofcom privately which, overall, ensures that we have 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.

7.58 BT currently provides additional financial information (AFI) schedules privately to Ofcom, including a 'Data File' which provides detailed information on all the revenues, volumes, costs and cost categories that support the published RFS.

7.59 In summary, we propose to:

- require BT to provide to Ofcom certain additional information as part of its AFI schedules;
- make some amendments to certain AFI schedules which BT is currently required to provide to Ofcom; and
- remove the requirement to provide certain information in AFI schedules to Ofcom.

Additional private information

7.60 We are proposing that BT must provide us with additional information as part of its AFI schedules, which we consider is necessary for our purposes.

Information that is no longer published

7.61 We explained above that we are proposing to no longer require BT to:

- publish information on revenue, volumes and prices at the WBA service level at the same level of granularity as currently;¹⁵⁹ or
- publish FAC cost component information in relation to individual WBA services.¹⁶⁰

7.62 However, we remain of the view that it is important that we still receive this information for our own internal purposes, as we still need it in order to monitor the effectiveness of our remedies and understand the individual volume and pricing trends in Market A. We therefore propose to require BT to provide this information privately to enable us to do this. We therefore propose to include a requirement for BT to provide, as part of the Data File in accordance with the criteria set out in para 7.72.

¹⁵⁹ This information is set out in a schedule on pages 104-106 of the 2014/15 RFS.

¹⁶⁰ This information is set out in a schedule on pages 107-108 of the 2014/15 RFS.

New Information

- 7.63 We propose that BT provides additional information privately in relation to detailed WBA service information and WBA service component FACs. We set out the requirements and our reasoning for them below.
- 7.64 The first proposed requirement is for WBA Service information pursuant to which BT would set out the revenues, volumes and total FAC on a CCA basis of any WBA service provided in Market A which is not disclosed in the published RFS, where the revenue from this service is above £5m.¹⁶¹ The revenues and costs should, in total, be reconciled to the revenues and costs included within the publicly reported totals for WBA Market A. This information will ensure that we have sufficient data to identify services that account for a significant proportion of WBA revenues and costs which will allow us to monitor the effectiveness of our regulation and to enable our timely intervention to ensure that the SMP obligations within WBA Market A address the underlying competitions concerns identified in our market analysis.
- 7.65 The second requirement is for Detailed WBA Service Network Component FACs pursuant to which BT would set out the calculation of FAC based on component costs and usage factors for all services reported in the Detailed WBA Service information schedule. The FAC service unit costs should reconcile to those given in the first requirement. As with the Detailed WBA Service information, this schedule will ensure that we have sufficient cost component information for the services that account for a significant proportion of WBA costs.
- 7.66 As with schedules provided publicly, these schedules will ensure Ofcom has sufficient information to monitor movements of revenues and costs within the market and conduct initial analysis where there appear to be unusual movements.
- 7.67 As explained further below, we propose to require BT to provide us this information as part of the 'Data File'.
- 7.68 The proposals set out above are consistent with our decision in the 2016 BCMR Statement.¹⁶²

Amendments to/removal of existing schedules

- 7.69 We propose to amend three AFI schedules: the 'Data File' schedule (AFI-5(a)(xii))¹⁶³ and two DLRIC/DSAC AFI schedules (AFI-5(a)(i) and (AFI-5(a)(ii)).¹⁶⁴

Data File

- 7.70 BT is currently required to provide to Ofcom a data file containing various information supporting the RFS. We have worked closely with BT to ensure that the files it provides allow us to interrogate the data underpinning the RFS.

¹⁶¹ As explained in paragraph 7.54 above, we intend to consult on proposals relating to EOI inputs information as part of the forthcoming DPA financial reporting consultation.

¹⁶² 2016 BCMR, Volume 1, paragraph 16.85.

¹⁶³ Proposed regulatory reporting Direction 5, Annex B, ref 5(a)(xii)

¹⁶⁴ Proposed regulatory reporting Direction 5, Annex B, ref 5(a)(i) and (ii)

- 7.71 As part of our ongoing engagement with BT on regulatory financial reporting, we have had discussions with BT over the continued provision of AFIs where that information is already contained in the Data File. We note that the proposed SMP condition that imposes this requirement for BT to provide additional financial information¹⁶⁵ does not specify the format of that information. It could therefore be provided as part of the Data File rather than duplicated in a separate AFI.
- 7.72 In principle, we agree that where the information is provided within the Data File it need not be provided as a separate AFI. However, this would not apply to:
- information that we do not get as part of the Data File (currently any LRIC and DSAC information);
 - where obtaining the information from the Data File would not be straightforward and / or the information from the Data File would be different than that which would have been included in the AFI;¹⁶⁶ or
 - where the AFI is used as a control total for information obtained from the Data File (such as AFIs 1-4).
- 7.73 Considering the above factors, we propose to make amendments to the requirement relating to the provision of the Data File to:
- Clarify the information which BT is currently providing or may provide as part of the Data File – as explained above, this includes certain information which BT provides as part of the Data File, which we currently direct BT to provide as a separate AFI, and we are therefore also proposing, in respect of that information, to remove the requirement on BT to provide that information as part of a separate AFI; and
 - capture new information which we consider we need BT to provide.
- 7.74 In terms of amendments which are intended to clarify the information which BT provides to us as part of the Data File, we are proposing to clarify that BT is required to provide, as part of the Data File, the file “FAC adjustment Summary” (for LRIC model),¹⁶⁷ which contains the post RFS adjustments to cost categories for the purposes of LRIC reporting, and to formalise the provision of EOI charges by service within WBA Market A and the Wholesale Residual schedule.¹⁶⁸
- 7.75 As explained above, we also expect BT to provide as part of the Data File the following information (which, as explained above, will not or will no longer be included as part of public reporting): revenues, volumes and FAC component cost on a CCA basis for IPstream Connect Max, IPstream connect Premium, IPstream Connect Regrades, IPstream Connect Migrations and IPstream Connect Cancellations.¹⁶⁹
- 7.76 Further, as explained above, we are proposing that BT provides Detailed WBA Service information, Detailed WBA Service Component total FACs and detailed WBA

¹⁶⁵ Proposed regulatory reporting SMP Condition 8.32.

¹⁶⁶ By different we mean that there would be a difference of at least 1% in any individual number.

¹⁶⁷ File provided by [redacted] (BT) to [redacted] (Ofcom) at 17:03 on 2 March 2017.

¹⁶⁸ This schedule is called ‘EOI by Pt Service 1415 Proposed AFI.xlsx’ and was provided by [redacted] to Ofcom on 27 April 2016.

¹⁶⁹ As explained in paragraph 7.53 above, we intend to consult on proposals relating to EOI inputs information as part of the forthcoming DPA financial reporting consultation. We would also anticipate obtaining such information as part of the Data File, where relevant.

service network component costs as part of the Data File – i.e. the revenues, volumes, total FAC and network component cost on a CCA basis of any other WBA service where the revenue from this service is above £5m.

- 7.77 We consider that it is appropriate for BT to provide us with this information as it will help us to understand how BT is allocating costs between and within markets and will help us assess the impact and effectiveness of the remedies we are proposing.

Proposed Removal of AFI schedules where the information is provided as part of the Data File

- 7.78 As noted above, we do not consider it necessary to direct BT to provide separate AFIs where the same information can be provided to us in an appropriate format as part of the Data File. Considering the factors outlined at paragraph 7.72 above, we have reviewed the current list of AFIs and, on the basis that we expect BT can provide the relevant information as part of the Data File, we propose to remove the requirement for BT to provide the following information under a separate AFI:

- The information included in the file AFI-C1¹⁷⁰ which is meant to set out a comprehensive analysis of the transfer charges for WBA Market A; and
- The information included in file AFI-C2,¹⁷¹ which sets out the geographical analysis of costs and assets on a cost accounting and EOI basis.

- 7.79 As the information in AFI-C1 and AFI-C2 are currently provided as part of the Data File, its extraction from the Data File is straightforward and it is not used for control purposes, we propose no longer to require this information to be provided in a separate AFI.

DLRIC and DSAC data on a cost category basis

- 7.80 BT is currently required to provide FAC and LRIC data across all regulated markets in a combined schedule on a cost component by cost category basis under AFIs 1-4 (currently schedules 5(a)(i), (ii), (iii) and (iv)).¹⁷² BT has voluntarily provided us with DLRIC and DSAC data across all regulated markets in a combined schedule.
- 7.81 DLRIC, DSAC, LRIC and FAC data can inform our market reviews and our assessment and analysis of appropriate remedies where SMP is present. It is important to receive this information on all regulated markets on a consistent basis to ensure the overall coherence of the data on DLRIC and DSAC, as well as LRIC and FAC. For example where we obtain data for a particular service or market, it is important to be able to see how it relates to the same data for other services or

¹⁷⁰ See the 2015 Directions Statement, Annex 7, Direction under section 49 of the Communications Act 2003 and SMP Services Conditions 13A.4 and 8A.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements, Annex B, AFI schedule reference 5(c)(i).

¹⁷¹ See the 2015 Directions Statement, Annex 7, Direction under section 49 of the Communications Act 2003 and SMP Services Conditions 13A.4 and 8A.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements, Annex B, AFI schedule reference 5(c)(ii).

¹⁷² See the 2015 Directions Statement, Annex 7, Direction under section 49 of the Communications Act 2003 and SMP Services Conditions 13A.4 and 8A.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements, Annex B, AFI schedule reference 5(a)(i) to (iv).

markets, to ensure the overall robustness of the data and to demonstrate that attribution and FAC and LRIC methodologies have been followed appropriately.

- 7.82 We therefore propose to amend the requirements to ensure that BT provides us with DSAC and DLRIC information, in addition to LRIC and FAC information, for WBA Market A, alongside the same information for all other regulated markets in a combined schedule. The new requirement is reflected in schedules AFI-5(a)(i), AFI-5(a)(ii).

FAC, LRIC, DLRIC and DSAC data on a service basis

- 7.83 BT is currently required to provide DLRIC and DSAC data for each service in each regulated market separately, which it provides in file AFI-C1173. In respect of WBA, this requirement is currently set out in schedule 5(c)(iii).
- 7.84 BT also voluntarily includes FAC data for each service.
- 7.85 As explained at paragraph 7.81, FAC, LRIC, DLRIC and DSAC data can inform our market reviews and our assessment and analysis of appropriate remedies where SMP is present and it is important to receive this information on all regulated markets on a consistent basis to ensure the overall coherence of the data on FAC and LRIC, as well as DLRIC and DSAC.
- 7.86 We therefore propose to require BT to provide us with FAC and LRIC information, in addition to DLRIC and DSAC data, for WBA Market A, for each regulated service alongside the same information for all other regulated markets. This is reflected in schedule 5(a)(xv). It follows that we propose to remove the requirement to provide FAC, DSAC and DLRIC data on WBA services specifically under a separate AFI.¹⁷⁴

Accounting Deadlines

- 7.87 As part of our ongoing engagement with BT on regulatory financial reporting, we have had discussions with BT over the timing of the delivery of AFI schedules that contain LRIC information. As it takes BT two weeks to generate LRIC information from its LRIC model, BT requested that the AFIs with LRIC information be provided two weeks after all other AFI's had been provided.
- 7.88 As part of our consideration of BT's request, we reviewed the SMP Conditions and Directions relating to the timing of the delivery of the RFS and uncovered several practices that had arisen that appeared contrary to those SMP Conditions and Directions.
- 7.89 The 2014 Regulatory Reporting Statement says that BT is required to provide to us with a copy of RFS that "shall be in the form in which they are ultimately to be published at least two weeks before they are required to be published".¹⁷⁵ We note that instead BT has been providing a 'near final' draft RFS. We propose that the new

¹⁷³ See the 2015 Directions Statement, Annex 7, Direction under section 49 of the Communications Act 2003 and SMP Services Conditions 13A.4 and 8A.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements, Annex B, AFI schedule reference 5(a)(i) to (iv).

¹⁷⁴ See the 2015 Directions Statement, Annex 7, Direction under section 49 of the Communications Act 2003 and SMP Services Conditions 13A.4 and 8A.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements, Annex B, AFI schedule reference 5(c)(iii).

¹⁷⁵ 2014 Regulatory Reporting Statement SMP Condition 8 (v).

condition will make it clear that the copy of the RFS we receive two weeks in advance of the publication should be the same as that which is published.

- 7.90 The 2014 Regulatory Reporting Statement says that BT is required to provide the AFIs at the same time as the RFS. We note that BT has instead been providing final AFIs two weeks after the RFS has been published. This practice had been happening for many years. BT's view was that this custom had arisen as there was no legal deadline for the delivery of the AFIs. However, in the 2014 Regulatory Reporting Statement the definition of 'Regulatory Financial Statement' is "any financial statement in respect of a Financial Year..."¹⁷⁶ And further, the glossary to the SMP conditions states that the RFS "describe the annual regulatory financial statements... We use this term in this consultation to refer to both the published and unpublished statements. The unpublished financial statements are submitted to us confidentially".¹⁷⁷ To us therefore it is unambiguous that BT should have been supplying the AFI's on the same date that the RFS is published. We propose to clarify this requirement in the direction.
- 7.91 In the light of the fact that the RFS must be provided in final form two weeks prior to publication, the provision of the AFIs that contain LRIC information on the date the RFS are published should be achievable. We do recognise that the team producing the RFS are extremely busy around the date of the RFS publication, but it is for BT to resource appropriately to meet its regulatory obligations.
- 7.92 We therefore propose that the direction will make it clear that non-LRIC AFI's (including the Data File) should be provided alongside the RFS. We will however propose that LRIC AFI's should be supplied when the RFS is published and the data no later than two weeks after the RFS is published.

Non-confidential compliance information

- 7.93 In the 2014 Regulatory Financial Reporting Statement, we decided that "BT must produce non-confidential compliance schedules for each regulated market. These non-confidential compliance statements must be published on BT's website in the same location as the Published RFS and at the same time as the confidential compliance statements are provided to Ofcom".¹⁷⁸ Following the WBA market review 2014 we imposed a requirement on BT through the 2015 Directions Statement to publish non-confidential compliance schedules in the WBA market.¹⁷⁹
- 7.94 As set out in Section 6, we are not proposing to impose a charge control of our proposals on BT in Market A. We therefore consider that there is no need for any requirement for BT to provide to us confidential price control schedules or publish non-confidential versions of them and we propose not to include such requirements as part of this proposed direction.

Summary of our proposal for the relevant direction

- 7.95 We therefore propose to implement the requirements set out above in paragraphs 7.48 to 7.91 by giving a direction to BT setting the requirements explained above in relation to preparation, delivery, publication, form and content of the RFS in respect of the WBA market. The form of the proposed direction is based on the form of the

¹⁷⁶ 2014 Regulatory Reporting Statement, page 120.

¹⁷⁷ 2014 Regulatory Reporting Statement Glossary paragraph A1.31 page 117.

¹⁷⁸ *Regulatory Financial Reporting: Final Statement*, paragraph 4.49.

¹⁷⁹ *Directions for Regulatory Financial Reporting*, paragraphs 7.50 – 7.52.

direction given in the 2015 Directions Statement with the modifications necessary to reflect our proposals set out above.

Legal tests

- 7.96 We consider that giving the proposed direction specifying requirements in relation to the preparation, delivery, publication, form and content of the RFS would fulfil our general duties under section 3 of the Act and meet the Community requirements set out in section 4 of the Act for the reasons set out above. In proposing this change, we have taken into account all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive, in particular the 2005 EC Recommendation.
- 7.97 We also consider that this direction meets the tests set out in section 49(2) of the Act in that it is:
- Objectively justifiable because the direction will reflect the proposals in this consultation. Our proposals concerning the additional information to be provided both in public and in private seek to ensure that stakeholders have sufficient information about the products and services they purchase to provide them with reasonable confidence about BT's compliance with its SMP conditions and we have sufficient information necessary to carry out our functions.
 - Not unduly discriminatory because it reflects BT's market position in the UK excluding the Hull Area.
 - Proportionate because the direction will be no more than is required in order to ensure the effectiveness of the proposals in this consultation and ensures that Ofcom and stakeholders are provided with a sufficient level of information, and does not extend beyond these.
 - Transparent because it is clear that the intention of the direction will be to make sure that the RFS remain fit for purpose and that Ofcom and stakeholders are provided with a sufficient level of information.

Consultation question

Question 7.1: *Do you agree with our proposals for BT's Regulatory Financial Reporting, including in particular the proposed Direction modifying requirements relating to the preparation, audit, delivery and publication of the RFS, and Direction modifying requirements relating to the form and content of the RFS? If not, what alternative would you propose and why?*

Annex 1

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 14 September 2017.
- A1.2 We strongly prefer to receive responses via the online form at <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review> We also provide a cover sheet (<http://stakeholders.ofcom.org.uk/consultations/consultation-response-coversheet/>) for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work. You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to Caroline.Longman@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet (<http://stakeholders.ofcom.org.uk/consultations/consultation-response-coversheet/>). This email address is for this consultation only, and will not be valid after 14 September 2017.
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation.
- Caroline Longman
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact Caroline Longman on 020 7783 4328, or email Caroline.Longman@ofcom.org.uk.
- A1.6 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.
- A1.7 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.
- A1.8 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 3. 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.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact Caroline Longman on 020 7783 4328, or by email to Caroline.Longman@ofcom.org.uk.

Confidentiality

- A1.10 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.
- A1.11 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.
- A1.12 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.
- A1.13 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 <http://www.ofcom.org.uk/terms-of-use/>

Next steps

- A1.14 Following this consultation period, Ofcom plans to publish a statement in early 2018.
- A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details please see <http://www.ofcom.org.uk/email-updates/>

Ofcom's consultation processes

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please call our consultation helpdesk on 020 7981 3003 or 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.

A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Tel: 020 7981 3601

Email steve.gettings@ofcom.org.uk

Annex 2

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.

Cover sheet for response to an Ofcom consultation

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	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	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)

Annex 3

Consultation questions

Question 3.1: Do you agree with Ofcom's proposed product market definition?
Please provide reasons and evidence in support of your views.

Question 4.1: Do you agree with Ofcom's proposed geographic market definition?
Please provide reasons and evidence in support of your views.

Question 5.1: Do you agree with Ofcom's proposal that BT holds SMP in Market A?
If not, please provide reasons and evidence in support of your views.

Question 5.2: Do you agree with Ofcom's proposal that no provider has SMP in Market B?
If not, please provide reasons and evidence in support of your views.

Question 6.1: Do you agree with the remedies that we propose for BT in Market A?
If not, please set out what alternative remedies you consider should be implemented
and provide your reasons and supporting evidence.

Question 7.1: Do you agree with our proposals for BT's Regulatory Financial Reporting, including in particular the proposed Direction modifying requirements relating to the preparation, audit, delivery and publication of the RFS, and Direction modifying requirements relating to the form and content of the RFS?
If not, what alternative would you propose and why?

Annex 4

Draft legal instruments: proposals for SMP services conditions

NOTIFICATION OF PROPOSALS UNDER SECTIONS 48A AND 80A OF THE COMMUNICATIONS ACT 2003

Proposals for identifying markets, making market power determinations and setting SMP conditions to be imposed on BT under section 45 of the Communications Act 2003

Background

1. On 26 June 2014, Ofcom published a regulatory statement entitled *Review of the wholesale broadband access markets – Statement on market definition, market power determinations and remedies*¹⁸⁰ (the “**2014 WBA Statement**”), identifying three separate geographic markets for the provision of wholesale broadband access:
 - (a) wholesale broadband access provided in Market A, which related to the area covered by the BT exchanges set out at Appendix 1 to Annex 2 of the 2014 WBA Statement;
 - (b) wholesale broadband access provided in Market B, which related to the area covered by the BT exchanges set out at Appendix 2 to Annex 2 of the 2014 WBA Statement; and
 - (c) wholesale broadband access provided in the Hull Area.
2. In the 2014 WBA Statement Ofcom determined that BT had significant market power in Market A. As a result of those market power determinations, and in accordance with section 48(1) of the Act, OFCOM imposed the SMP conditions set out in Schedule 1 to Annex 2 of the 2014 WBA Statement on BT.
3. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁸¹ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s conclusions on the regulatory financial reporting policy that it considered should be applied to BT. On 30 March 2015 Ofcom published a statement entitled “*Directions for Regulatory Financial Reporting*”¹⁸² and made directions implementing the conclusions set out in the 2014 RFS Statement and the 2014 WBA Statement.
4. In the 2014 WBA Statement Ofcom also determined that KCOM had significant market power in the Hull Area and imposed SMP conditions set out in Schedule 2 to Annex 2 of the WBA Statement on KCOM. This Notification does not relate to that market, as this is the subject of a separate consultation and notification which has also been published today.

¹⁸⁰ https://www.ofcom.org.uk/_data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf

¹⁸¹ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁸² https://www.ofcom.org.uk/_data/assets/pdf_file/0018/59112/statement.pdf

Proposals for service market identifications and market power determinations in relation to the United Kingdom excluding the Hull Area

5. Ofcom is proposing to identify, in accordance with section 80A of the Act, the following markets for the purpose of making market power determinations in relation to those identified markets:
 - (a) wholesale broadband access provided in Market A (which excludes the Hull Area); and
 - (b) wholesale broadband access provided in Market B (which excludes the Hull Area).
6. Ofcom is proposing in accordance with section 80A of the Act to make a market power determination that BT has significant market power in relation to the market set out in paragraph 5(a).
7. Ofcom is proposing to find that no person has significant market power in the market identified in paragraph 5(b) above.

Proposals to set and apply, and revoke SMP services conditions

8. Ofcom is proposing to set, in relation to the services market referred to in paragraph 5(a) above, the SMP conditions set out in Schedule 1 to this Notification to be applied to BT to the extent specified in that Schedule, which SMP conditions shall, unless otherwise stated in that Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this notification and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.
9. Ofcom is proposing, in accordance with section 48(2) of the Act, to revoke all the SMP conditions set out at Schedule 1 of Annex 2 of the 2014 WBA Statement, in so far as they apply to the market referred to in paragraph 5(a) above at the date specified in any subsequent notification under section 48(1) and 79(4) of the Act adopting the proposals set out in this Notification. It is proposed that section 16 of the Interpretation Act 1978 shall apply as if this revocation were a repeal of an enactment by an Act of Parliament.

OFCOM's duties and legal tests

10. The effect of, and Ofcom's reasons for making, the proposals for identifying the markets, making the market power determinations and setting the SMP conditions referred to in this Notification are set out in the consultation document accompanying this Notification.
11. In identifying and analysing the markets referred to in this Notification, and in considering whether to make the corresponding proposals set out in this Notification, Ofcom has, in accordance with section 79 of the Act, taken due account of all applicable guidelines and recommendations which have been issued or made by the European Commission in pursuance of the provisions of a European Union instrument, and which relate to market identification and analysis or the determination of what constitutes significant market power.

12. Ofcom considers that the proposed SMP conditions in Schedule 1 comply with the requirements of sections 45 to 47, 87 and 88 of the Act, as appropriate and relevant to each such SMP condition, and further that the proposed revocations of the SMP conditions referred to above comply with the requirements of sections 45 to 47, 87 and 88 of the Act as appropriate and relevant to them.
13. In making all of the proposals referred to in this Notification, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act and the six Community requirements in section 4 of the Act. In accordance with section 4A of the Act Ofcom has also taken due account of all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive. Ofcom has also, pursuant to Article 3(3) of Regulation (EC) No 1211/2009, taken utmost account of any relevant opinion, recommendation, guidelines, advice or regulatory practice adopted by the Body of European Regulators for Electronic Communications (BEREC).

Making representations

14. Representations may be made to Ofcom about the proposals set out in this Notification and the accompanying consultation document by no later than 14 September 2017.
15. Copies of this Notification and the accompanying consultation document have been sent to the Secretary of State in accordance with sections 48C(1) and 81(1) of the Act.

Interpretation

16. For the purpose of interpreting this Notification—
 - (a) except in so far as the context otherwise requires, words or expressions have the meaning assigned to them in paragraph 30 below, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Notification shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Notification were an Act of Parliament.
17. In this Notification:
 - (a) “**2014 WBA Statement**” means the statement described in paragraph 1 above;
 - (b) “**2014 RFR Statement**” means the statement described in paragraph 3 above;
 - (c) “**the Act**” means the Communications Act 2003 (c. 21);
 - (d) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006;

- (e) “**Hull Area**” means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc, (now known as KCOM);
- (f) “**Framework Directive**” means Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, as amended;
- (g) “**Market A**” means the area covered by the BT exchanges set out at Appendix 1 to Schedule 1 of this notification;
- (h) “**Market B**” means the area covered by the BT exchanges set out at Appendix 2 to Schedule 1 of to this notification;
- (i) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;
- (j) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (c.30).

18. The Schedules to this Notification shall form part of this Notification.

Signed

A handwritten signature in blue ink, appearing to read 'D. Clarkson'.

David Clarkson

Competition Policy Director, OFCOM

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE 1

[PROPOSED] SMP conditions imposed on BT in Market A

Part 1: Application

The SMP conditions in Part 3 of this Schedule 1 shall, except where specified otherwise, apply to the Dominant Provider in the wholesale broadband access market referred to as Market A in paragraph 5(a) of the Notification. Save as otherwise specified in any condition, each condition will enter into force on the date of publication of [*date of final notification*] and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.

Part 2: Definitions and Interpretation

1. In addition to the definitions set out above in this notification, in this Schedule 1—
 - (a) “**Access Agreement**” means an agreement entered into between the Dominant Provider and a Third Party for the provision of network access in accordance with Condition 1;
 - (b) “**Dominant Provider**” means BT;
 - (c) “**Reference Offer**” means the terms and conditions on which the Dominant Provider is willing to enter into an Access Agreement;
 - (d) “**Third Party**” means a person providing a public electronic communications network or a person providing a public electronic communications service.

Part 3: The SMP conditions

Condition 1 – Network access on reasonable request

- 1.1 The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1.2 The provision of network access by the Dominant Provider in accordance with this Condition 1 must –
 - (a) take place as soon as reasonably practicable after receiving the request from a Third Party;
 - (b) be on fair and reasonable terms, conditions and charges; and
 - (c) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1.3 The provision of network access by the Dominant Provider in accordance with this Condition 1 must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.
- 1.4 The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition 1.

Condition 2 – No undue discrimination

- 2.1 The Dominant Provider must not unduly discriminate against particular persons or against a particular description of persons, in relation to the provision of network access in accordance with Condition 1.
- 2.2 In this Condition 2, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place one or more Third Parties at a competitive disadvantage in relation to activities carried on by the Dominant Provider.

Condition 3 – Equivalence of Inputs basis

- 3.1 Subject to Condition 3.2, the Dominant Provider must provide network access in accordance with Condition 1 on an Equivalence of Inputs basis.
- 3.2 The obligation in Condition 3.1 to provide network access on an Equivalence of Inputs basis shall not apply to—
- (a) any forms of network access which the Dominant Provider was providing other than on an Equivalence of Inputs basis as at the date that this condition enters into force; and
 - (b) such provision of network access as Ofcom may from time to time otherwise consent in writing.
- 3.3 Without prejudice to the generality of Condition 3.1, the Dominant Provider must not provide (or seek to provide) network access for its own services (including for those of its retail divisions, subsidiaries or partners), unless at the same time the Dominant Provider provides and/or offers to provide such network access to Third Parties (other than its retail divisions, subsidiaries or partners) on an Equivalence of Inputs basis.
- 3.4 For the avoidance of doubt, the obligations set out in this Condition 3 apply in addition to the obligations set out in Condition 2.
- 3.5 In this Condition 3:
- (a) **“Equivalence of Inputs basis”** means that the Dominant Provider must provide, in respect of a particular product or service, the same product or service to all Third Parties and itself on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes, and includes the provision to all Third Parties and itself of the same Relevant Commercial Information about such products, services, systems and processes as the Dominant Provider provides to its own divisions, subsidiaries or partners. In particular, it includes the use by the Dominant Provider of such systems and processes in the same way as Third Parties and with the same degree of reliability and performance as experienced by Third Parties.

In this definition “the same” means exactly the same subject only to:

(A) trivial differences;

(B) differences relating to:

- i. credit vetting procedures;
- ii. payment procedures;
- iii. matters of national and crime-related security (which for the avoidance of doubt includes for purposes related to the Regulation of Investigatory Powers Act 2000), physical security, security required to protect the operational integrity of the network;
- iv. provisions relating to the termination of a contract; or
- v. contractual provisions relating to requirements for a safe working environment;

- (C) differences relating to the provision of Relevant Commercial Information by the Dominant Provider to its own divisions, subsidiaries or partners where this is necessary for purposes other than relating to the provision of network access to those own divisions, subsidiaries or partners; and
- (D) such other differences as Ofcom may from time to time consent to in writing.

For the avoidance of any doubt, unless seeking Ofcom's consent, the Dominant Provider may not rely on any other reasons in seeking to objectively justify the provision in a different manner.

- (b) **"Relevant Commercial Information"** means information of a commercially confidential nature relating to products and services to which this Condition 3 applies, and which relates to any or all of the following in relation thereto—
 - i. product development;
 - ii. pricing;
 - iii. marketing strategy and intelligence;
 - iv. product launch dates;
 - v. cost;
 - vi. projected sales volumes; or
 - vii. network coverage and capabilities;

save for any such information in relation to which Ofcom consents in writing to it being treated as falling outside this definition.

Condition 4 – Publication of a Reference Offer

- 4.1 Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish a Reference Offer in relation to the provision of network access pursuant to Condition 1 and act in the manner set out below.
- 4.2 Subject to Condition 4.8, the Dominant Provider must ensure that a Reference Offer in relation to the provision of network access pursuant to Condition 1 includes, where applicable, at least the following—
- (a) a description of the network access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of network access);
 - (b) the locations at which network access will be provided;
 - (c) any relevant technical standards for network access (including any usage restrictions and other security issues);
 - (d) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);
 - (e) any ordering and provisioning procedures;
 - (f) relevant charges, terms of payment and billing procedures;
 - (g) details of interoperability tests;
 - (h) details of maintenance and quality as follows—
 - i. specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, and for provision of support services (such as fault handling and repair);
 - ii. service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
 - iii. the amount of compensation payable by one party to another for failure to perform contractual commitments;
 - iv. a definition and limitation of liability and indemnity; and
 - v. procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;
 - (i) details of any relevant intellectual property rights;
 - (j) a dispute resolution procedure to be used between the parties;
 - (k) details of duration and renegotiation of agreements;
 - (l) provisions regarding confidentiality of the agreements;

- (m) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts);
 - (n) the standard terms and conditions for the provision of network access;
- 4.3 To the extent that the Dominant Provider provides to itself network access that—
- (a) is the same, similar or equivalent to that provided to any other Third Party;
or
 - (b) may be used for a purpose that is the same, similar or equivalent to that provided to any other Third Party;
- in a manner that differs from that detailed in a Reference Offer in relation to network access provided to any Third Party, the Dominant Provider must ensure that it publishes a Reference Offer in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Condition 4.2(a) to (n).
- 4.4 The Dominant Provider must, on the date that this Condition 4 enters into force, publish a Reference Offer in relation to any network access that it is providing as at the date that this Condition enters into force.
- 4.5 The Dominant Provider must as soon as reasonably practicable update and publish the Reference Offer in relation to any amendments or in relation to any further network access provided after the date that this Condition 4 enters into force.
- 4.6 Publication referred to above shall be effected by the Dominant Provider placing a copy of the Reference Offer on any relevant website operated or controlled by the Dominant Provider.
- 4.7 The Dominant Provider must send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts as have been requested).
- 4.8 The Dominant Provider must make such modifications to the Reference Offer as Ofcom may direct from time to time.
- 4.9 The Dominant Provider must provide network access at the charges, terms and conditions in the relevant Reference Offer and must not depart therefrom either directly or indirectly.
- 4.10 The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition 4.

Condition 5 – Notification of charges and terms and conditions

- 5.1 Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish charges, terms and conditions and act in the manner set out in this Condition 5.
- 5.2 Where it proposes a WBA Access Change, the Dominant Provider must send to every person with whom it has entered into an Access Agreement pursuant to Condition 1, a WBA Access Change Notice.
- 5.3 The obligation in Condition 5.2 shall not apply where the WBA Access Change Notice is directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or required by a notification or enforcement notification issued by OFCOM under sections 96A or 96C of the Act.
- 5.4 Subject to Condition 5.5, a WBA Access Change Notice must be sent not less than 28 days before any such amendment comes into effect.
- 5.5 The Dominant Provider must ensure that a WBA Access Change Notice includes—
- (a) a description of the network access in question;
 - (b) a reference to the location in the Dominant Provider’s current Reference Offer of the terms and conditions associated with the provision of that network access;
 - (c) the current and proposed new charge and/or current and proposed new terms and conditions (as the case may be); and
 - (d) the date on which, or the period for which, the WBA Access Change will take effect (the “**effective date**”).
- 5.6 The Dominant Provider must not apply any WBA Access Change identified in a WBA Access Change Notice before the effective date.
- 5.7 To the extent that the Dominant Provider provides to itself network access that—
- (a) is the same, similar or equivalent to that provided to any Third Party;
or
 - (b) may be used for a purpose that is the same, similar or equivalent to that provided to any Third Party,

in a manner that differs from that detailed in a WBA Access Change Notice in relation to network access provided to any Third Party, the Dominant Provider must ensure that it sends to Ofcom a notice in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Conditions 5.5(a) to (c) and, where the Dominant Provider amends the charges, terms and conditions on which it provides itself with network access, it must ensure it sends to Ofcom a notice equivalent to a WBA Access Change Notice.

5.8 In this Condition 5:

- (a) **“WBA Access Change”** means any amendment to the charges, terms and conditions on which the Dominant Provider provides network access;
- (b) **“WBA Access Change Notice”** means a notice given by the Dominant Provider of a WBA Access Change.

Condition 6 – Notification of technical information

- 6.1 Except in so far as OFCOM may from time to time otherwise consent in writing, where the Dominant Provider provides network access pursuant to Condition 1 and proposes new or amended terms and conditions relating to the following—
- (a) technical characteristics (including information on network configuration, where necessary, to make effective use of the network access provided);
 - (b) the locations at which network access will be provided; or
 - (c) technical standards (including any usage restrictions and other security issues),
- the Dominant Provider must publish a written notice (the “**Notice**”) of the new or amended terms and conditions within a reasonable time period but not less than 90 days before either the Dominant Provider enters into an Access Agreement to provide the new network access or the amended terms and conditions of the existing Access Agreement come into effect.
- 6.2 The obligation in Condition 6.1 shall not apply where the new or amended terms and conditions are directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or are required by a notification or enforcement notification issued by OFCOM under sections 96A or 96C of the Act.
- 6.3 The Dominant Provider must ensure that the Notice includes—
- (a) a description of the network access in question;
 - (b) a reference to the location in the Dominant Provider’s Reference Offer of the relevant terms and conditions;
 - (c) the date on which or the period for which the Dominant Provider may enter into an Access Agreement to provide the new network access or any amendments to the relevant terms and conditions will take effect (the “**effective date**”).
- 6.4 The Dominant Provider must not enter into an Access Agreement containing the terms and conditions identified in the Notice or apply any new relevant terms and conditions identified in the Notice before the effective date.
- 6.5 Publication referred to in Condition 6.1 must be effected by the Dominant Provider—
- (a) placing a copy of the Notice on any relevant website operated or controlled by the Dominant Provider;
 - (b) sending a copy of the Notice to Ofcom;
 - (c) sending a copy of the Notice to any person at that person’s written request, and where the Notice identifies a modification to existing relevant terms and conditions, sending a copy to every person with which the Dominant Provider has entered into an Access Agreement pursuant to Condition 1.

The provision of such a copy of the Notice by the Dominant Provider may be subject to a reasonable charge.

Condition 7 – Quality of Service

- 7.1 The Dominant Provider must publish all such information as to the quality of service in relation to network access provided by the Dominant Provider pursuant to Condition 1, in such manner and form, and including such content, as Ofcom may from time to time direct.
- 7.2 The Dominant Provider must comply with any direction OFCOM may make from time to time under this Condition 7.

Condition 8 – Regulatory Financial Reporting

General requirements

- 8.1 The Dominant Provider must maintain a separation for accounting purposes between such different matters relating to network access to the relevant network or the availability of the relevant facilities, as required by Conditions 8.3 to 8.35 including as Ofcom may from time to time direct under those Conditions 8.3 to 8.35.
- 8.2 The Dominant Provider must comply with such rules made by Ofcom about the use of cost accounting systems as required by Conditions 8.3 to 8.35 (as applicable) and must comply with such requirements about the description to be made available to the public of the cost accounting system as required by Conditions 8.3 to 8.35 (as applicable) in each case including as Ofcom may from time to time direct under Conditions 8.3 to 8.35 (as applicable).
- 8.3 Except in so far as Ofcom may consent otherwise in writing, the Dominant Provider shall act in the manner set out in this Condition 8.
- 8.4 Ofcom may from time to time make such directions as they consider appropriate in relation to the Dominant Provider's obligations under this Condition 8.
- 8.5 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition 8.
- 8.6 Where the Dominant Provider is required to comply with:
- (i) this Condition 8; and
 - (ii) the Regulatory Accounting Principles,
- and it appears to the Dominant Provider that any of these requirements conflict with each other in a particular case, the Dominant Provider must resolve such conflict by giving priority to them in the order in which they are set out above.
- 8.7 For the purpose of this Condition 8, publication shall be effected by:
- (i) placing a copy of the relevant information on any relevant publicly available website operated or controlled by the Dominant Provider; and
 - (ii) sending a copy of the relevant information to any person at that person's written request.

Requirements relating to the preparation, audit, delivery and publication of the Regulatory Financial Statements

- 8.8 The Dominant Provider shall in respect of the Market, Technical Areas, Products, Network Components and Network Services (as applicable), for each Financial Year:
- (i) prepare such Regulatory Financial Statements as directed by Ofcom from time to time in accordance with this Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents (the relevant

Accounting Methodology Documents to be identified in the Regulatory Financial Statements by reference to their date);

- (ii) prepare a reconciliation report as set out in Condition 8.23;
 - (iii) secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time and on the reconciliation report as set out in Condition 8.24;
 - (iv) secure the approval of the Regulatory Financial Statements by the board of directors of the Dominant Provider and secure the signature of the Regulatory Financial Statements by a director of the Dominant Provider for and on behalf of the board of directors;
 - (v) deliver to Ofcom copies of the Regulatory Financial Statements, the reconciliation report and any corresponding audit opinion, each and all of which shall be in the form in which they are ultimately to be published, at least two weeks before they are required to be published;
 - (vi) publish the Regulatory Financial Statements, the reconciliation report and any corresponding audit opinion, within four months after the end of the Financial Year to which they relate;
 - (vii) ensure that any Regulatory Financial Statement and corresponding audit opinion that it delivers to Ofcom and/or publishes are fit for such purpose (or purposes), if any, as notified by Ofcom in writing; and
 - (viii) publish with the Regulatory Financial Statements any written statement made by OFCOM and provided to the Dominant Provider commenting on the figures in, the notes to or the presentation of any or all of the Regulatory Financial Statements, the reconciliation report and/or the Accounting Methodology Documents.
- 8.9 The Dominant Provider shall make such amendments to the form and content of the Regulatory Financial Statements as are necessary to give effect fully to the requirements of this Condition 8. The Dominant Provider shall provide to Ofcom particulars of any such amendment, the reasons for it and its effect, when it delivers the Regulatory Financial Statements to Ofcom.
- 8.10 The Dominant Provider shall prepare all Regulatory Financial Statements, explanations or other information required by virtue of this Condition 8 on a regulatory asset value adjusted current cost basis as directed by Ofcom from time to time and shall be capable of doing so in relation to any period. Such Regulatory Financial Statements, explanations or other information shall be, in the opinion of Ofcom, meaningfully reconcilable to the Statutory Financial Statements.
- 8.11 Each Regulatory Financial Statement shall include Prior Year Comparatives which shall be prepared on a basis consistent with Current Year Figures. The Dominant Provider may depart from this requirement in preparing the Regulatory Financial Statements for a Financial Year if there are reasons for doing so provided that the particulars of the departure, the reasons for it and its effect are stated in a note in the Regulatory Financial Statements in accordance with the Statutory Accounting Standards.

Requirements relating to audit of the Regulatory Financial Statements

- 8.12 The Regulatory Auditor that the Dominant Provider from time to time appoints shall at all times be satisfactory to Ofcom having regard to such matters as Ofcom consider appropriate. The Dominant Provider shall notify Ofcom in writing of the Regulatory Auditor appointed to secure compliance with this Condition 8 before the Regulatory Auditor carries out any work for that purpose. The Dominant Provider shall notify Ofcom of any proposed change of Regulatory Auditor 28 days before effect is given to that change.
- 8.13 In the event that the Regulatory Auditor is in the opinion of Ofcom unsatisfactory, the Dominant Provider shall appoint and instruct an Alternative Regulatory Auditor that is at all times satisfactory to Ofcom having regard to such matters as Ofcom consider appropriate. The Dominant Provider shall ensure that the Alternative Regulatory Auditor:
- (i) carries out such on-going duties as are required to secure compliance with this Condition 8;
 - (ii) carries out work or further work, in addition to that performed by the Statutory Auditor and/or by the former Regulatory Auditor, in relation to such matters connected to compliance with these conditions as are of concern to Ofcom and notified to the Dominant Provider in writing; and/or
 - (iii) re-performs work previously performed by the Statutory Auditor and/or by the former Regulatory Auditor in relation to such matters connected to compliance with this condition as are of concern to Ofcom and notified to the Dominant Provider in writing.
- 8.14 The Dominant Provider shall extend to the Alternative Regulatory Auditor such assistance and co-operation as would be extended to the Statutory Auditor and/or to the Regulatory Auditor and, to the extent similar assistance and co-operation may be required from the Statutory Auditor and/or from the former Regulatory Auditor, the Dominant Provider shall use its best endeavours to secure such assistance and co-operation.
- 8.15 The Dominant Provider's letter of engagement appointing the Regulatory Auditor or Alternative Regulatory Auditor shall include such provisions acknowledging the acceptance by the Regulatory Auditor or Alternative Regulatory Auditor of duties and responsibilities to Ofcom in respect of its audit work, audit report and audit opinion as are consistent with the ICAEW Guidance.
- 8.16 The Dominant Provider shall use its best endeavours to obtain from the Regulatory Auditor or Alternative Regulatory Auditor any further explanation and clarification of any audit opinion required under this Condition 8 and any other information in respect of the matters which are the subject of that audit opinion as Ofcom shall require.
- 8.17 The Dominant Provider shall obtain such assurance statement in the form of the Agreed Upon Procedures in relation to the Dominant Provider's obligations under this Condition 8 as directed by Ofcom.

Requirements relating to the Accounting Methodology Documents

- 8.18 The Dominant Provider must prepare, maintain and keep up-to-date the Accounting Methodology Documents in accordance with this Condition 8 and with the Regulatory Accounting Principles.
- 8.19 The Dominant Provider must include in the Accounting Methodology Documents documentation setting out a description of each of the Attribution Methods, the Transfer Charge System Methodology, the Accounting Policies and the Long Run Incremental Cost Methodology.
- 8.20 The Dominant Provider must deliver an up-to-date version of the Accounting Methodology Documents to Ofcom when it delivers the Regulatory Financial Statements to Ofcom in accordance with Condition 8.8 and publish such up-to-date version on or before the day of publication of the Regulatory Financial Statements which have been prepared in accordance with such version.

Requirements relating to changes to the Regulatory Accounting Methodology and the correction of Material Errors

- 8.21 The Dominant Provider must publish and deliver to Ofcom a list of each and every change to the Regulatory Accounting Methodology, by 31 March of the Financial Year in which the change to the Regulatory Accounting Methodology is to be made (the “**Change Control Notification**”). The Change Control Notification must be accompanied by a description of each of the changes, the reason for making each of the changes (including by reference to their compliance with the Regulatory Accounting Principles), and the impact of each of the changes on the figures at the level of the Markets and Technical Areas (as applicable) by setting out the figures which were presented in the previous Financial Year alongside the figures that would have been presented had such changes been made in the previous Financial Year.
- 8.22 Where in Ofcom’s opinion any change referred to in Condition 8.21 does not comply with these conditions or the Regulatory Accounting Principles, the Dominant Provider shall not make such change, if so directed by Ofcom.
- 8.23 The Dominant Provider must prepare a reconciliation report as referred to in Condition 8.8 and as directed by Ofcom from time to time, which sets out changes to the Regulatory Accounting Methodology and the impact of such changes on the Regulatory Financial Statements, and Material Errors corrected in the Regulatory Financial Statements and the impact of such Material Errors on the Regulatory Financial Statements.
- 8.24 The Dominant Provider must obtain an audit opinion on the reconciliation report as directed by Ofcom from time to time.

Requirements relating to the Regulatory Accounting System

- 8.25 The Dominant Provider’s Regulatory Accounting System must be able to produce the Regulatory Financial Statements as directed by Ofcom under Condition 8.8 in accordance with these conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents.

- 8.26 Where the Dominant Provider replaces the whole or part of its Regulatory Accounting System, or substantially modifies such Regulatory Accounting System, the Dominant Provider must:
- (i) notify Ofcom in a timely manner of the replacement or modification, and, where so requested by Ofcom, inform Ofcom of progress towards completion and such other information as Ofcom may reasonably request;
 - (ii) ensure, to the best of its ability, that the replacement or modification does not cause the figures contained in the Regulatory Financial Statements to be different from the figures that would have been contained in the Regulatory Financial Statements had such Regulatory Financial Statements been prepared using the old or unmodified Regulatory Accounting System;
 - (iii) in relation to the final Financial Year for which the Regulatory Financial Statements are prepared using the old or unmodified Regulatory Accounting System, prepare a systems reconciliation report, which must:
 - a. set out the difference between the Current Year Figures presented in the Regulatory Financial Statements and the Current Year Figures had such Regulatory Financial Statements been prepared on the basis of the new or modified Regulatory Accounting System, expressed as a percentage change; and
 - b. explain each and every Material Difference between the Current Year Figures presented in the Regulatory Financial Statements and the Current Year Figures had such Regulatory Financial Statements been prepared on the basis of the new or modified Regulatory Accounting System;
 - (iv) publish and deliver the systems reconciliation report to Ofcom by 31 December of the Financial Year for which the figures will be prepared using the new or modified Regulatory Accounting System for the first time;
 - (v) obtain an assurance statement in the form of Agreed Upon Procedures on the systems reconciliation report, which must report:
 - a. whether the figures in the systems reconciliation report referred to in Condition 8.26(iii)(a) have been properly extracted from the old or unmodified Regulatory Accounting System and the new or modified Regulatory Accounting System respectively;
 - b. whether each and every difference in the systems reconciliation report referred to in Condition 8.26(iii)(a) has been correctly calculated; and
 - c. whether the explanation of each and every Material Difference in the systems reconciliation report referred to in Condition 8.26(iii)(b) is an accurate representation of the cause of each such Material Difference.
 - (vi) deliver the assurance statement in the form of the Agreed Upon Procedures to Ofcom when it delivers the systems reconciliation report to Ofcom in accordance with Condition 8.26(iv).

- (vii) where the systems reconciliation report referred to in Condition 8.26(iii) indicates that the replacement or modification causes the Current Year Figures contained in the Regulatory Financial Statements to be significantly different, either individually or in aggregate, from the Current Year Figures that would have been contained in the Regulatory Financial Statements had such Regulatory Financial Statements been prepared using the new or modified Regulatory Accounting System, prepare, if so directed by Ofcom, the Regulatory Financial Statements on a basis consistent with the old or unmodified Regulatory Accounting System.

Requirements relating to deficiencies in the Regulatory Financial Statements and the Accounting Methodology Documents

- 8.27 Where Ofcom have reasonable grounds to believe that any or all of the Regulatory Financial Statements and/or Accounting Methodology Documents are deficient, the Dominant Provider shall, where directed by OFCOM:
- (i) amend the Accounting Methodology Documents in order to remedy the deficiencies identified by Ofcom;
 - (ii) restate the Regulatory Financial Statements identified by Ofcom as requiring restatement in accordance with the Accounting Methodology Documents which have, where necessary, been amended pursuant to Condition 8.27(i);
 - (iii) prepare a reconciliation report as set out in Condition 8.23, whereby any reference to the Regulatory Financial Statements should be understood as a reference to the restated Regulatory Financial Statements;
 - (iv) secure in accordance with any relevant notification of Ofcom under this condition the expression of an audit opinion on the restated Regulatory Financial Statements;
 - (v) deliver to OFCOM the restated Regulatory Financial Statements, the reconciliation report and corresponding audit opinion; and
 - (vi) publish the restated Regulatory Financial Statements, the reconciliation report and corresponding audit opinion.

Requirements relating to the maintenance of sufficient accounting records

- 8.28 The Dominant Provider shall maintain accounting records for a period of six years from the date on which each Regulatory Financial Statement is delivered to Ofcom.
- 8.29 The Dominant Provider shall maintain the accounting records in accordance with this Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents.
- 8.30 The Dominant Provider shall maintain accounting records in a form which, on a historical cost basis and on a current cost basis:
- (i) separately identifies each of the Markets, Technical Areas, Products, Network Components and Network Services;

- (ii) separately attributes the costs, revenues, assets and liabilities of each of the Markets, Technical Areas, Products, Network Components and Network Services; and
- (iii) shows and explains the transactions underlying each of the Markets, Technical Areas, Products, Network Components and Network Services.

8.31 The Dominant Provider shall maintain the accounting records so that they are sufficient:

- (i) to provide an adequate explanation of each Regulatory Financial Statement;
- (ii) to show that charges are non-discriminatory; and
- (iii) to provide a complete justification of the Dominant Provider's charges for Network Access.

Requirement to facilitate on-demand reporting

8.32 The Dominant Provider shall ensure that its Regulatory Accounting System and accounting records are sufficient to enable the Dominant Provider, at all times, to be capable of preparing in relation to any specified calendar month or months a financial statement in accordance with the Accounting Methodology Documents.

Requirements relating to the preparation and maintenance of a Wholesale Catalogue

8.33 The Dominant Provider must prepare, maintain and keep up-to-date a Wholesale Catalogue. Such Wholesale Catalogue should separately identify and describe:

- (i) External Wholesale Services;
- (ii) Internal Wholesale Services;
- (iii) Wholesale Services supplied both externally and internally; and
- (iv) Network Services and the extent to which these activities are used in the course of supplying Wholesale Services.

8.34 The Dominant Provider must deliver an up-to-date version of the Wholesale Catalogue to Ofcom when it delivers the Regulatory Financial Statements to Ofcom in accordance with Condition 8.8 and publish such up-to-date version on or before the day of publication of the Regulatory Financial Statements which have been prepared by reference to such version.

Requirements relating to the demonstration of non-discrimination

8.35 The Dominant Provider shall ensure it is able to demonstrate that at any point in time:

- (i) where a Network Service or combination of Network Services is used by the Dominant Provider in providing Internal Wholesale Services, the amount applied and incorporated in the Transfer Charge for the Internal Wholesale Service in respect of the use of the Network Service or

combination of Network Services is equivalent to the amount applied and incorporated for the use of the Network Services or combination of Network Services in the charge payable for an equivalent External Wholesale Service;

- (ii) the same amount as applied and incorporated in the Transfer Charge for the Internal Wholesale Service in Condition 8.35(i) in respect of the use of the Network Service or combination of Network Services is applied to the Network Service or combination of Network Services whenever it is or they are used by the Dominant Provider in providing that same Internal Wholesale Service; and
- (iii) the same amount as applied and incorporated in the Transfer Charge for the equivalent External Wholesale Service in Condition 8.35(i) in respect of the use of the Network Service or combination of Network Services is applied to the Network Service or combination of Network Services whenever it is or they are used by the Dominant Provider in providing that same External Wholesale Service;
- (iv) the amount applied and incorporated in the Transfer Charge for the Internal Wholesale Service in Condition 8.32(i) in respect of the use of the Network Service or combination of Network Services shall be the cost of those Network Services unless the Network Service concerned is provided from a Market which is different from the Market which comprises the Internal Wholesale Service.

8.36 In this Condition 8:

- (a) **“Accounting Methodology Documents”** means the documentation maintained by the Dominant Provider setting out in detail the rules, policies, methods, allocations, calculations, assumptions, procedures and Processes used by the Dominant Provider for the purpose of preparing Regulatory Financial Statements in accordance with the Regulatory Accounting Guidelines and the Regulatory Accounting Principles;
- (b) **“Accounting Policies”** means the manner in which the Dominant Provider applies the requirements of Regulatory Accounting Guidelines and the Regulatory Accounting Principles in each of the Regulatory Financial Statements;
- (c) **“Alternative Regulatory Auditor”** means any auditor not for the time being appointed as the Dominant Provider’s Regulatory Auditor;
- (d) **“Agreed Upon Procedures”** means an engagement carried out in accordance with international standard (ISRS 4400) under which the Regulatory Auditor or another independent third party performs a set of audit procedures agreed by Ofcom and based on Ofcom’s specific requirements in relation to the Regulatory Financial Statements, and reports the findings of that work to Ofcom;
- (e) **“Attribution Methods”** means the practices used by the Dominant Provider to attribute revenue (including appropriate Transfer Charges), costs (including appropriate Transfer Charges), assets and liabilities to activities or, insofar as those activities have been aggregated into Wholesale

Segments or Retail Segments in a given Market or Technical Area (as applicable), to each Wholesale Segment or Retail Segment;

- (f) **“Current Year Figures”** means, in relation to any set of Regulatory Financial Statements, the amounts relating to the Financial Year to which the statements relate;
- (g) **“External Wholesale Services”** means services supplied or offered to any Communications Provider other than the Dominant Provider;
- (h) **“Financial Year”** means a financial year of the Dominant Provider in respect of which the Statutory Financial Statements are required to be (or to have been) prepared and audited in accordance with the requirements of the Companies Act 2006;
- (i) **“ICAEW Guidance”** means the technical release titled “Reporting to Regulators of Regulated Entities: Audit 05/03” issued by the Audit and Assurance Faculty of the Institute of Chartered Accountants in England & Wales in October 2003;
- (j) **“Internal Wholesale Services”** means services supplied within the Dominant Provider;
- (k) **“Long Run Incremental Cost Methodology”** means the long run incremental cost principles, procedures and Processes which form the framework under which long run incremental costs are determined by the Dominant Provider;
- (l) **“Market”** means the market to which this Condition 8 applies;
- (m) **“Material Error”** means a deviation from accuracy or correctness which meets the materiality threshold as directed by Ofcom from time to time for the purpose of this Condition 8;
- (n) **“Material Difference”** means a difference identified in a systems reconciliation report which meets the materiality threshold as directed by Ofcom from time to time for the purpose of this Condition 8;
- (o) **“Network Component”** means an element of the network that is used to provide Wholesale Services, and, to the extent the network components are used in the Market or Technical Area (as applicable), specified in a direction given by Ofcom from time to time for the purposes of this Condition 8;
- (p) **“Network Services”** means those groups of Network Components used directly (or which in the absence of horizontal or vertical integration would be used directly) in the course of supplying Wholesale Services;
- (q) **“Prior Year Comparatives”** means, in relation to any set of Regulatory Financial Statements, the amounts relating to the Financial Year immediately preceding the Financial Year to which the Regulatory Financial Statements relate, re-evaluated if necessary to ensure that such figures are comparable to the Current Year Figures;

- (r) **“Process”** means the series of inter-related activities or actions to obtain, record or hold data or information or to carry out any operation or set of operations on the data or information, including:
- i. organisation, storage, adaptation, or alteration of the data or information;
 - ii. retrieval, consultation, computation or use of the data or information;
 - iii. disclosure of the data or information by transmission, dissemination, or otherwise making available; or
 - iv. alignment, combination, blocking, erasing or destruction of the data or information;
- (s) **“Product”** means any product or service comprised in a Market or Technical Area to which this Condition 8;
- (t) **“Regulatory Accounting Methodology”** means the rules, policies, methods, allocations, calculations, assumptions and procedures used by the Dominant Provider for the purpose of preparing Regulatory Financial Statements.
- (u) **“Regulatory Accounting Principles”** means the principles as directed by Ofcom from time to time for the purpose of this Condition 8;
- (v) **“Regulatory Accounting System”** means the set of computerised and manual accounting methods, procedures, Processes and controls established to determine and attribute the costs, revenues, assets and liabilities and summarise, interpret, and present the resultant financial data in an accurate and timely manner;
- (w) **“Regulatory Auditor”** means the auditor for the time being appointed by the Dominant Provider in accordance with this Condition 8;
- (x) **“Regulatory Financial Statement”** means any financial statement in respect of a Financial Year prepared or required to be prepared by the Dominant Provider in accordance with this Condition 8;
- (y) **“Retail Products”** means services used by or offered to any End Users (including the Dominant Provider);
- (z) **“Retail Segments”** means groups of Retail Products;
- (aa) **“Statutory Accounting Standards”** means the accounting standards, including the requirements of the Companies Act 2006, by reference to which the Dominant Provider are required to prepare the Statutory Financial Statements;
- (bb) **“Statutory Auditor”** means the auditor for the time being appointed by the Dominant Provider in accordance with the requirements of the Companies Act 2006;

- (cc) **“Statutory Financial Statements”** means any annual account required to be prepared by the Dominant Provider in accordance with the requirements of the Companies Act 2006;
- (dd) **“Technical Area”** means the technical area to which this Condition 8 applies;
- (ee) **“Transfer Charge”** means the charge or price that is applied, or deemed to be applied, within the Dominant Provider by one division or business unit of the Dominant Provider to another for the use or provision of an activity or group of activities. For the avoidance of doubt, such activities or group of activities include, amongst other things, Products provided from, to or within the Market or Technical Area (as applicable) and the use of Network Components in the Market or Technical Area (as applicable);
- (ff) **“Transfer Charge System Methodology”** means the methodology of the system employed by the Dominant Provider which enables an activity to use a service or good from another activity and to account for it as though it had purchased that service or good from an unrelated party (including accounting for it at an appropriate amount);
- (gg) **“Wholesale Catalogue”** means the documentation required to be produced by the Dominant Provider under Condition 8.33;
- (hh) **“Wholesale Segments”** means groups of Wholesale Services;
- (ii) **“Wholesale Services”** means services related to network access on the Dominant Provider’s network used by or offered to any Communications Provider (including the Dominant Provider).

WSCLR, WSCOL, WSCOM, WSCOR, WSCOS, WSCOU, WSCOV, WSCOY, WSCRG,
 WSCRH, WSCRI, WSCRJ, WSCRN, WSCRW, WSDAI, WSDAS, WSDER, WSDOL,
 WSDOW, WSDRE, WSDRG, WSDRN, WSDUE, WSDUR, WSDUS, WSDUU, WSDUY,
 WSELV, WSESK, WSFEN, WSFIN, WSFIO, WSFIV, WSGAE, WSGAI, WSGAR, WSGIG,
 WSGLC, WSGLE, WSGLL, WSGLU, WSGRS, WSINS, WSINV, WSJOB, WSJOP, WSJUR,
 WSKET, WSKIA, WSKIC, WSKID, WSKIF, WSKIG, WSKII, WSKIK, WSKIN, WSKIP,
 WSKKC, WSKKD, WSKKN, WSKKO, WSKKR, WSKKZ, WSKLN, WSKRK, WSLAL,
 WSLAM, WSLEA, WSLED, WSLEN, WSLIS, WSLOA, WSLOD, WSLOG, WSLOH, WSLOT,
 WSLUI, WSLUS, WSMAB, WSMAC, WSMAH, WSMOC, WSMOD, WSMON, WSMOU,
 WSNEA, WSNEL, WSOLD, WSORM, WSPAN, WSPAR, WSPEN, WSPIN, WSPIR,
 WSPOA, WSPOC, WSPOE, WSPOR, WSPOW, WSRIN, WSSAL, WSSCA, WSSHI,
 WSSKI, WSSKL, WSSLI, WSSOE, WSSOK, WSSOR, WSSTD, WSSTT, WSSTU, WSTAT,
 WSTAY, WSTIG, WSTIR, WSTOD, WSTOR, WSTUR, WSTWE, WSTYN, WSULV, WSUPL,
 WSWAT, WSWHB, WSWHI, WWANST, WWBAMP, WWBAWT, WWBDON, WWBEAF,
 WWBEAW, WWBLAG, WWBNYM, WWBOW, WWBRAN, WWBRAY, WWBRDY,
 WWBREA, WWBROM, WWBSTM, WWCANW, WWCARD, WWCFIT, WWCHIT, WWCHIV,
 WWCLAY, WWCLOV, WWCMAC, WWCOAD, WWCRAN, WWCSTN, WWDITT, WWDULV,
 WWDUNS, WWEXBO, WWEXFO, WWFARW, WWFILL, WWGARA, WWGHAM,
 WWHART, WWHAWK, WWHEMY, WWHOLB, WWHOLN, WWHTOR, WWISLE,
 WWKENT, WWKGWR, WWKILK, WWKSTM, WWLANR, WWLAPF, WWLLAW, WWLTRE,
 WWLYNT, WWMABT, WWMARK, WWMDAM, WWMITC, WWMTON, WWMTVY,
 WWMULL, WWNCUR, WWNCYR, WWNMOL, WWNPWI, WWNTAM, WWNTCY,
 WWOAKF, WWOSTN, WWPADS, WWPCMB, WWPORL, WWPOST, WWPOUN,
 WWPAZ, WWPTRE, WWRACK, WWROCH, WWRUMF, WWSBUR, WWSCIL, WWSFLM,
 WWSGER, WWSHAU, WWSHEB, WWSIDB, WWSKEV, WWSMER, WWSMOL, WWSPAX,
 WWSTOG, WWTIMB, WWTREG, WWTRES, WWUPOT, WWWDGT, WWWEEK,
 WWWFRD, WWWHEA, WWWILM, WWWITH, WWWOOL, WWWSHM, WWZELA,

EATLB, EATLL, EATLW, EATNM, EATOL, EATRU, EATSC, EATTS, EAVAN, EAWAR, EAWBS, EAWCT, EAWDB, EAWDF, EAWEL, EAWFY, EAWFD, EAWHI, EAWIV, EAWKB, EAWLD, EAWLM, EAWLW, EAWLY, EAWMK, EAWMS, EAWOD, EAWOL, EAWOR, EAWRE, EAWRI, EAWRO, EAWRU, EAWSM, EAWST, EAWTB, EAWTH, EAWTL, EAWTN, EAWTS, EAWWR, EAWYM, EAYOX, EMABBOT, EMALFRE, EMALLES, EMALREW, EMALVAS, EMAMBER, EMANCAS, EMARKWR, EMARNOL, EMASBOU, EMASFOR, EMASHBB, EMATTHE, EMAYLES, EMBAIN, EMBAKEW, EMBARTO, EMBASFO, EMBEAUM, EMBEEST, EMBELGR, EMBELPE, EMBENWI, EMBGWOR, EMBILLE, EMBILLI, EMBILST, EMBINGH, EMBIRSS, EMBLDWO, EMBLEAS, EMBLLTO, EMBOSTO, EMBOTTE, EMBOURN, EMBOZEA, EMBRAUN, EMBREAD, EMBRIGS, EMBRIXW, EMBRLAT, EMBROUG, EMBUCKD, EMBUCKM, EMBULWE, EMBURGH, EMBURTJ, EMBURTO, EMBUTTE, EMBYFIE, EMBYTHO, EMCABYT, EMCARSI, EMCASTL, EMCASTO, EMCENTL, EMCHALF, EMCHAPE, EMCHATT, EMCHELL, EMCHRIS, EMCHSTL, EMCLIFT, EMCNTON, EMCOALV, EMCOGEN, EMCOLLI, EMCOTGR, EMCOTTE, EMCRGLN, EMCROWL, EMCROXT, EMCRRBY, EMCRWLL, EMCTSC, EMDARLE, EMDAVEN, EMDEEPI, EMDESBO, EMDETHI, EMDFFIE, EMDNGTN, EMDODDI, EMDOWSB, EMDRAYC, EMDRRBB, EMDSSFO, EMDUDDI, EMDUSTO, EMEARLS, EMEASTB, EMEASTS, EMEASWI, EMEDWAL, EMEDWIN, EMEKKBY, EMELTON, EMEMPIN, EMERRSS, EMESSTL, EMESTLE, EMETWLL, EMEVING, EMEYEPE, EMFARNS, EMFAZEL, EMFENTO, EMFINED, EMFLECK, EMFOLKI, EMFOSDY, EMFRIDA, EMFRISK, EMFULBE, EMGADDE, EMGDDLI, EMGLINT, EMGLNFI, EMGOSBE, EMGPONT, EMGRETL, EMGRETO, EMGRHAM, EMGRTFO, EMGRTGL, EMGSCTE, EMGTTHA, EMGUYHI, EMHACKL, EMHARDI, EMHARRO, EMHECKI, EMHINCK, EMHLBCH, EMHNDON, EMHNGTN, EMHOARC, EMHOLSM, EMHORSL, EMHRLST, EMHRRBY, EMHTHER, EMHUBBE, EMHUCKN, EMHULLA, EMHURLE, EMHUSBB, EMIBSTO, EMILKES, EMINGOL, EMIRTHL, EMKBWOR, EMKGWOR, EMKIMBE, EMKINGS, EMKINOU, EMKIRKB, EMKIRKL, EMKIRTO, EMKISLI, EMKMBLT, EMKNIPT, EMKNRSS, EMKRBYM, EMKTTER, EMLANGL, EMLBENN, EMLEABR, EMLERRE, EMLGHBO, EMLNGBU, EMLONGB, EMLONGE, EMLOWDH, EMLSTEE, EMLSUTT, EMLUTTE, EMMAARC, EMMANEA, EMMARCH, EMMARKB, EMMARSM, EMMATLO, EMMELBO, EMMELTN, EMMERES, EMMESHM, EMMICKL, EMMKDEE, EMMKFIE, EMMMLCHA, EMMMLTON, EMMNSFI, EMMNTON, EMMONTF, EMMORCO, EMMOULT, EMMRKTH, EMMRTON, EMNARBO, EMNEBOR, EMNETHB, EMNEWAR, EMNEWLE, EMNEWOL, EMNEWTO, EMNLUFF, EMNORTH, EMNWTON, EMOAKHA, EMOODBY, EMOLDLE, EMORTON, EMOSSGA, EMOUNDL, EMOVERS, EMPADVE, EMPAPSA, EMPATTI, EMPEATL, EMPETER, EMPINXT, EMPLEAS, EMPLUMT, EMPNCHB, EMPOLSW, EMPREST, EMPRTRE, EMQURRN, EMRADCL, EMRANND, EMRDDEE, EMRDDIN, EMRGATE, EMRMSEY, EMROCKI, EMROTHW, EMROTTB, EMRPLEY, EMRPTON, EMRRSBB, EMRTHLY, EMRUSHD, EMSANDI, EMSAWTR, EMSBSEY, EMSCALF, EMSHARD, EMSHEPS, EMSHIRE, EMSHRWO, EMSKGN, EMSLEBY, EMSLFRD, EMSOMER, EMSOSHM, EMSOUTH, EMSPCOT, EMSPDNG, EMSPLSB, EMSRAUC, EMSRFLT, EMSTBBS, EMSTICK, EMSTIVE, EMSTKEG, EMSTMFD, EMSTNEO, EMSTNYG, EMSTTEL, EMSUBGE, EMSUTER, EMSUTSJ, EMSUTTI, EMSUTTO, EMSWADL, EMSWATN, EMSWSHD, EMTBSHE, EMTERSJ, EMTGGBY, EMTHIST, EMTHRAP, EMTHRNB, EMTHRNY, EMTHURL, EMTILTO, EMTMWOR, EMTNGND, EMTOWCE, EMTRENT, EMTRVES, EMTTYDD, EMTUTBU, EMTWCRO, EMUPPIN, EMUPWLL, EMWALGR, EMWALSA, EMWARBY, EMWARSO, EMWDHOU, EMWEDDO, EMWELFO, EMWELLI, EMWERRI, EMWESSW, EMWESTO, EMWHAPL, EMWHISS, EMWHITT, EMWHTTO, EMWILLO, EMWINST, EMWINWI, EMWIOTH, EMWIRKS, EMWISSM, EMWLTHA, EMWLVEY, EMWNFLT, EMWOLEY, EMWOLLA, EMWOODB, EMWSBCH, EMWSFRD, EMWSTWO, EMWYSWO, EMYARDL, EMYOULG, EMYXLEY, ESABB, ESABE, ESABN, ESABR, ESACB, ESALL, ESALM, ESALV, ESALY, ESANS, ESARB, ESARH, ESARM, ESARR, ESARY, ESASH, ESATH, ESAYT, ESBAF, ESBAB, ESBAL, ESBAN, ESBAT, ESBAX, ESBALB, ESBALF, ESBALG, ESBLO, ESBLLR, ESBLY, ESBOE, ESBON, ESBRA,

ESBRE, ESBRF, ESBRO, ESBUC, ESBUN, ESBUR, ESBYB, ESCAR, ESCAU, ESCER,
 ESCHI, ESCLA, ESCLF, ESCLR, ESCOC, ESCOM, ESCOR, ESCOU, ESCOW, ESCRA,
 ESCRf, ESCRL, ESCSR, ESCTN, ESCUP, ESDAB, ESDAL, ESDAV, ESDEA, ESDem,
 ESDEN, ESDOL, ESDON, ESDOU, ESDUF, ESDUG, ESDUK, ESDUN, ESDUR, ESDUS,
 ESDYS, ESEAL, ESEAR, ESEDD, ESEDZ, ESERR, ESETB, ESEYE, ESFAI, ESFAL,
 ESFAU, ESFFR, ESFLK, ESFML, ESFOL, ESFOR, ESFOS, ESFOU, ESFRI, ESGAG,
 ESGAL, ESGLC, ESGLF, ESGLN, ESGLS, ESGRA, ESGRB, ESGRG, ESGUL,
 ESHAD, ESHAR, ESHAW, ESIKG, ESINC, ESINN, ESIVB, ESIVG, ESJED, ESKCA,
 ESKEL, ESKGH, ESKGL, ESKIL, ESKIN, ESKIP, ESKIR, ESKLS, ESKLY, ESKNW,
 ESKRL, ESKRM, ESLAD, ESLAK, ESLAR, ESLAU, ESLCE, ESLCG, ESLEI, ESLEU,
 ESLEV, ESLIB, ESLIL, ESLIM, ESLNW, ESLOA, ESLOC, ESLON, ESLTA, ESLTM,
 ESLUN, ESLVB, ESLVS, ESMAl, ESMAY, ESMEI, ESMEL, ESMET, ESMID, ESMNF,
 ESMON, ESMOR, ESMRB, ESMUI, ESMUS, ESNBF, ESNBG, ESNEW, ESNML, ESNOA,
 ESNPT, ESNRB, ESNRW, ESNTY, ESPAR, ESPCD, ESPCK, ESPEB, ESPEN, ESPER,
 ESPHI, ESPIT, ESPOL, ESPOR, ESQUE, ESROS, ESSCN, ESSEL, ESSHO, ESSLY,
 ESSRK, ESSRM, ESSRY, ESSTA, ESSTB, ESSTI, ESSTW, ESSWI, ESSYB, ESTAY,
 ESTHO, ESTIL, ESTNT, ESWAV, ESWCA, ESWHA, ESWHI, ESWLI, LCABT, LCACC,
 LCADL, LCAIM, LCAIN, LCALL, LCAMB, LCAOR, LCAPB, LCAPP, LCARM, LCASB,
 LCASD, LCASL, LCASP, LCATH, LCBAB, LCBAC, LCBAD, LCBAN, LCBAR, LCBAS,
 LCBBN, LCBEL, LCBEM, LCBIR, LCBK, LCBLP, LCBMO, LCBOb, LCBOL, LCBOR,
 LCBRI, LCBRN, LCBRT, LCBTN, LCBUG, LCBUR, LCBUS, LCCAF, LCCAL, LCCAR,
 LCCBK, LCCHA, LCCHI, LCCHO, LCCHU, LCCLA, LCCLE, LCCLR, LCCLV, LCCOC,
 LCCOL, LCCON, LCCOP, LCCRO, LCCRS, LCCTN, LCCUL, LCDAR, LCDAU, LCDEN,
 LCDLS, LCDTF, LCDUN, LCEAR, LCECC, LCEGR, LCFAR, LCFLW, LCFOM, LCFRE,
 LCFTN, LCFUL, LCGAL, LCGAR, LCGIL, LCGIS, LCGLE, LCGOS, LCGRC, LCGRH,
 LCGRS, LCGRY, LCGYG, LCHAC, LCHAL, LCHAM, LCHAR, LCHAY, LCHBK, LCHBY,
 LCHET, LCHEW, LCHEY, LCHIG, LCHIN, LCHOG, LCHOL, LCHOR, LCING, LCKEN,
 LCKES, LCKFS, LCKHA, LCKLE, LCKNO, LCKST, LCKTH, LCLAM, LCLAN, LCLAY,
 LCLAZ, LCLEI, LCLEY, LCLGD, LCLIT, LCLOG, LCLOI, LCLON, LCLOR, LCLOT, LCLYT,
 LCMAR, LCMAT, LCMEL, LCMIL, LCMML, LCMOR, LCNBL, LCNEL, LCNSh, LCCORR,
 LCORT, LCPAD, LCPAR, LCPEN, LCPEW, LCPLB, LCPLE, LCPOU, LCPRE, LCRAM,
 LCRIB, LCROC, LCROS, LCRUF, LCRVW, LCSCA, LCSED, LCSEG, LCSHA, LCSHW,
 LCSIL, LCSLA, LCSOU, LCSOW, LCSSH, LCSTA, LCSTD, LCSTM, LCSTO, LCSTV,
 LCSVD, LCTHR, LCTOD, LCTOT, LCTUR, LCULV, LCWAL, LCWEE, LCWES, LCWET,
 LCWGT, LCWHA, LCWHI, LCWHW, LCWIG, LCWIL, LCWIN, LCWOR, LCWSK, LNADK,
 LNBAR, LNBGN, LNBKG, LNBPK, LNCED, LNCHF, LNCLA, LNCUF, LNDAG, LNEDM,
 LNENF, LNFIN, LNGDM, LNGHL, LNHAC, LNHAi, LNhat, LNHOd, LNHOR, LNHPK,
 LNILC, LNILN, LNING, LNLEY, LNLOU, LNLVY, LNMED, LNMUS, LNNAZ, LNNFN,
 LNNWS, LNPFT, LNPGN, LNPKS, LNPN, LNPOP, LNPOT, LNRAI, LNROM, LNSOK,
 LNSTA, LNSTB, LNSTF, LNTHB, LNTOT, LNUPK, LNUPM, LNWCR, LNWFD, LNWGN,
 LNWIN, LNWSd, LNwTh, LSADD, LSASH, LSBAL, LSBEC, LSBET, LSBEU, LSBEX,
 LSBKM, LSBRO, LSBURH, LSByF, LSCHER, LSCHES, LSCHI, LSCLPM, LSCOB,
 LSCRAY, LSCRO, LSCTFD, LSCTHM, LSDAR, LSDEP, LSDOW, LSDUL, LSELT,
 LSEPSM, LSERI, LSESH, LSEWE, LSFARB, LSFARN, LSFOR, LSGIP, LSGRNH,
 LSGRNW, LSGRO, LSHAY, LSKID, LSKIN, LSLEA, LSLEE, LSLODH, LSMAL, LSMEPK,
 LSMERS, LSMIT, LSMOG, LSMOL, LSMOR, LSNCHM, LSNOR, LSNUT, LSORP, LSOTT,
 LSOXS, LSPUR, LSPUT, LSRED, LSREI, LSRIC, LSRUS, LSSAN, LSSID, LSSLA, LSSTR,
 LSSUN, LSSUR, LSSUT, LSSWA, LSSYD, LSTAD, LSTED, LSTHDT, LSTHMD, LSTHO,
 LSTUL, LSUWAR, LSWAL, LSWAN, LSWey, LSWIM, LSWLTN, LSWOO, LSWOR,
 LSWWKM, LVAIN, LVALL, LVANF, LVARR, LVAUG, LVBIL, LVBIR, LVBOO, LVBRO,
 LVCAL, LVCEN, LVCHI, LVCLA, LVCRE, LVCUL, LVEAS, LVELL, LVFRO, LVGAT,
 LVGRE, LVHAL, LVHEL, LVHES, LVHIG, LVHOO, LVHOY, LVHUN, LVHUY, LVIRB,
 LVKIN, LVLAR, LVLYM, LVMag, LVMAN, LVMOO, LVMOU, LVMPK, LVMSX, LVNES,
 LVNET, LVNLW, LVNOR, LVORM, LVPAD, LVPEN, LVPRE, LVRAI, LVRNE, LVRNM,
 LVROC, LVROY, LVSAI, LVSEF, LVSIM, LVsKE, LVSTA, LVSTK, LVSTO, LVUPH,

LWWAL, LVWAR, LWWAT, LVWID, LVWTW, LWACT, LWASH, LWBUS, LWCHI, LWCHO, LWCOL, LWCRI, LWDEN, LWEAL, LWEDG, LWEGH, LWELS, LWFEL, LWGAR, LWGOL, LWGRE, LWHAM, LWHARE, LWHARL, LWHARR, LWHAT, LWHAY, LWHEN, LWHOU, LWISL, LWKGRE, LWKIN, LWKLAN, LWKNE, LWKROA, LWMIL, LWNEDG, LWNOR, LWNWEM, LWNWOO, LWPER, LWPIN, LWRAD, LWRIC, LWRUI, LWSHAR, LWSHE, LWSKY, LWSOU, LWSTAI, LWSTAN, LWTWI, LWUXB, LWWAT, LWWDRA, LWWEM, LWWIL, LWWRA, MRALD, MRALT, MRARD, MRASH, MRBLA, MRBOL, MRBRA, MRBRO, MRBUC, MRBUR, MRBUX, MRCEN, MRCHA, MRCHE, MRCHI, MRCHL, MRCHO, MRCOL, MRCOM, MRCON, MRDEN, MRDID, MRDIS, MRDRO, MREAS, MRECC, MRFAI, MRGAT, MRGLO, MRHAR, MRHEA, MRHUL, MRHYD, MRIRL, MRKNU, MRLON, MRLOW, MRMAC, MRMAR, MRMDW, MRMER, MRMHE, MRMID, MRMOB, MRMOS, MRMOT, MRMSL, MRNEW, MRNOR, MROLD, MRPBYP, MRPEN, MRPIC, MRPOY, MRPRE, MRRAD, MRRIN, MRRUS, MRSAD, MRSAL, MRSAN, MRSTA, MRSTE, MRSTO, MRSUT, MRSWI, MRTID, MRTRA, MRURM, MRWAL, MRWEA, MRWHA, MRWHI, MRWIL, MRWIN, MRWOO, MRWYT, MYACO, MYADD, MYADE, MYAMP, MYAPP, MYARM, MYART, MYBAT, MYBD, MYBEE, MYBEN, MYBIN, MYBIR, MYBKA, MYBKE, MYBNN, MYBOR, MYBOS, MYBPI, MYBPM, MYBPW, MYBRG, MYBRW, MYBUB, MYBYB, MYCAL, MYCAM, MYCAS, MYCAW, MYCAY, MYCHA, MYCLE, MYCLO, MYCOL, MYCON, MYCOP, MYCOX, MYCRF, MYCSG, MYCSH, MYCTN, MYCUL, MYDAL, MYDAR, MYDEW, MYDFF, MYDHS, MYDLT, MYDUD, MYDUN, MYEAO, MYELL, MYELV, MYESC, MYFIL, MYFLM, MYFLO, MYFLX, MYGAT, MYGIL, MYGOO, MYGRA, MYGRE, MYGRF, MYGRG, MYGUI, MYHAL, MYHAW, MYHAX, MYHBK, MYHEA, MYHEB, MYHEC, MYHGT, MYHHL, MYHIP, MYHIR, MYHLI, MYHLM, MYHLP, MYHLT, MYHMB, MYHMF, MYHMW, MYHNS, MYHOB, MYHON, MYHOV, MYHOW, MYHSF, MYHSM, MYHUB, MYHUD, MYHUG, MYHUM, MYIDL, MYILK, MYILL, MYKEI, MYKET, MYKEY, MYKIL, MYKKB, MYKMP, MYKMS, MYKMZ, MYKNA, MYKNO, MYLAI, MYLAN, MYLEC, MYLEV, MYLIN, MYLOC, MYLOF, MYLOW, MYLS, MYMAL, MYMAN, MYMAR, MYMAS, MYMID, MYMIL, MYMIR, MYMLB, MYMMB, MYMOO, MYMOR, MYMSG, MYMTH, MYNCV, MYNMN, MYNSY, MYNUN, MYOAT, MYOTL, MYPBG, MYPIC, MYPOC, MYPON, MYPTN, MYPUD, MYQUE, MYREE, MYRIC, MYRIL, MYROT, MYRPN, MYRPP, MYRUF, MYRWC, MYRWD, MYSAN, MYSBG, MYSBN, MYSCA, MYSEA, MYSEL, MYSEM, MYSET, MYSHF, MYSHI, MYSKE, MYSKP, MYSKR, MYSLA, MYSML, MYSNH, MYSNN, MYSOW, MYSPO, MYSPU, MYSRB, MYSTE, MYSTI, MYSTO, MYSTR, MYTAD, MYTHN, MYTHR, MYTHT, MYTHW, MYTIB, MYTOC, MYTOL, MYUND, MYWAK, MYWAT, MYWAY, MYWBG, MYWEH, MYWEN, MYWEW, MYWHE, MYWIL, MYWIT, MYYO, NDACO, NDAGR, NDALD, NDALL, NDAPP, NDASF, NDASH, NDAYL, NDBAL, NDBAR, NDBAT, NDBEA, NDBEC, NDBEN, NDBET, NDBEX, NDBGR, NDBHI, NDBID, NDBIR, NDBLH, NDBOU, NDBRD, NDBRE, NDBRG, NDBRI, NDBRK, NDBRO, NDBUR, NDBUX, NDCAN, NDCAS, NDCDO, NDCGA, NDCHA, NDCHD, NDCHE, NDCHI, NDCHL, NDCHR, NDCHS, NDCLI, NDCOO, NDCOP, NDCRA, NDCRO, NDCRW, NDDEA, NDDHI, NDDOV, NDDPA, NDDYM, NDEDE, NDEGE, NDEGR, NDELH, NDEPE, NDETC, NDFAI, NDFAV, NDFLI, NDFOL, NDFRA, NDFRI, NDFRM, NDFRO, NDGIL, NDGOD, NDGRA, NDGUE, NDHAD, NDHAK, NDHAL, NDHAR, NDHAS, NDHAW, NDHBA, NDHDO, NDHEA, NDHED, NDHGR, NDHHA, NDHIL, NDHOL, NDHOO, NDHRO, NDHST, NDHYT, NDIDE, NDIHI, NDISF, NDKNO, NDLAM, NDLAN, NDLEN, NDLIN, NDLO, NDLOO, NDLYD, NDLYM, NDMAI, NDMAR, NDMAY, NDMED, NDMEO, NDMSH, NDMTH, NDNEI, NDNEW, NDNIN, NDNON, NDNOR, NDNRO, NDNUT, NDOTF, NDOTH, NDOXT, NDPEA, NDPEM, NDPEN, NDPET, NDPLU, NDPWO, NDRAI, NDRAM, NDROB, NDROT, NDRYE, NDSAH, NDSAN, NDSEA, NDSER, NDSEI, NDSER, NDSEV, NDSGO, NDSHA, NDSHE, NDSHO, NDSHP, NDSIT, NDSMA, NDSMB, NDSMI, NDSML, NDSNO, NDSOU, NDSTA, NDSTR, NDSTU, NDSVA, NDTEN, NDTEY, NDTHA, NDTIC, NDTON, NDTWE, NDUCK, NDWAD, NDWAT, NDWES, NDWET, NDWHI, NDWIN, NDWIT, NDWKI, NDWMA, NDWOO, NDWOR, NDWYE, NEAL, NEALD, NEALS, NEAM, NEAT, NEAW, NEAYC, NEB, NEBA, NEBC, NEBDL, NEBDT, NEBEA, NEBED, NEBH, NEBHM, NEBL, NEBLA, NEBML, NEBNG, NEBO, NEBR, NEBRO, NEBRT, NEBU, NEBUR, NEBW, NEBWS, NECB, NECBN, NECC,

NECFD, NECM, NECN, NECOD, NECOT, NECOX, NECR, NECSN, NECST, NECT,
 NECTN, NED, NEDB, NEDL, NEDN, NEDP, NEDU, NEDUDL, NEE, NEEC, NEEGT,
 NEEHL, NEEHN, NEELA, NEEN, NEES, NEESG, NEF, NEFH, NEFN, NEFSL, NEG,
 NEGA, NEGF, NEGHD, NEGLA, NEGM, NEGMT, NEGND, NEGNFD, NEGS, NEGTD,
 NEGWT, NEHAL, NEHAS, NEHAY, NEHDL, NEHH, NEHHL, NEHID, NEHLS, NEHRT,
 NEHT, NEHTR, NEHWH, NEHYL, NEHZ, NEILB, NEJ, NEJW, NEK, NEKF, NEKI, NEL,
 NELC, NELEB, NELF, NELIN, NELK, NELM, NELO, NELOF, NEMEA, NEMI, NEMIL,
 NEMP, NEMTD, NEMTN, NENA, NENB, NENCT, NENN, NENP, NENR, NENS, NENT,
 NENTE, NENTW, NEOC, NEOM, NEP, NEPB, NEPG, NEPH, NEPTE, NEPX, NERB,
 NERC, NERD, NERE, NEREH, NERFD, NERG, NERHB, NERM, NERN, NERT, NES,
 NESAC, NESAI, NESBY, NESDP, NESEH, NESFE, NESG, NESGT, NESH, NESHB,
 NESH, NESHM, NESK, NESLB, NESLN, NESLS, NESLY, NESP, NESS, NESTK, NESTN,
 NESTO, NESU, NESUN, NESUT, NESVL, NETI, NETL, NETMN, NETP, NETW, NEUL,
 NEULM, NEW, NEWAS, NEWAU, NEWB, NEWHD, NEWHP, NEWHY, NEWK, NEWLF,
 NEWLL, NEWLW, NEWN, NEWO, NEWR, NEWT, NEWYL, NIAA, NIAE, NIAFN, NIAGH,
 NIAH, NIAL, NIAM, NIAN, NIAR, NIAT, NIAY, NIBA, NIBB, NIBC, NIBCO, NIBDY, NIBEK,
 NIBGY, NIBH, NIBKB, NIBKR, NIBL, NIBM, NIBML, NIBMS, NIBN, NIBNB, NIBNH, NIBO,
 NIBRA, NIBRH, NIBRN, NIBRS, NIBSB, NIBT, NIBW, NIBWR, NIBY, NIBYS, NIC, NICA,
 NICB, NICD, NICDN, NICDY, NICE, NICF, NICG, NICGR, NICH, NICI, NICK, NICL, NICLK,
 NICM, NICMG, NICMN, NICN, NICR, NICRG, NICRH, NICRS, NICS, NICTY, NICUS,
 NICW, NIDBO, NIDD, NIDG, NIDK, NIDL, NIDM, NIDMA, NIDMR, NIDNM, NIDO, NIDOD,
 NIDP, NIDPT, NIDQ, NIDR, NIDRY, NIDV, NIDYN, NIEAS, NIEG, NIEK, NIFCT, NIFH,
 NIFIN, NIFN, NIFWM, NIFY, NIGF, NIGFD, NIGGY, NIGM, NIGN, NIGT, NIGVA, NIGWY,
 NIGY, NIHB, NIHO, NIHW, NIIM, NIIT, NIJP, NIKA, NIKH, NIKI, NIKL, NIKN, NIKNK, NIKS,
 NIKVY, NIKY, NIKYL, NILA, NILDM, NILDW, NILE, NILG, NILGL, NILI, NILL, NILN, NILY,
 NIMA, NIMAL, NIME, NIMF, NIMFD, NIMH, NIMM, NIMOY, NIMR, NIMTN, NIMZ, NINB,
 NINE, NINH, NINS, NINTH, NINTS, NINY, NIOM, NIORM, NIPE, NIPO, NIPP, NIPR, NIPS,
 NIPT, NIPVE, NIPY, NIRD, NIRI, NIRL, NIRLN, NIRN, NIRS, NIRT, NISD, NISE, NISEA,
 NISF, NISM, NISP, NISTF, NISTM, NISTN, NISW, NITB, NITC, NITG, NITO, NITP, NITR,
 NIWBY, NIWD, NIWP, NIWT, NSABC, NSABL, NSABO, NSAGR, NSALF, NSANS, NSASH,
 NSASR, NSATL, NSAVI, NSBAC, NSBBN, NSBCS, NSBCY, NSBDI, NSBDS, NSBEA,
 NSBET, NSBIG, NSBIX, NSBKI, NSBLG, NSBLT, NSBMD, NSBNF, NSBOG, NSBRA,
 NSBRR, NSBRY, NSBSY, NSCAL, NSCAN, NSCAW, NSCBK, NSCBS, NSCLN, NSCLO,
 NSCPC, NSCPY, NSCRB, NSCRR, NSCRU, NSCRY, NSCTN, NSCTR, NSCTW, NSCTY,
 NSCUN, NSCWY, NSDAV, NSDCH, NSDCT, NSDEN, NSDGW, NSDMK, NSDNC, NSDUF,
 NSDYC, NSEDD, NSELG, NSELL, NSEVA, NSEVI, NSFAG, NSFAN, NSFOC, NSFRA,
 NSFRN, NSFRS, NSFSE, NSFWM, NSGBT, NSGOL, NSGOS, NSGQT, NSHAM, NSHAT,
 NSHEL, NSHLK, NSHOL, NSHOP, NSHRS, NSHRY, NSHUN, NSICL, NSIGD, NSIMD,
 NSINS, NSIUR, NSIVA, NSIVS, NSKCG, NSKDY, NSKEM, NSKES, NSKGS, NSKGW,
 NSKIR, NSKLV, NSKNC, NSKNL, NSKON, NSKSS, NSKTH, NSKTR, NSKTY, NSLER,
 NSLEV, NSLHA, NSLMN, NSLMY, NSLNG, NSLOS, NSLSD, NSLYB, NSMAU, NSMDF,
 NSMIN, NSMON, NSMOO, NSMUN, NSNAI, NSNBR, NSNET, NSNHL, NSNMC, NSNMR,
 NSNPT, NSNST, NSNTH, NSNTT, NSOMD, NSONI, NSORN, NSORP, NSPET, NSPIT,
 NSPMH, NSPRT, NSPSY, NSREY, NSRHT, NSRHY, NSRMY, NSRNM, NSRTS, NSSBY,
 NSSHA, NSSLW, NSSNS, NSSPB, NSSPF, NSSSH, NSSTM, NSSTN, NSSTR, NSSUL,
 NSSUM, NSSVN, NSSWY, NSTAI, NSTHR, NSTHU, NSTPH, NSTTL, NSTTN, NSTUR,
 NSTVS, NSULL, NSURR, NSVID, NSVOE, NSWAL, NSWES, NSWHL, NSWIC, NSWRY,
 NSWTT, SDBGNRR, SDBLCMB, SDBLLNG, SDBMBRD, SDBRCKL, SDBRCMB,
 SDBRDHM, SDBRGHS, SDBRGSS, SDBRY, SDBSHM, SDCHCHS, SDCHLGR,
 SDCHLLR, SDCLBRN, SDCMPTN, SDCRWLY, SDCSHM, SDCWFLD, SDCWS,
 SDESTBR, SDFNDN, SDFRHM, SDFRSHW, SDFTTLW, SDFYGT, SDGDSHL, SDGLYND,
 SDGRFFH, SDGSPRT, SDHLSHM, SDHMFLD, SDHMTPDN, SDHNDCR, SDHNFLD,
 SDHRLY, SDHRNDN, SDHRSHM, SDHRSTM, SDHRSTP, SDHRTNG, SDHSSCK, SDHV,
 SDHVNT, SDHYLNG, SDHYWRD, SDKMPTW, SDKRDFR, SDLDSWR, SDLFRST,
 SDLNCNG, SDLNDFL, SDLNLNT, DLSS, DLTTLH, DLWS, DLXWD, SDMDDL,

SSULY, SSWAR, SSWCE, SSWDH, SSWED, SSWEL, SSWES, SSWG, SSWHE, SSWHI, SSWIB, SSWIN, SSWOB, SSWOR, SSWOT, SSWRI, SSWSM, SSWTC, SSWUE, SSWWR, SSWWS, SSWYL, SSYAT, STABTAN, STABTSY, STALDBY, STALSFD, STAMSBY, STANDVR, STASHST, STBBSTK, STBDSTN, STBDWSR, STBERER, STBINAB, STBISHW, STBLFRD, STBLNFD, STBMSTR, STBNMTH, STBORTN, STBOSMB, STBOTLY, STBRDCK, STBRDPT, STBRFLD, STBRGTN, STBRNGR, STBROCK, STBSETT, STBUCKN, STBURLY, STBURSN, STCADNM, STCANCL, STCERNA, STCFORD, STCHBTN, STCHLDO, STCHRCH, STCOOMB, STCORFC, STCRANB, STDONHD, STDORCH, STDOWTN, STDURRW, STEARLD, STEASTK, STEASTL, STEASTS, STFAIRO, STFARLY, STFAWLY, STFERND, STFONTM, STFORDB, STFOVNT, STGILGM, STHAMBL, STHAZEB, STHICLF, STHINDN, STHMPTN, STHRSTK, STHRSTT, STHYTHE, STICHAB, STIDSTN, STKINGS, STLCKLY, STLGSHL, STLOCKH, STLONGB, STLYMTN, STLYNST, STLYTMN, STMARNL, SMARTN, STMDNTN, STMERE, STMIDWD, STMILAB, STMILOS, STMILSA, STMRHLL, STNETBY, STNEWMN, STNTHBN, STPIDTH, STPOOLE, STPORTL, STPRKST, STPRSTN, STPUDTN, STRINGW, STROCKB, STROMSY, STRWNMS, STSALIS, STSHABY, STSHRLY, STSOTON, STSSCOT, STSTHBN, STSTPFD, STSTURM, STSTURN, STSWANG, STSWAY, STTDWTH, STTEFFT, STTISBY, STTOTTN, STTWYFD, STUPAVN, STUPWEY, STVERWD, STWALOP, STWARHM, STWESTL, STWESTW, STWEYHL, STWEYMH, STWHPHS, STWHTLY, STWIMBN, STWINCH, STWINSL, STWINTN, STWITCH, STWLSTN, STWLTON, STWRMWL, STWSTBN, SWAA, SWAAV, SWAAZ, SWABD, SWABT, SWADW, SWAG, SWAGL, SWAPO, WAVY, SWBIG, SWBII, SWBIK, SWBNB, SWBNP, SWBPG, SWBSE, SWBUD, SWCAA, SWCAB, SWCFATE, SWCFK, SWCG, SWCIT, SWCJ, SWCJW, SWCNE, SWCOO, SWCRS, SWCT, SWCTE, SWCUV, SWCWN, SWCXX, SWCYX, SWDCP, SWDPW, SWDRW, SWEBY, SWFBX, SWFCJ, SWGAR, SWGBG, SWGBY, SWGC, SWGLN, SWHJL, SWHV, SWHXM, SWJOH, SWKGH, SWKW, SWLAK, SWLAS, SWLCA, SWLCY, SWLDR, SWLDV, SWLHY, SWLJ, SWLJZ, SWLKB, SWLKX, SWLKY, SWLLD, SWLLF, SWLLG, SWLLM, SWLLO, SWLLR, SWLLU, SWLNI, SWLY, SWLYJ, SWLYW, SWMAD, SWMAL, SWMCH, SWMDE, SWMES, SWMF, SWMGR, SWMLZ, SWMMN, SWMMV, SWMNF, SWMTEX, SWMU, SWMYS, SWMYU, SWNB, SWNBI, SWNDO, SWNEEX, SWNEN, SWNES, SWNM, SWNSN, SWNTD, SWNVW, SWOAG, SWPBL, SWPBM, SWPDU, SWPDW, SWPEK, SWPEU, SWPEV, SWPHX, SWPM, SWPN, SWPND, SWPP, SWPRU, SWPTB, SWPTH, SWPTM, SWPTY, SWPYH, SWQHV, SWQJA, SWQKL, SWQOB, SWQOE, SWQTI, SWRAG, SWRDA, SWRDX, SWRHR, SWRRY, SWRSV, SWRVH, SWRWI, SWSAS, SWSAW, SWSDV, SWSKJ, SWSKU, SWSMX, SWSSQ, SWSX, SWSZX, SWTAJ, SWTAT, SWTB, SWTDU, SWTEZ, SWTFA, SWTFS, SWTLU, SWTR, SWTRF, SWTRH, SWTSA, SWTUC, SWUAH, SWUCW, SWUHN, SWUWN, SWVLD, SWWCP, SWWHT, SWWJK, SWWXC, SWXNH, SWXSX, SWXTP, SWXUU, SWYBL, SWYDU, SWYYN, SWZFR, SWZIU, SWZIU, SWZKS, SWZNR, SWZNT, SWZWM, THAD, THAFD, THAG, THAS, THATN, THBA, THBEN, THBG, THBK, THBL, THBN, THBO, THBR, THBRK, THBT, THBW, THBZ, THC, THCDN, THCH, THCK, THCKN, THCL, THCLY, THCMN, THCN, THCP, THCV, THCW, THDC, THDF, THDG, THDK, THDM, THEAR, THED, THEI, THEV, THEY, THFB, THFC, THFJ, THFM, THFN, THFT, THFTG, THGG, THGI, THGO, THGRS, THGX, THH, THHC, THHDY, THHE, THHH, THHM, THHN, THHRJ, THHS, THHT, THHW, THIP, THKB, THKC, THKE, THLG, THLL, THLM, THLP, THLSN, THM, THMD, THML, THMO, THMS, THMSD, THNB, THNE, THNU, THOH, THOK, THOL, THOV, THP, THPM, THRD, THRG, THRO, THS, THSBN, THSCR, THSE, THSL, THSPD, THT, THTAD, THTF, THTG, THTH, THTI, THTT, THWA, THWDY, THWI, THWK, THWL, THWM, THWN, THWO, THWP, THWR, THWT, THWTH, THWY, THY, WEWBAY, WEWBLO, WEWHAM, WEWLOR, WEWMAI, WEWMAR, WEWMAY, WEWNPN, WEWPAD, WEWPRI, WEWSOH, WMADM, WMADY, WMALS, WMARL, WMASH, WMASN, WMAST, WMAUH, WMBAD, WMBAR, WMBBN, WMBDY, WMBET, WMBEW, WMBID, WMBIS, WMBLA, WMBLS, WMBLY, WMBPZ, WMBRA, WMBUR, WMCAM, WMCBM, WMCHA, WMCHD, WMCHS, WMCIT, WMCLO, WMCOL, WMCRO, WMDAP, WMDIM, WMDRO, WMECC, WMECK, WMELM, WMEND,

WSTHL, WSTHO, WSTIN, WSTOB, WSTOW, WSTRO, WSTWY, WSUDD, WSWEK, WSWEM, WSWES, WSWHH, WSWIG, WSWIS, WWASHB, WWASHC, WWASHR, WWASHW, WWAXMI, WWBARN, WWBCAU, WWBCKL, WWBCKN, WWBCLY, WWBERE, WWBFAS, WWBIDE, WWBIGB, WWBKNO, WWBLYD, WWBODM, WWBOSC, WWBRAU, WWBRIX, WWBROA, WWBRUL, WWBSTW, WWBTON, WWBTOR, WWBTRA, WWBUDE, WWBUDL, WWBURN, WWBURR, WWBWAT, WWCALL, WWCAMB, WWCAME, WWCARY, WWCBIS, WWCKKW, WWCHAG, WWCHEL, WWCHID, WWCHIS, WWCHLL, WWCHRD, WWCHRI, WWCHRM, WWCHRS, WWCHUD, WWCHUL, WWCMAR, WWCOLY, WWCONS, WWCOPP, WWCORN, WWCORS, WWCORT, WWCPOL, WWCRAD, WWCRAL, WWCREC, WWCREW, WWCROY, WWCRWC, WWCRWN, WWCULL, WWCWIC, WWDAWT, WWDAWL, WWDOBW, WWDOLE, WWDOWN, WWDPRT, WWDRAN, WWDREW, WWDEAL, WWDEVER, WWEXMN, WWEXMO, WWEXTR, WWFALM, WWFENI, WWFOWE, WWFRAD, WWFROG, WWGERM, WWGRAM, WWGUNN, WWHARB, WWHATH, WWHAYL, WWHBCK, WWHBCM, WWHCRX, WWHELE, WWHELK, WWHENL, WWHOLF, WWHOLS, WWHONI, WWILCH, WWILFR, WWILMI, WWINST, WWIPPL, WWIVYB, WWKEND, WWKKNL, WWKNGB, WWLAND, WWLAUN, WWLDOW, WWLEED, WWLIFT, WWLISK, WWLODD, WWLOOE, WWLOST, WWLPRT, WWLSTL, WWLSUT, WWLUPP, WWLVET, WWLWDN, WWLYDF, WWLYME, WWMARA, WWMART, WWMAWG, WWMBSH, WWMCAN, WWMEVA, WWMILV, WWMINE, WWMLBK, WWMMAG, WWMODY, WWMORT, WWMORW, WWMOUS, WWMPRT, WWMSMT, WWNABB, WWNANP, WWNCAD, WWNETH, WWNEWQ, WWNFER, WWNPTN, WWNTAW, WWOKEH, WWOSMY, WWPAIG, WWPAR, WWPENZ, WWPERR, WWPINH, WWPIPE, WWPIKA, WWPLRN, WWPOLP, WWPREA, WWPRIN, WWPRYN, WWPSCO, WWPSTK, WWPTON, WWPTWN, WWPURI, WWPYTH, WWREDR, WWRILL, WWROBO, WWSAGN, WWSALC, WWSALT, WWSAMP, WWSAUS, WWSBNT, WWSBUD, WWSCAN, WWSCHD, WWSCLM, WWSCOL, WWSDAY, WWSDOM, WWSEAT, WWSENN, WWSGAB, WWSGEN, WWSHAL, WWSSHER, WWSHIP, WWSHIR, WWSIDM, WWSILV, WWSIVE, WWSJUS, WWSMAB, WWSMAR, WWSMWG, WWSMWS, WWSOME, WWSOWT, WWSPET, WWSTAL, WWSTAR, WWSTAV, WWSTEN, WWSTIC, WWSTIT, WWSTOC, WWSTUD, WWSUTT, WWSSWIM, WWTAUN, WWTAVI, WWTEDB, WWTEIG, WWTEMP, WWTHRE, WWTINT, WWTIVE, WWTLIZ, WWTOPS, WWTORQ, WWTORR, WWTORX, WWTOTN, WWTPNT, WWTREB, WWTRUR, WWVERY, WWWADE, WWWASH, WWWBAY, WWWCKR, WWWDWN, WWWELL, WWWEMB, WWWHIM, WWWILL, WWWINC, WWWIVE, WWWKLH, WWWMON, WWWMOR, WWWOOD, WWWZOY, WWYEAL, WWYELV, WWYEOV, WWYETM

Annex 5

Draft legal instruments: proposals for regulatory financial reporting directions

NOTIFICATION OF PROPOSALS UNDER SECTIONS 49 AND 49A OF THE COMMUNICATIONS ACT 2003 AND SMP SERVICES CONDITIONS

1. Proposal for a direction specifying the Regulatory Accounting Principles

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 8.4 specifying the Regulatory Accounting Principles

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁸³ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that it considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s policy conclusions was that in preparing the Regulatory Financial Statements, BT should be required to comply with, among others, the Regulatory Accounting Principles.
2. On 22 June 2017, OFCOM published a consultation document entitled *Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*¹⁸⁴ (the “**2017 WBA Consultation**”), consulting on proposals to identify markets, make market power determinations and set SMP conditions. In the 2017 WBA Consultation, Ofcom is proposing, in relation to the market for wholesale broadband access referred to as “Market A”, to impose SMP services conditions on BT in relation to regulatory financial reporting.
3. Under proposed SMP services Condition 8.8 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, BT is required comply with, among others, the Regulatory Accounting Principles.
4. Under proposed SMP services Condition 8 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, the Regulatory Accounting Principles are defined as the principles as directed by Ofcom from time to time for the purposes of that Condition.
5. Under proposed Condition 8.4 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
6. This Notification sets out proposals specifying the Regulatory Accounting Principles in relation to the market set out in paragraph 2 above.

¹⁸³ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁸⁴ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>

Proposal to make directions

7. Ofcom is proposing to make the direction set out in the Schedule to this Notification.
8. The effect of, and the reasons for giving the proposed direction are set out in the 2017 WBA Consultation accompanying this Notification.

OFCOM's duties and legal tests

9. For the reasons set out in the 2017 WBA Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Communications Act 2003 ("**Act**").
10. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

11. Representations may be made to Ofcom about the proposals set out in this Notification and the 2017 WBA Consultation by no later than 14 September 2017.
12. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, has been sent to the Secretary of State.

Interpretation

13. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 4, Schedule 1 to the 2017 WBA Consultation. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A handwritten signature in blue ink that reads "D. Clarkson". The signature is written in a cursive style with a large initial 'D'.

David Clarkson

Competition Policy Director, OFCOM

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE

[PROPOSED] Direction under section 49 of the Communications Act 2003 and Condition 8.4 specifying the Regulatory Accounting Principles

Background

1. On 22 June 2017, Ofcom published a consultation document entitled “*Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*” (“**2017 WBA Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2017 WBA Consultation, Ofcom consulted on proposals, in relation to a geographic market for the provision of wholesale broadband access referred to as “Market A”, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT.
2. The proposals referred to in paragraph 1 above included proposals to issue a direction specifying the Regulatory Accounting Principles. Ofcom invited responses to the 2017 WBA Consultation by 14 September 2017.
3. On [DATE], Ofcom concluded its review of the wholesale broadband access market in which it identified markets, made a market power determination and set appropriate SMP conditions as set out in the 2017 WBA Notification.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has SMP in the market set out a paragraph 1 above.
5. Under Condition 8.8, set out in the 2017 WBA Notification, BT is required to comply with, among others, the Regulatory Accounting Principles.
6. Under Condition 8 set out in the 2017 WBA Notification, the Regulatory Accounting Principles are defined as the principles as directed by Ofcom from time to time for the purposes of that Condition.
7. Under Condition 8.4, set out in the 2017 WBA Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (c) proportionate to what it is intended to achieve; and
 - (d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act

and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2017 WBA Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition 8.4, directs BT that the Regulatory Accounting Principles for the purposes of Condition 8 in relation to the market set out in paragraph 1 shall be those principles specified in the Annex to this Direction.
14. The Annex to this direction forms part of the Direction.

Interpretation

15. For the purpose of interpreting this Direction:
 - (a) except as otherwise defined in paragraph 16 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 WBA Notification, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.
16. For the purposes of interpreting this Direction the following definitions shall apply:
 - (a) “**2017 WBA Notification**” means the notification at Annex [X] of the statement [wholesale broadband access markets] dated [DATE]; and
 - (b) “**Regulatory Financial Reporting**” means the whole of the Regulatory Financial Statements, the Accounting Methodology Documents, the accounting records and the Regulatory Accounting System.
17. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

**A person duly authorised in accordance with paragraph 18 of the Schedule to the
Office of Communications Act 2002**

[DATE]

Annex - The Regulatory Accounting Principles

The Regulatory Accounting Principles which apply for the purposes of preparing and maintaining the Regulatory Financial Statements, the Accounting Methodology Documents, the accounting records and the Regulatory Accounting System are the following:

1. Completeness

Regulatory Financial Reporting must encompass all revenues, costs, assets and liabilities of the Markets and Technical Areas, together with residual activities (including wholesale and retail).

2. Accuracy

Regulatory Financial Reporting must maintain an adequate degree of accuracy, such that the information included in the Regulatory Financial Statements is free from material errors and double-counting. Materiality must be determined in accordance with the definition set out below.

3. Objectivity

Each element of Regulatory Financial Reporting, so far as is possible, must take account of all the available financial and operational data that is relevant to that element.

Where an element of Regulatory Financial Reporting is based on assumptions, those assumptions must be justified and supported by all available relevant empirical data. The assumptions must not be formulated in a manner which unfairly benefits BT or any other operator or entity, or creates undue bias towards any part of BT's or any other operator's business or product.

4. Consistency with regulatory decisions

Regulatory Financial Reporting must be consistent with Ofcom's regulatory decisions as directed by Ofcom.

5. Causality

Regulatory Financial Reporting must ensure that:

- (a) revenues (including revenues resulting from transfer charges);
- (b) costs (including costs resulting from transfer charges);
- (c) assets; and
- (d) liabilities

are attributed in accordance with the activities which cause the revenues to be earned, or costs to be incurred, or assets to be acquired, or liabilities to be incurred respectively.

6. Compliance with the statutory accounting standards

Regulatory Financial Reporting must comply with the accounting standards applied in BT's statutory accounts; with the exception of any departures as Ofcom may direct from time to time.

7. Consistency of the Regulatory Financial Statements as a whole and from one period to another

Regulatory Financial Reporting must be applied consistently in all the Regulatory Financial Statements relating to the same period.

Regulatory Financial Reporting must be applied consistently from one period to another.

All the changes in Regulatory Financial Reporting from one period to another must be justified by reference to the Regulatory Accounting Principles.

If there are material changes in Regulatory Financial Reporting from one period to another, BT must restate the previous period's Regulatory Financial Statements, applying the changes to the Regulatory Financial Statements for that period.

The Regulatory Accounting Principles must be applied to all material items of revenue, costs, assets and liabilities in the Regulatory Financial Statements, or material changes in those items. A material item of revenue, costs, assets or liabilities, or a material change in those items, is one which is reasonably expected by virtue of its magnitude or nature, to affect the views of any user of the Regulatory Financial Statements.

Where it appears to BT that any of the Regulatory Accounting Principles set out above conflict with each other in a particular case, BT must resolve such conflict by giving priority to them in the order in which they are set out above, with a previous principle taking precedence over a later principle.

2. Proposal for a direction specifying the requirements in relation to regulatory asset value

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 8.4 specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁸⁵ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that it considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s policy conclusions was that in preparing the Regulatory Financial Statements, BT should be required, among others, to prepare all Regulatory Financial Statements, explanations and other required information on a regulatory asset value current cost basis.
2. On 22 June 2017, OFCOM published a consultation document entitled *Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*¹⁸⁶ (the “**2017 WBA Consultation**”), consulting on proposals to identify markets, make market power determinations and set SMP conditions. In the 2017 WBA Consultation, Ofcom is proposing, in relation to the market for wholesale broadband access referred to as “Market A”, to impose SMP services conditions on BT in relation to regulatory financial reporting.
3. Under proposed SMP services Condition 8.10 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, BT must prepare all Regulatory Financial Statements, explanations or other information required by virtue of proposed Condition 8 on the regulatory asset value adjusted current costs basis as directed by Ofcom.
4. Under proposed SMP services Condition 8.4 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
5. This Notification sets out proposals specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis in relation to the market set out in paragraph 2 above.

Proposal to make directions

6. Ofcom is proposing to make the direction set out in the Schedule to this Notification.
7. The effect of, and the reasons for giving the proposed direction are set out in the 2017 WBA Consultation accompanying this Notification.

¹⁸⁵ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁸⁶ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>

OFCOM's duties and legal tests

8. For the reasons set out in the 2017 WBA Consultation, Ofcom considers that the proposed direction referred to in paragraph 6 complies with the requirements of section 49(2) of the Communications Act 2003 ("**Act**").
9. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

10. Representations may be made to Ofcom about the proposals set out in this Notification and the 2017 WBA Consultation by no later than 14 September 2017.
11. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, has been sent to the Secretary of State.

Interpretation

12. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 4, Schedule 1 to the 2017 WBA Consultation. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A handwritten signature in blue ink that reads "D. Clarkson." The signature is written in a cursive style.

David Clarkson

Competition Policy Director, OFCOM

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE

[PROPOSED] Direction under section 49 of the Communications Act 2003 and Condition 8.4 specifying the requirements in relation to regulatory asset value

Background

1. On 22 June 2017, Ofcom published a consultation document entitled “*Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*” (“**2017 WBA Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2017 WBA Consultation, Ofcom consulted on proposals, in relation to a geographic market for the provision of wholesale broadband access referred to as “Market A”, impose (among other things) SMP conditions with respect to regulatory financial reporting on BT.
2. The proposals referred to in paragraph 1 above included proposals to issue a direction requiring BT to prepare all Regulatory Financial Statements, explanations and other required information on a regulatory asset value adjusted current cost basis in relation to the market set out in paragraph 1.
3. Ofcom invited responses to the 2017 WBA Consultation by 14 September 2017.
4. On [DATE], Ofcom concluded its review of the wholesale broadband access market in which it identified markets, made a market power determination and set appropriate SMP conditions as set out in the 2017 WBA Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the market set out a paragraph 1 above.
6. Under Condition 8.10, set out in the 2017 WBA Notification, BT is required to prepare all Regulatory Financial Statements, explanations or other information required by virtue of Condition 8.10 on a regulatory asset value adjusted current cost basis as directed by Ofcom from time to time.
7. Under Condition 8.4, set out in the 2017 WBA Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (c) proportionate to what it is intended to achieve; and
 - (d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act

and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2017 WBA Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition 8.4, directs BT to act as prescribed in paragraph 14 below, in relation to the market set out in paragraph 1.
14. In preparing the Regulatory Financial Statements, explanations and other required information on a regulatory asset value adjusted current costs basis, BT shall value the Access Ducts capitalised prior to 1 August 1997 on the basis of the closing historical cost on 31 March 2005 which is indexed by the Retail Price Index from 31 March 2005.

Interpretation

15. For the purpose of interpreting this Direction:
 - (a) except as otherwise defined in paragraph 16 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 WBA Notification, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.
16. For the purposes of interpreting this Direction the following definitions shall apply:
 - (a) “**2017 WBA Notification**” means the notification at Annex [X] of the statement [wholesale broadband access markets] dated [DATE];
 - (b) “**Access Ducts**” means the underground pipes which hold copper and fibre lines and which are used in the part of BT’s network which connects directly to customers from the local telephone exchange; and

- (c) “**Retail Prices Index**” means the measure of inflation which is published monthly by the Office for National Statistics.

17. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[DATE]

3. Proposal for a direction specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition [8.4] specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁸⁷ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that it considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s conclusions was that in preparing the Regulatory Financial Statements, BT should be required to comply with, among others, specified transparency requirements.
2. On 22 June 2017, OFCOM published a consultation document entitled *Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*¹⁸⁸ (the “**2017 WBA Consultation**”), consulting on proposals to identify markets, make market power determinations and set SMP conditions. In the 2017 WBA Consultation, Ofcom is proposing, in relation to the market for wholesale broadband access referred to as “Market A”, to impose SMP services conditions on BT with respect to regulatory financial reporting.
3. Under proposed SMP services Condition 8, set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, and in particular proposed SMP services Conditions 8.8, 8.18, 8.25 and 8.29, BT will be required to:
 - (a) prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time;
 - (b) prepare, maintain and keep up-to-date the Accounting Methodology Documents in accordance with Condition 8 and the Regulatory Accounting Principles;
 - (c) ensure that its Regulatory Accounting System is able to product the Regulatory Financial Statements in accordance with Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents; and
 - (d) maintain the accounting records in accordance with Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents.
4. Under proposed SMP services Condition 8.4 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.

¹⁸⁷ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁸⁸ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>

5. This Notification sets out proposals specifying the level of transparency required to be met by BT in preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements in relation to the market set out in paragraph 2 above.

Proposal to make directions

6. Ofcom is proposing to make the direction set out in the Schedule to this Notification.
7. The effect of, and the reasons for giving the proposed direction are set out in the 2017 WBA Consultation accompanying this Notification.

OFCOM's duties and legal tests

8. For the reasons set out in the 2017 WBA Consultation, Ofcom considers that the proposed direction referred to in paragraph 5 complies with the requirements of section 49(2) of the Communications Act 2003 ("**Act**").
9. In making the proposals referred to in paragraph 5, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

10. Representations may be made to Ofcom about the proposals set out in this Notification and the 2017 WBA Consultation by no later than 14 September 2017.
11. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, has been sent to the Secretary of State.

Interpretation

12. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 4, Schedule 1 to the 2017 WBA Consultation. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed



David Clarkson

Competition Policy Director, Ofcom

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE

[PROPOSED] Direction under section 49 of the Communications Act 2003 and Condition 8.4 specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

Background

1. On 22 June 2017, Ofcom published a consultation document entitled “*Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*” (“2017 WBA Consultation”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2017 WBA Consultation, Ofcom consulted on proposals, in relation to a geographic market for the provision of wholesale broadband access referred to as “Market A”, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT.
2. The proposals referred to in paragraph 1 above included proposals to issue a direction specifying the level of transparency required to be met by BT in preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements. Ofcom invited responses to the 2017 WBA Consultation by 14 September 2017.
3. On [DATE], Ofcom concluded its review of the wholesale broadband access market in which it identified markets, made a market power determination and set appropriate SMP conditions as set out in the 2017 WBA Notification.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has SMP in the market set out a paragraph 1 above.
5. Under Condition 8, set out in the 2017 WBA Notification, and in particular proposed SMP services Conditions 8.8, 8.18, 8.25 and 8.29, BT is required to:
 - (a) prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time;
 - (b) prepare, maintain and keep up-to-date the Accounting Methodology Documents in accordance with Condition 8 and the Regulatory Accounting Principles;
 - (c) ensure that its Regulatory Accounting System is able to product the Regulatory Financial Statements in accordance with Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents; and
 - (d) maintain the accounting records in accordance with Condition 8, the Regulatory Accounting Principles and the Accounting Methodology Documents.
6. Under Condition 8.4, set out in the 2017 WBA Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:

- (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (c) proportionate to what it is intended to achieve; and
 - (d) in relation to what it is intended to achieve, transparent.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
9. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
10. The proposals set out in the 2017 WBA Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
11. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

12. Ofcom hereby, pursuant to section 49 of the Act and Condition 8.4, directs BT to act as prescribed in paragraph 13 below in relation to the market set out in paragraph 1.
13. In preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements, BT shall ensure that any data, information, description, material or explanatory document prepared in respect of accounting and other methods used in the preparation of the accounting records and Regulatory Financial Statements shall be sufficiently transparent and prepared such that a suitably informed reader can gain a clear understanding of such data, information, description, material or explanatory document, and, if necessary, the overall structure of BT's financial and information systems from which regulatory accounting data is derived and in particular the sequence of the processing and 'cascade' effect of the intermediate cost centres; and gain a clear understanding of all the material, methodologies and drivers (e.g. systems, Processes and procedures) applied in the preparation of regulatory accounting data. This includes ensuring transparency as to how BT has allocated costs between Market A and the WBA market referred to as "Market B" in the 2017 WBA Notification, in which Ofcom has found that BT does not have significant market power.

Interpretation

14. For the purpose of interpreting this Direction:
- (a) except as otherwise defined in paragraph 15 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 WBA Notification, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.
15. For the purposes of interpreting this Direction the following definitions shall apply:
- (a) “**2017 WBA Notification**” means the notification at Annex [X] of the statement [wholesale broadband access markets] dated [DATE].
16. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[DATE]

4. Proposal for a direction setting the requirements in relation to audit, form of the FPIA opinion and form of the PPIA opinion for Regulatory Financial Statements

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 8.4 setting the requirements in relation to audit, form of the FPIA opinion and form of the PPIA opinion for the Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁸⁹ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s conclusions on the regulatory financial reporting policy that it considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s conclusions was to specify the level of audit which must, where so required by Ofcom, be secured by BT in obtaining:
 - (a) an audit to “fairly presents in accordance with” (“FPIA”) standards; and
 - (b) an audit to “properly prepared in accordance with” (“PPIA”) standards.
2. On 22 June 2017, OFCOM published a consultation document entitled *Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*¹⁹⁰ (the “**2017 WBA Consultation**”), consulting on proposals to identify markets, make market power determinations and set SMP conditions. In the 2017 WBA Consultation, Ofcom is proposing, in relation to the market for wholesale broadband access referred to as “Market A”, to impose SMP services conditions on BT with respect to regulatory financial reporting.
3. Under proposed SMP services Condition 8.8(iii) set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, BT is required to secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time.
4. Under proposed SMP services Condition 8.4 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
5. This Notification sets out proposals setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements in relation to the market set out in paragraph 2 above.

Proposal to make directions

6. Ofcom is proposing to make the direction set out in the Schedule to this Notification.
7. The effect of, and the reasons for giving the proposed direction are set out in the 2017 WBA Consultation accompanying this Notification.

¹⁸⁹ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁹⁰ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>

OFCOM's duties and legal tests

8. For the reasons set out in the 2017 WBA Consultation, Ofcom considers that the proposed direction referred to in paragraph 6 complies with the requirements of section 49(2) of the Communications Act 2003 ("**Act**").
9. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

10. Representations may be made to Ofcom about the proposals set out in this Notification and the 2017 WBA Consultation by no later than 14 September 2017.
11. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, has been sent to the Secretary of State.

Interpretation

12. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 4, Schedule 1 to the 2017 WBA Consultation. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A handwritten signature in blue ink that reads "D. Clarkson." The signature is written in a cursive style.

David Clarkson

Competition Policy Director, Ofcom

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE

[PROPOSED] Direction under section 49 of the Communications Act 2003 and Condition 8.4 setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements

Background

1. On 22 June 2017, Ofcom published a consultation document entitled “*Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*” (“**2017 WBA Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2017 WBA Consultation, Ofcom consulted on proposals, in relation to a geographic market for the provision of wholesale broadband access referred to as “Market A”, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT.
2. The proposals referred to in paragraph 1 above included proposals to issue a direction setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements. Ofcom invited responses to the 2017 WBA Consultation by 14 September 2017.
3. On [DATE], Ofcom concluded its review of the wholesale broadband access market in which it identified markets, made a market power determination and set appropriate SMP conditions as set out in the 2017 WBA Notification.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has SMP in the market set out a paragraph 1 above.
5. Under Condition 8.8(iii) set out in the 2017 WBA Notification, BT is required to secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time.
6. Under Condition 8.4, set out in the 2017 WBA Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (c) proportionate to what it is intended to achieve; and
 - (d) in relation to what it is intended to achieve, transparent.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

9. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
10. The proposals set out in the 2017 WBA Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
11. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

12. Ofcom hereby, pursuant to section 49 of the Act and Condition 8.4, directs BT to act as prescribed in paragraphs 13 to 15 below in relation to the market set out in paragraph 1.
13. BT shall secure, to the satisfaction of Ofcom, an appropriate audit opinion in respect of the published Regulatory Financial Statements as a whole, in respect of each Regulatory Financial Statement and in respect of groups of Regulatory Financial Statement, to either “fairly presents in accordance with” (“**FPIA**”) standards or “properly prepared in accordance with” (“**PPIA**”) standards, as determined following consultation with Ofcom and the Regulatory Auditor.
14. Where BT is required to secure the expression of an audit opinion to FPIA standards upon any Regulatory Financial Statement, BT shall ensure that the Regulatory Auditor shall state whether in his opinion:
 - (a) each Regulatory Financial Statement has been prepared in accordance with the applicable SMP services conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents;
 - (b) each Regulatory Financial Statement and corresponding audit opinion that BT delivers to Ofcom and/or publishes is fit for such purpose (or purposes), if any, as notified by Ofcom to BT in writing;
 - (c) each Regulatory Financial Statement fairly presents in accordance with the Regulatory Accounting Principles, and the Accounting Methodology Documents:
 - i. in the case of the ‘Performance Summary by Market or Technical Area’ and the ‘BT Reconciliation Statement – Consolidated Profit and Loss Account’, the results in the relevant market, technical area, basket, single charge category and Network Service (as appropriate) for the relevant Financial Year and Prior Year Comparatives;
 - ii. in the case of the ‘Attribution of Wholesale Current Cost Mean Capital Employed’ and the ‘BT Reconciliation Statement – Consolidated Mean Capital Employed’, the mean capital employed in the relevant market, technical area, basket, single charge category and Network Service (as

- appropriate) for the relevant Financial Year and Prior Year Comparatives;
and
- iii. in the case of the other statements of revenues, costs, assets, liabilities and other quantities, the revenues, costs, assets, liabilities and other quantities incurred or employed in the relevant market, technical area, basket, single charge category and Network Service (as appropriate) for the relevant Financial Year and Prior Year Comparatives.
15. Where BT is required to secure the expression of an audit opinion to PPIA standards upon any Regulatory Financial Statement, BT shall ensure that the Regulatory Auditor shall state whether in his opinion:
- (a) each Regulatory Financial Statement has been properly prepared in accordance with the applicable SMP services conditions, the Regulatory Accounting Principles, and the Accounting Methodology Documents, including the Prior Year Comparatives;
- (b) each Regulatory Financial Statement and corresponding audit opinion that BT delivers to Ofcom and/or publishes is fit for such purpose (or purposes), if any, as notified by Ofcom to BT in writing; and
- (c) anything has come to his attention that would lead him to conclude that the applicable SMP services conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents have not been properly applied in the preparation of the relevant Regulatory Financial Statement, disclosing where practicable any adjustments he considers to be required in respect of any such matter.

Interpretation

16. For the purpose of interpreting this Direction:
- (a) except as otherwise defined in paragraph 17 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 WBA Notification, and otherwise any word or expression has the same meaning as it has in the Act;
- (b) headings and titles shall be disregarded;
- (c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
- (d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.
17. For the purposes of interpreting this Direction the following definitions shall apply:
- (a) “**2017 WBA Notification**” means the notification at Annex [X] of the statement [wholesale broadband access markets] dated [DATE].
18. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[DATE]

5. Proposal for a direction setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 8.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting: Final Statement*”¹⁹¹ (“**2014 RFR Statement**”) which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that it considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s conclusions was that BT should be required to comply with, among others, a direction specifying the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements.
2. On 22 June 2017, OFCOM published a consultation document entitled *Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*¹⁹² (the “**2017 WBA Consultation**”), consulting on proposals to identify markets, make market power determinations and set SMP conditions. In the 2017 WBA Consultation, Ofcom is proposing, in relation to the market for wholesale broadband access referred to as “Market A”, to impose SMP services conditions on BT with respect to regulatory financial reporting.
3. Under proposed SMP services Condition 8 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, and in particular Condition 8.8, BT will be required to prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time.
4. Under proposed SMP services Condition 8.4 set out at Annex 4, Schedule 1 to the 2017 WBA Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
5. This Notification sets out proposals to set the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements in relation to the market set out in paragraph 2 above.

Proposal to make directions

6. Ofcom is proposing to make the direction set out in the Schedule to this Notification.
7. The effect of, and the reasons for giving the proposed direction are set out in the 2017 WBA Consultation accompanying this Notification.

¹⁹¹ https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf

¹⁹² <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>

Ofcom's duties and legal tests

8. For the reasons set out in the 2017 WBA Consultation, Ofcom considers that the proposed direction referred to in paragraph 6 complies with the requirements of section 49(2) of the Communications Act 2003 ("**Act**").
9. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

10. Representations may be made to Ofcom about the proposals set out in this Notification and the 2017 WBA Consultation by no later than 14 September 2017.
11. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, has been sent to the Secretary of State.

Interpretation

12. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 4, Schedule 1 to the 2017 WBA Consultation. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A handwritten signature in blue ink that reads "D. Clarkson". The signature is written in a cursive style with a large initial 'D'.

David Clarkson

Competition Policy Director, Ofcom

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

22 June 2017

SCHEDULE

[PROPOSED] Direction under section 49 of the Communications Act 2003 and Condition 8.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

Background

1. On 22 June 2017, Ofcom published a consultation document entitled “*Review of the wholesale broadband access markets – Consultation on market definition, market power determinations and remedies*” (“**2017 WBA Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2017 WBA Consultation, Ofcom consulted on proposals, in relation to a geographic market for the provision of wholesale broadband access referred to as “Market A”, impose (among other things) SMP conditions with respect to regulatory financial reporting on BT.
2. The proposals referred to in paragraph 1 above included proposals to set the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements. Ofcom invited responses to the 2017 WBA Consultation by 14 September 2017.
3. On [DATE], Ofcom concluded its review of the wholesale broadband access market in which it identified markets, made a market power determination and set appropriate SMP conditions as set out in the 2017 WBA Notification.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has SMP in the market set out a paragraph 1 above.
5. Under Condition 8 set out in the 2017 WBA Notification, and in particular Condition 8.8, BT will be required to prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time.
6. Under Condition 8.4, set out in the 2017 WBA Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 8.
7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (c) proportionate to what it is intended to achieve; and
 - (d) in relation to what it is intended to achieve, transparent.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

9. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
10. The proposals set out in the 2017 WBA Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
11. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

12. Ofcom hereby, pursuant to section 49 of the Act and Condition 8.4, directs BT to act as prescribed in paragraphs 13 to 18 below in relation to the market set out at paragraph 1.
13. BT shall prepare and deliver to Ofcom two weeks before they are published the following final statements in respect of the market set out at paragraph 1 above, in accordance with the obligation in paragraph 15 below:
 - i. Statement of Responsibility;
 - ii. Regulatory Financial Review;
 - iii. Notes to the Regulatory Financial Statements;
 - iv. Performance Summary by Market or Technical Area;
 - v. Attribution of Wholesale Current Costs;
 - vi. Attribution of Wholesale Current Cost Mean Capital Employed;
 - vii. Market/Technical Area Summary;
 - viii. BT Reconciliation Statement – Consolidated Profit and Loss Account;
 - ix. BT Reconciliation Statement – Consolidated Mean Capital Employed; and
 - x. Consolidated Network Activity Statement.
14. BT shall publish the statements set out in paragraph 13 of this Direction, and in addition the following statements:
 - i. Statement by Ofcom; and
 - ii. Report of the Regulatory Auditor,

within four months after the end of the Financial Year to which they relate, and in accordance with the obligation in paragraph 15 below.

15. Except where BT is entitled to amend the form and content of the Regulatory Financial Statements, BT shall prepare the statements described in paragraphs 13 and 14 above as to the form and content in the manner set out in Annex A to this Direction.
16. BT shall publish the Regulatory Financial Statements in Excel spreadsheet format as well as in portable document format ("PDF").
17. BT shall prepare and deliver to Ofcom at the same time it delivers its Regulatory Financial Statements the following additional financial information in respect of each Market in the form and content as described in Annex B:
 - i. Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost;
 - ii. Summarised activity analysis of components for network activities, increments and the relevant layers of common cost (LRIC basis);
 - iii. Cost category (as used within regulatory LRIC model) analysis for network components and increments;
 - iv. Summarised activity analysis for network components and increments;
 - v. Analysis, by asset category and network activities, of the depreciation charge for the year and impact of CCA valuation adjustments on costs for the year;
 - vi. CCA fixed asset movement statement;
 - vii. Total mean capital employed and detailed activity analysis for all network components;
 - viii. Detailed network activity analysis of mean capital employed for all network components;
 - ix. Graphs over time of the various raw indices, index weightings and composite indices used by BT to revalue assets onto a current cost basis;
 - x. Estimated economic useful lives, valuation and depreciation basis, survey used for valuation or index used to revalue, historical cost accounting (HCA) and current cost accounting (CCA) depreciation, gross book values (GBV) by year of acquisition, gross replacement costs (GRC) and net replacement costs (NRC) across asset categories;
 - xi. Total operating costs and mean capital employed costs (and associated volumes) for each plant group and their individual exhaustion, including the disclosure of relevant usage factors, onto each network activity and/or (sub) component;
 - xii. Provision of BT 'Data File';
 - xiii. CCA information to allow Ofcom to re-calculate the regulatory asset value (RAV) for copper assets used in BT's access network;
 - xiv. BT Network Services Reconciliation;

- xv. Provision of FAC, LRIC, DLRIC and DSAC data per service;
- 18. BT shall provide to Ofcom the additional financial information in paragraph 17 above (except for 17(ii), (iv), (xii) and (xv)) at the same time it delivers its Regulatory Financial Statements. The additional financial information in paragraphs 17(ii), (iv) and (xv) shall be provided when it publishes its Regulatory Financial Statements while the additional financial information in paragraph 17(xii) shall be provided to Ofcom two weeks after it publishes its Regulatory Financial Statements.
- 19. The Annexes to this direction form part of the Direction.

Interpretation

- 20. For the purpose of interpreting this Direction:
 - (a) except as otherwise defined in paragraph 21 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 WBA Notification, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.
- 21. For the purposes of interpreting this Direction the following definitions shall apply:
 - (a) “**2017 WBA Notification**” means the notification at Annex [X] of the statement [wholesale broadband access markets] dated [DATE];
 - (b) “**Interconnect Circuits**” has the meaning given to it in the notification set out at Annex [x], Schedule 1, Part 2 of the document [narrowband markets review] dated [DATE]; and
 - (c) “**Market**” means each of the SMP markets to which cost accounting and/or accounting separation obligations apply and Interconnect Circuits.
- 22. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

[DATE]

Annex A

Statement by Ofcom

The statement provided by Ofcom commenting on the figures in, the notes to, or the presentation of any or all of the Regulatory Financial Statements, in relation to each of the markets to which cost accounting and/or accounting separation obligations apply.

Statement of Responsibility

The statement provided by the board of directors of BT shall set out the basis of preparation of the Regulatory Financial Statements and confirm the approval of the Regulatory Financial Statements by BT's board of directors.

Regulatory Financial Review

BT shall be required to summarise the financial performance:

1. across all of the SMP markets to which cost accounting and/or accounting separation obligations apply;
2. at the market review level encompassing individual SMP markets to which cost accounting and/or accounting separation obligations apply considered as part of such market review; and
3. at the level of each individual SMP market to which cost accounting and/or accounting separation obligations apply.

The Regulatory Financial Review (RFR) shall be included in the Regulatory Financial Statements either as a separate statement or as notes to relevant other statements.

The RFR should assist the user's assessment of the Regulatory Financial Statements and provide commentary on compliance with these regulatory conditions.

The RFR should focus on those matters which are relevant to the users of the information, be clearly written and readily understandable.

The information and analysis contained within the RFR should be complete and free from bias.

Disclosure should make clear any issues of comparability that would assist the reader's understanding of the RFR. It should highlight accounting policies that are key to the understanding of performance, focusing on those which have required the particular exercise of judgement in their application and those accounting policies which have changed in the year.

When using financial and non-financial measures in the RFR it is important these are defined and explained, assumptions set out and Prior Year Comparatives are disclosed on the same basis as Current Year Figures.

The RFR should explain the main factors that underlie all of the regulated activities, all of the individual SMP markets forming part of each market review and each individual SMP market. In particular, the RFR should explain those factors which have either varied in the past or are expected to change in the future. It should also set out an analysis of the effect of changes in each individual SMP market or the environment in which it operates and of developments within each individual SMP market. For example, it should include changes in the market conditions, introduction or announcement of new products and services, new and discontinued activities, other acquisitions and disposals.

The RFR should also analyse the main factors and influences that may have an effect on future performance, whether or not they were significant in the period under review. There should be a discussion of the principal risks facing all of the regulated activities, all of the individual SMP markets forming part of each market review, and each individual SMP market, with a commentary on the approach taken to manage them.

Notes to the Regulatory Financial Statements

The Regulatory Financial Statements shall contain, as a separate statement or as notes to relevant other statements, notes, modelled on statutory accounting conventions, to assist the user in the interpretation of the individual Regulatory Financial Statements.

The notes will address issues necessary to ensure the fair presentation of the Regulatory Financial Statements (where BT is required to obtain an audit to “fairly presents in accordance with” standards) and the proper preparation of the Regulatory Financial Statements (where BT is required to obtain an audit to “properly prepared in accordance with” standards). They should set out to the extent necessary the basis of accounting, accounting policies, changes for restatement, non-compliance with the ICAEW Guidance and any other information that will enable users to properly understand the individual Regulatory Financial Statement.

Amongst others the necessary notes would be expected to include:

- a description of the basis on which revenue from sales to other operators arise and other related matters necessary to understand how financial performance has been measured;
- a commentary setting out how the principle of non-discrimination and the calculation of usage factors have been applied in the preparation and presentation of Regulatory Financial Statements in respect of Wholesale Services.

Report of the Regulatory Auditor

The statement by the Regulatory Auditor shall set out the duties and responsibilities of BT and of the Regulatory Auditor, the basis of audit opinion in accordance with current auditing standards, to whom a duty of care is owed and their opinion in respect of each Regulatory Financial Statement.

Performance Summary by Market or Technical Area 20XX

For the year ended 31 March 20XX

	Section	Internal Revenue	External Revenue	Total Revenue	Operating Costs	Depreciation	Holding (gain)/loss	Supp. Dep.	Other CCA	Roundings	Total CCA	Return	Mean Capital Employed	Return on MCE
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%
Market Review 1														
Market/Technical Area 1	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market/Technical Area 2 etc	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market Review 2 etc														
Market/Technical Area 1	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market/Technical Area 2 etc	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total SMP Markets		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Wholesale Residual		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Retail Residual		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total Markets		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%

Attribution of Wholesale Current Costs 20XX

For the year ended 31 March 20XX

	Market Review 1		Market Review 2 etc		Wholesale Residual	Roundings	Total Wholesale Markets
	Market/Technical Area 1 £m	Market/Technical Area 2 etc £m	Market/Technical Area 1 £m	Market/Technical Area 2 etc £m			
Operating Costs of Wholesale Services:							
EOI Input Prices	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Provision/Maintenance	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Network Support	xxx	xxx	xxx	xxx	xxx	xxx	xxx
General Support	xxx	xxx	xxx	xxx	xxx	xxx	xxx
General Management	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Finance and Billing	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Accommodation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Bad Debts	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Depreciation - Land & Buildings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Access	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Switch and Transmission	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Other related	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Sub Total Depreciation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Sub Total HCA Operating Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx
CCA Adjustments:							
Holding Loss/(Gain)	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Supplementary Depreciation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other CCA Adjustments	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Roundings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total CCA Operating Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Attribution of Wholesale Current Cost Mean Capital Employed 20XX

For the year ended 31 March 20XX

	Market Review 1		Market Review 2 etc		Wholesale Residual	Roundings	Total Wholesale Markets
	Market/Technical Area 1	Market/Technical Area 2 etc	Market/Technical Area 1	Market/Technical Area 2 etc			
	£m	£m	£m	£m	£m	£m	£m
Non-current Assets							
Land & Buildings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Copper	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Fibre	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Duct	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Switch	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Transmission	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Investments	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Non-current Assets	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Current Assets							
Inventories	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Receivables							
- Internal	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- External	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Current Assets	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Current Liabilities							
- Internal	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- External	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total liabilities falling due within one year	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Net Current Assets/(Liabilities)	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Assets less Current Liabilities	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Provisions for Liabilities & Charges	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Roundings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Mean Capital Employed	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Notes to the statement entitled “Market/Technical Area Summary”

BT shall disclose financial information shown in the “Market/Technical Area Summary” as follows:

1. In relation to the market “Wholesale Broadband Access in the United Kingdom excluding the Hull Area” the information is required to be provided for the following Network Services:
 - i. IPstream Connect End user access – Rentals;
 - ii. IPstream Connect Bandwidth;
 - iii. Other IPstream Connect services;
 - iv. WBC Connection;
 - v. WBC End user access - rental;
 - vi. WBC bandwidth;
 - vii. WBC Other services;
 - viii. Other WBA Market A.

[NOTE: As explained in paragraph 7.54 of the 2017 WBA Consultation we intend to consult on proposals relating to EOI inputs information as part of the forthcoming DPA financial reporting consultation.]

Market/Technical Area Summary 20XX**Summary for Market 1/Technical Area 1 etc**

For the year ended 31 March 20XX

	Internal Revenue £m	External Revenue £m	Total Revenue £m	Internal Volume	External Volume	Unit(s)	Average Internal price £	Average External Price £	Internal FAC* £m	External FAC £m
IP Stream Connect End user access - rentals	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
IP Stream Connect bandwidth	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Other IP Stream connect services	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
WBC Connections	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
WBC Ender user access - rentals	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
WBC bandwidth	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
WBC - Other services	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Other wholesale broadband access charges	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Total WBA Market A	x.x	x.x	x.x						x.x	x.x
Adjustment for EOI and internal	x.x		x.x						x.x	x.x
Total WBA Market A (excluding EOI and Internal)	x.x	x.x	x.x						x.x	x.x

Internal and External FAC as required by Ofcom

Average Prices may require more detailed analysis as required by Ofcom

* Only where Internal unit FAC is different from External unit FAC

[NOTE: As explained in paragraph 7.54 of the 2017 WBA Consultation we intend to consult on proposals relating to EOI inputs information as part of the forthcoming DPA financial reporting consultation.]

BT Reconciliation Statement - Consolidated Profit and Loss Account 20XX

For the year ended 31 March 20XX

	External Revenue £m	Operating Costs £m	Return or Profit before taxation £m
As in the Annual Report	X	X	X
Adjustments			
Elimination of inter-market revenue and costs	X	X	X
Share of Post tax loss of associates and joint ventures	X	X	X
Loss on disposal of interest in associates and joint ventures	X	X	X
Net short term interest	X	X	X
Specific pension interest	X	X	X
Long term interest payable	X	X	X
Other adjustment(s) as required	X	X	X
Total Markets (HCA)	X	X	X
Holding (gain)/loss	X	X	X
Supplementary Depreciation	X	X	X
Other CCA adjustments	X	X	X
Roundings	X	X	X
Total Markets (CCA)	X	X	X

BT Reconciliation Statement - Consolidated Mean Capital Employed 20XX

For the year ended 31 March 20XX

	20XX £m	20XX-1 £m	Mean capital employed of BT Markets	20XX £m	20XX-1 £m
Shareholders' funds as in the 20XX Annual Report	X	X			
CCA adjustments	X	X	Market Review 1	X	X
	X	X	Market Review 2 etc	X	X
Adjustments			Sub total SMP Markets	X	X
Derivative financial instruments - assets	X	X			
Deferred tax liabilities	X	X	Residual activities		
Deferred tax assets	X	X	Wholesale residual activity	X	X
Current tax assets	X	X	Retail residual activity	X	X
Current tax liabilities	X	X			
Long term loans and other borrowings:			Sub total residual activities	X	X
Due in less than one year	X	X			
Due in more than one year	X	X	Roundings and other adjustments		
Derivative financial instruments - liabilities	X	X	Wholesale markets	X	X
Other liabilities	X	X	Retail markets & activities	X	X
Retirement benefit obligations	X	X			
Other adjustment(s) as required	X	X	Sub total roundings and other adjustments	X	X
Closing CCA capital employed at 31 March	X	X	Total CCA mean capital employed	X	X
Opening CCA capital employed at 1 April	X	X			
Total CCA mean capital employed	X	X			

Wholesale Broadband Access Market Review

Consolidated Network Activity Statement 20XX

For the year ended 31 March 20XX

Network Activity Statement - Consolidated (this is a consolidation of all markets where there are cost accounting obligations)

Fully Allocated Cost (£m)	Footnotes	HCA operating cost	Supplementary depreciation	Holding gain/(loss) and other CCA adjustments	Total CCA operating costs	CCA mean capital employed	Applicable rate of return on capital %	Capital costs	Total of operating costs and capital costs relating to current year	Volume (units)	Average costs per min/unit on a current cost basis relating to current year
Network Components											
Component 1		X	X	X	X	X	X	X	X	X	X
Component 2 etc		X	X	X	X	X	X	X	X	X	X
Residual components		X	X	X	X	X	X	X	X	X	X
Roundings		X	X	X	X	X	X	X	X	X	X
Total		X	X	X	X	X	X	X	X	X	X

Annex B

Reference	Additional Financial Information	Description
<u>Additional Financial Information to be provided in respect of each Market and Interconnect Circuits</u>		
5(a)(i)	Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost (LRIC, DLRIC and DSAC basis)	<ol style="list-style-type: none"> 1. Ensure the LRIC model reconciles to BT group's total cost and asset and liability base; 2. Review the outputs of BT's LRIC model for the whole BT Group by cost category and components, increments and layers of common costs; 3. Identify all relevant layers of common costs separately within BT Group; 4. Enable trend analysis of this breakdown to be undertaken; 5. Enable assessment of cost-volume relationships; 6. Provide input into network price control reviews.
5(a)(ii)	Summarised activity analysis of components for network activities, increments and the relevant layers of common cost (LRIC, DLRIC and DSAC basis)	<ol style="list-style-type: none"> 1. Review the outputs of BT's LRIC model by activity analysis for network components, increments and the layers of common costs; 2. Identify all relevant layers of common costs separately for network activities; 3. Enable trend analysis of this breakdown to be undertaken; 4. Provide input into network price control reviews; 5. Ensure LRIC model reconciles to the total cost and asset and liability base for BT's network activities.
5(a)(iii)	Cost category (as used within regulatory LRIC model) analysis for network components and increments	Similar to "Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost", but on a fully allocated cost basis.

5(a)(iv)	Summarised activity analysis for network components and increments	Similar to “Summarised activity analysis of components for network activities, increments and the relevant layers of common cost”, but on a fully allocated cost basis.
5(a)(v)	<p>Analysis, by asset category and network activities, of the depreciation charge for the year and impact of CCA valuation adjustments on costs for the year for example:</p> <ul style="list-style-type: none"> • HCA depreciation • CCA supplementary depreciation • Holding gain • Other CCA adjustments 	<ol style="list-style-type: none"> 1. Provide impact on profit and loss cost base of the application of CCA methodologies; 2. Enable trend analysis of this breakdown to be undertaken; 3. Provide sub-analysis (for the cost/gain line items left) of the asset movement statement in relation to network components; 4. Provide input into network price control reviews.

5(a)(vi)	<p>CCA fixed asset movement statement</p> <p>a) gross replacement costs brought forward, additions/disposals/transfers, holdings gains/(loss), gross replacement costs carried forward; and</p> <p>b) gross depreciation brought forward, HCA depreciation charge, supplementary CCA depreciation, disposals/transfers/other movements, holding gains/(loss), gross depreciation carried forward)</p> <p>by asset category for BT Group</p> <p>plus reconciliation to HCA fixed assets movement statement in the group statutory accounts</p>	<ol style="list-style-type: none"> 1. Review the breakdown of asset costs between principal asset categories and how such CCA asset values have moved in the year; 2. Enable trend analysis of CCA asset values to be undertaken; 3. Provide input into network price control reviews.
5(a)(vii)	Total mean capital employed and detailed activity analysis for all network components	<ol style="list-style-type: none"> 1. Review network component costs; 2. Enable trend analysis of these breakdowns to be undertaken; 3. Provide input into price control reviews; 4. Assist in dealing with investigations; 5. Ensure summarised activity analysis presented elsewhere reconciles to BT's network activities cost base.
5(a)(viii)	Detailed network activity analysis of mean capital employed for all network components	<ol style="list-style-type: none"> 1. Enable trend analysis of these breakdowns to be undertaken; 2. Ensure summarised activity analysis reconciles to BT's network activity mean capital employed.

5(a)(ix)	Graphs over time of the various raw indices, index weightings and composite indices used by BT to revalue assets onto a current cost basis	<ol style="list-style-type: none"> 1. Evaluate the price trends for composite elements of BT's asset revaluation indices; 2. Evaluate the weightings within individual asset revaluation indices; 3. Evaluate the trend of individual asset revaluation indices; 4. Provide input into price control reviews and determinations.
5(a)(x)	Estimated economic useful lives, valuation and depreciation basis, survey used for valuation or index used to revalue, historical cost accounting (HCA) and current cost accounting (CCA) depreciation, gross book values (GBV) by year of acquisition, gross replacement costs (GRC) and net replacement costs (NRC) across asset categories	<ol style="list-style-type: none"> 1. Review the nature and relative distribution of BT's asset base; 2. Evaluate BT's chosen asset lives for individual asset categories; 3. Review the relationship between gross HCA and CCA valuations; 4. Evaluate the appropriateness of the CCA valuation basis for each asset category; 5. Evaluate the appropriateness of the CCA depreciation methodology for each asset category; 6. Review the impact of CCA accounting on the cost base; 7. Enable trend analysis of CCA costs to be undertaken; 8. Provide input into network price control reviews.
5(a)(xi)	Total operating costs and mean capital employed costs (and associated volumes) for each plant group and their individual exhaustion, including the disclosure of relevant usage factors, onto each network activity and/or (sub) component	<ol style="list-style-type: none"> 1. Review the breakdown of costs to all the different components and sub-components within BT's network activities; 2. Enable trend analysis of this breakdown to be undertaken; 3. Provide input into network price control reviews; 4. Ensure total plant group costs reconcile to the cost base for BT's network activities.

5(a)(xii)	Provision of BT 'Data File' ¹⁹³	<p>Delivery of "data file" in prescribed format containing all records from cost attribution system. Format of file to allow for identification of sources of data, data flows (from the input sources at F8/OUC code level through to products and services) and attribution bases.</p> <p>The data would, as a minimum, be able to replicate the outputs of the financial statements and include financial information (for example F8 code, OUC, finance type, and AS/WS sector) on all services and components that have received an allocation of costs in the Regulatory Financial Statements. The data would include transfer charges and CCA adjustments, and be able to identify the attribution bases to those described in the Accounting Methodology Documents. The basis of preparation must be consistent with BT's SMP conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents.</p> <p>The data will also include:</p> <ol style="list-style-type: none"> 1. the post RFS adjustments to cost categories for LRIC reporting by service; 2. the FAC adjustment Summary (for LRIC model), which contains the post RFS adjustments to cost categories for the purposes of LRIC reporting; 3. the Wholesale Residual schedule; 4. revenues, volumes and FAC component cost on a CCA basis for IPstream Connect Max, IPstream connect Premium, IPstream Connect Regrades, IPstream Connect Migrations and IPstream Connect Cancellations; 5. the revenues, volumes and total FAC cost on a CCA basis of any other WBA service where the revenue from this service is above £5m; and 6. the network component FAC cost on a CCA basis of any other WBA service where the revenue from this service is above £5m. <p>The information to be provided annually within 10 working days of the publication of the regulatory accounts. The outputs of the annual file would be consistent with published audited information.</p> <p>BT to maintain file in format consistent with Ofcom/third party import routine, accompanied by provision of control totals, and any technical advice which allows seamless data transfers and it should be updated where appropriate. In consultation with</p>
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		Ofcom, BT shall procure an appropriate audit opinion in relation to the data file.
5(a)(xiii)	CCA information to allow Ofcom to re-calculate the regulatory asset value (RAV) for copper assets used in BT's access network.	<ol style="list-style-type: none"> 1. Provide breakdown of the following information: 2. Full CCA on an actual price index basis; 3. Pre 1997 assets on an RPI basis; 4. Post 1997 assets on an actual price index basis; 5. Enable Ofcom to re-calculate and monitor the effect of this going forward.
5(a)(xiv)	BT Network Services Reconciliation	Provide a breakdown of FAC into BT services and components and reconcile both categories to the total FAC for the year.
5(a)(xv)	Provision of FAC, LRIC, DLRIC and DSAC data per service	Provide FAC, LRIC, DLRIC and DSAC information for each regulated service.

¹⁹³ NOTE: As explained in paragraph 7.54 of the 2017 WBA Consultation we intend to consult on proposals relating to EOI inputs information as part of the forthcoming DPA financial reporting consultation.

Annex 6

Regulatory framework

Introduction

- A6.1 This annex provides an overview of the market review process to give some additional context and understanding of the matters discussed in this statement, including the legal instruments (statutory notification) published at Annex 4.
- A6.2 This overview identifies some of the key aspects of materials relevant to this market review, but does not purport to give a full and exhaustive account of all materials that we have considered in developing our proposals for this market.

Market reviews

- A6.3 A market review is a process by which, at regular intervals, we identify relevant markets appropriate to national circumstances and carry out analyses of these markets to determine whether they are effectively competitive. Where an operator has significant market power (SMP) in a market, we impose appropriate remedies, known as SMP obligations or conditions, to address this. We explain the concept of SMP below.
- A6.4 In carrying out this work, we act in our capacity as the sector-specific regulator for the UK communications industries, particularly relating to our role as the regulator for telecommunications. Our functions in this regard are to be found in Part 2 of the Communications Act 2003 (the “**2003 Act**”).¹⁹⁴ We exercise those functions within the framework harmonised across the European Union for the regulation of electronic communications by the Member States (known as the Common Regulatory Framework or the ‘CRF’), as transposed by the 2003 Act. The applicable rules¹⁹⁵ are contained in a package of five EC Directives, of which two Directives are particularly relevant for present purposes, namely:
- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (the ‘Framework Directive’); and
 - Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the ‘Access Directive’).
- A6.5 The Directives require that NRAs (such as Ofcom) carry out reviews of competition in communications markets to ensure that SMP regulation remains appropriate and proportionate in the light of changing market conditions.
- A6.6 Each market review normally involves three analytical stages, namely:
- the procedure for the identification and definition of the relevant markets (the market definition procedure);

¹⁹⁴ <http://www.legislation.gov.uk/ukpga/2003/21/contents>

¹⁹⁵ The Directives were subsequently amended on 19 December 2009. The amendments have been transposed into the national legislation and applied with effect from 26 May 2011 and any references in this statement to the 2003 Act should be read accordingly.

- the procedure for the assessment of competition in each market, in particular whether the relevant market is effectively competitive (the market analysis procedure); and
- the procedure for the assessment of appropriate regulatory obligations (the remedies procedure).

A6.7 These stages are normally carried out together.

Market definition procedure

A6.8 The 2003 Act provides that, before making a market power determination,¹⁹⁶ we must identify “the markets which in [our] opinion, are the ones which in the circumstances of the United Kingdom are the markets in relation to which it is appropriate to consider whether to make such a determination” and analyse those markets.¹⁹⁷

A6.9 The Framework Directive requires that NRAs shall, taking the utmost account of the 2014 EC Recommendation¹⁹⁸ and SMP Guidelines¹⁹⁹ published by the European Commission, define the relevant markets appropriate to national circumstances, in particular relevant geographic markets within their territory, in accordance with the principles of competition law.²⁰⁰

A6.10 The 2014 EC Recommendation identifies a set of product and service markets within the electronic communications sector in which *ex ante* regulation may be warranted. Its purpose is twofold. First, seeking to achieve harmonisation across the single market by ensuring that the same markets will be subject to a market analysis in all Member States. Second, the 2014 EC Recommendation seeks to provide legal certainty by making market players aware in advance of the markets to be analysed.

A6.11 However, NRAs are able to regulate markets that differ from those identified in the 2014 EC Recommendation where this is justified by national circumstances by demonstrating that three cumulative criteria referred to in the 2014 EC Recommendation (the three-criteria test) are satisfied and where the EC does not raise any objections.

A6.12 The three criteria, which are cumulative, are:

¹⁹⁶ The market power determination concept is used in the 2003 Act to refer to a determination that a person has SMP in an identified services market.

¹⁹⁷ Section 79 of the 2003 Act

¹⁹⁸ *Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, (2014/710/EU)*, available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.295.01.0079.01.ENG. Together with this Recommendation, the Commission has adopted an Explanatory Note, available at: http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?action=display&doc_id=7056

¹⁹⁹ *Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)*, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2002:165:0006:0031:EN:PDF>.

²⁰⁰ Article 15(3) Framework Directive

- the presence of high and non-transitory structural, legal or regulatory barriers to entry;
 - a market structure which does not tend towards effective competition within the relevant time horizon, having regard to the state of infrastructure-based and other competition behind the barriers to entry; and
 - competition law alone is insufficient to adequately address the identified market failure(s).
- A6.13 The 2014 EC Recommendation identifies wholesale central access provided at a fixed location for mass-market products (which we refer to as wholesale broadband access for the purposes of this consultation – in order to be consistent with the nomenclature of previous reviews) as one of the markets to be reviewed (Market 3b).
- A6.14 The fact that an NRA identifies the product and service markets listed in the 2014 EC Recommendation or identifies other product and service markets that meet the three-criteria test does not automatically mean that regulation is warranted. Market definition is not an end in itself but rather a means of assessing effective competition.
- A6.15 The SMP Guidelines make clear that market definition is not a mechanical or abstract process. It requires an analysis of any available evidence of past market behaviour and an overall understanding of the mechanics of a given market sector. As market analysis has to be forward-looking, the SMP Guidelines state that NRAs should determine whether the market is prospectively competitive, and thus whether any lack of effective competition is durable, by taking into account expected or foreseeable market developments over the course of a reasonable period.²⁰¹ The SMP Guidelines clarify that NRAs enjoy discretionary powers which reflect the complexity of all the relevant factors that must be assessed (economic, factual and legal) when identifying the relevant market, and assessing whether an undertaking has SMP.
- A6.16 The SMP Guidelines also describe how competition law methodologies may be used by NRAs in their analysis. In particular, there are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market. Ofcom's approach to market definition follows that used by the UK competition authorities, which is in line with the approach adopted by the EC.
- A6.17 While competition law methodologies are used in identifying the relevant markets *ex ante*, the markets identified will not necessarily be identical to markets defined in *ex post* competition law cases. This may be the case, especially as the former is based on an overall forward-looking assessment of the structure and the functioning of the market under examination. Accordingly, the economic analysis carried out for the purpose of this review, including the markets we propose to identify, is without prejudice to any analysis that may be carried out in relation to any investigation

²⁰¹ The SMP Guidelines provide that the actual period used should reflect the specific characteristics of the market and the expected timing for the next review of the relevant market by the NRA.

pursuant to the Competition Act 1998²⁰² (relating to the application of the Chapter I or II prohibitions or Article 101 or 102 of the Treaty on the Functioning of the European Union²⁰³) or the Enterprise Act 2002.²⁰⁴

Market analysis procedure

Effective competition

A6.18 The 2003 Act requires that we carry out market analyses of identified markets for the purpose of making or reviewing market power determinations. Such analyses are normally to be carried out within two years from the adoption of a revised recommendation on markets, where that recommendation identifies a market not previously notified to the EC, or within three years from the publication of a previous market power determination relating to that market.²⁰⁵ Exceptionally, the three-year period may be extended for up to three additional years where the NRA notifies the EC, and it does not object.

A6.19 In carrying out a market analysis, the key issue for an NRA is to determine whether the market in question is effectively competitive. The 27th recital to the Framework Directive clarifies the meaning of that concept:

“[it] is essential that ex ante regulatory obligations should only be imposed where there is not effective competition, i.e. in markets where there are one or more undertakings with significant market power, and where national and Community competition law remedies are not sufficient to address the problem”.

A6.20 The definition of SMP is equivalent to the concept of dominance as defined in competition law.²⁰⁶ In essence, it means that an undertaking in the relevant market is in a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. The Framework Directive requires that NRAs must carry out the market analysis taking the utmost account of the SMP Guidelines, which emphasise that NRAs should undertake a thorough and overall analysis of the economic characteristics of the relevant market before coming to a conclusion as to the existence of SMP.

Sufficiency of competition law

A6.21 As part of our overall forward-looking analysis, we also assess whether competition law by itself (without *ex ante* regulation) is sufficient, within the relevant markets we have defined, to address the competition problems we have identified. We consider this matter in our assessment of the appropriate remedies which, as explained below, are based on the nature of the specific competition problems we identify within the relevant markets as defined. We also note that the SMP Guidelines clarify that, if NRAs designate undertakings as having SMP, they must impose on them one or more regulatory obligations.

²⁰² <http://www.legislation.gov.uk/ukpga/1998/41/contents>

²⁰³ Previously Article 81 and Article 82 of the EC Treaty, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:FULL:EN:PDF>

²⁰⁴ <http://www.legislation.gov.uk/ukpga/2002/40/contents>

²⁰⁵ Section 84A 2003 Act

²⁰⁶ Article 14 Framework Directive, implemented by section 78 of the 2003 Act.

- A6.22 In considering this matter, we bear in mind the specific characteristics of the relevant markets we have defined. Generally, the case for *ex ante* regulation is based on the existence of market failures, which, by themselves or in combination, mean that the establishment of competition might not be possible if the regulator relied solely on *ex post* competition law powers which are not specifically tailored to the sector. Therefore, it may be appropriate for *ex ante* regulation to be used to address these market failures along with any entry barriers that might otherwise prevent effective competition from becoming established within the relevant markets we have defined. By imposing *ex ante* regulation that promotes competition, it may be possible to reduce such regulation over time, as markets become more competitive, allowing greater reliance on *ex post* competition law.
- A6.23 *Ex post* competition law is also unlikely in itself to bring about (or promote) effective competition, as it prohibits the abuse of dominance rather than the holding of a dominant position itself. In contrast, *ex ante* regulation is normally aimed at actively promoting the development of competition through attempting to reduce the level of market power (or dominance) in the identified relevant markets, thereby encouraging the establishment of effective competition.
- A6.24 We generally take the view that *ex ante* regulation provides additional legal certainty for the market under review and may also better enable us to intervene in a timely manner. We may also consider that certain obligations are needed as competition law would not remedy the particular market failure(s), or that the specific clarity and detail of the obligation is required to achieve a particular result.

Remedies procedure

Powers and legal tests

- A6.25 The Framework Directive prescribes what regulatory action NRAs must take depending upon whether or not an identified relevant market has been found effectively competitive. Where a market has been found effectively competitive, NRAs are not allowed to impose SMP obligations and must withdraw such obligations where they already exist. On the other hand, where the market is found not effectively competitive, the NRAs must identify the undertakings with SMP in that market and then impose appropriate obligations.²⁰⁷
- A6.26 NRAs have a suite of regulatory tools at their disposal, as reflected in sections 87 to 91 of the 2003 Act. Specifically, the Access Directive specifies a number of SMP obligations, including transparency, non-discrimination, accounting separation, access to and use of specific network elements and facilities, price control and cost accounting. When imposing a specific obligation, the NRA will need to demonstrate that the obligation in question is based on the nature of the problem identified, proportionate and justified in the light of the policy objectives as set out in Article 8 of the Framework Directive.²⁰⁸
- A6.27 Specifically, for each and every proposed SMP obligation, we explain why it satisfies the requirement in section 47(2) of the 2003 Act that the obligation is:
- objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;

²⁰⁷ See Article 16(3) and (4) of the Framework Directive; sections 84 and 87(1) of the Act.

²⁰⁸ See Article 8(4) of the Access Directive.

- not such as to discriminate unduly against particular persons or against a particular description of persons;
- proportionate to what the condition or modification is intended to achieve; and
- transparent in relation to what is intended to be achieved.²⁰⁹

A6.28 Additional legal requirements may also need to be satisfied depending on the SMP obligation in question.²¹⁰ For example, in the case of price controls, the NRA's market analysis must indicate that the lack of effective competition means that the telecoms provider concerned may sustain prices at an excessively high level, or may apply a price squeeze, to the detriment of end-users and that the setting of the obligation is appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on the end-users of public electronic communications services. In that instance, NRAs must take into account the investment made by the telecoms provider and allow it a reasonable rate of return on adequate capital employed, taking into account any risks specific to a particular new investment, as well as ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits.²¹¹

A6.29 Where an obligation to provide third parties with network access is considered appropriate, NRAs must take into account factors including the feasibility of the proposed network access, the technical and economic viability of creating networks (including the viability of other network access products, whether provided by the dominant provider or another person) that would make the network access unnecessary, the investment of the network operator who is required to provide access (taking account of any public investment made), and the need to secure effective competition (including, where it appears to us to be appropriate, economically efficient infrastructure-based competition) in the long term.²¹²

A6.30 To the extent relevant to this review, we demonstrate the application of these legal tests to the particular SMP obligations we have decided to impose in the parts of this document which set out our decisions on remedies. In doing so, we also assess how the performance of our general duties under section 3 of the 2003 Act is secured or furthered by our regulatory intervention, and that it is in accordance with the six Community requirements in section 4 of the 2003 Act. This is also relevant to our assessment of the likely impact of implementing our conclusions.

Ofcom's general duties – section 3 of the 2003 Act

A6.31 Under the 2003 Act, our principal duty in carrying out our functions is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition (section 3(1)).

A6.32 In so doing, we are required to secure a number of specific objectives and to have regard to a number of matters set out in section 3 of the Act.

²⁰⁹ Section 47 of the 2003 Act; Article 8(5) of the Framework Directive and Article 5(2) of the Access Directive.

²¹⁰ As set out in sections 87 et seq of the 2003 Act

²¹¹ Section 88 of the 2003 Act, which implements Article 13 of the Access Directive.

²¹² Section 87 of the 2003 Act.

- A6.33 In performing our duties, we are also required to have regard to a range of other considerations, as appear to us to be relevant in the circumstances. In this context, we consider that a number of such considerations are relevant, namely:
- the desirability of promoting competition in relevant markets (section 3(4)(b));
 - the desirability of encouraging investment and innovation in relevant markets (section 3(4)(d)); and
 - the desirability of encouraging the availability and use of high speed data transfer services throughout the UK (section 3(4)(e)).
- A6.34 We must also have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed (section 3(3)), as well as the interest of consumers in respect of choice, price, quality of service and value for money (section 3(5)).
- A6.35 Ofcom has, however, a wide measure of discretion in balancing its statutory duties and objectives. In so doing, we take account of all relevant considerations, including responses received during our consultation process, in reaching our conclusions.

European Community requirements for regulation – sections 4 and 4A of the 2003 Act and Article 3 of the BEREC Regulation

- A6.36 As noted above, our functions exercised in this review fall under the CRF. As such, section 4 of the 2003 Act requires us to act in accordance with the six European Community requirements for regulation. Where it appears to Ofcom that any of their general duties conflict with one or more of their duties under section 4, priority must be given to those latter duties (section 3(6)).
- A6.37 In summary, these six requirements are:
- to promote competition in the provision of electronic communications networks and services, associated facilities and the supply of directories;
 - to contribute to the development of the European internal market;
 - to promote the interests of all persons who are citizens of the EU;
 - to take account of the desirability of Ofcom's carrying out of its functions in a manner which, so far as practicable, does not favour one form of or means of providing electronic communications networks, services or associated facilities over another (i.e. to be technologically neutral);
 - to encourage, to such extent as Ofcom considers appropriate for certain prescribed purposes, the provision of network access and service interoperability, namely securing efficient and sustainable competition, efficient investment and innovation, and the maximum benefit for customers of telecoms providers; and
 - to encourage compliance with certain standards in order to facilitate service interoperability and secure freedom of choice for the customers of telecoms providers.

- A6.38 We considered that the first, third, fourth and fifth of those requirements are of particular relevance to the matters under review and that no conflict arises in this regard with those specific objectives in section 3 of the 2003 Act that we consider are particularly relevant in this context.
- A6.39 Section 4A of the 2003 Act requires Ofcom, in carrying out certain of its functions (including, among others, Ofcom's functions in relation to market reviews under the CRF) to take due account of applicable recommendations issued by the EC under Article 19(1) of the Framework Directive. Where we decide not to follow such a recommendation, we must notify the EC of that decision and the reasons for it.
- A6.40 Further, Article 3(3) of the Regulation establishing BEREC²¹³ requires NRAs to take utmost account of any opinion, recommendation, guidelines, advice or regulatory best practice adopted by BEREC.
- A6.41 Accordingly, we have taken due account of the applicable EC recommendations, (including, in the context of this review, the NGA Recommendation²¹⁴ and the Costing and Non-Discrimination Recommendation²¹⁵) and utmost account of the applicable opinions, recommendations, guidelines, advice and regulatory best practices adopted by BEREC relevant to the matters under consideration in this review (in particular, in the context of this review, the BEREC Common Position on geographical aspects of market analysis²¹⁶ and the BEREC Common Position on best practice in remedies in the WBA market²¹⁷).

Regulated entity

- A6.42 The power in the 2003 Act to impose an SMP obligation by means of an SMP services condition provides that it is to be applied only to a 'person' whom we have determined to be a 'person' having SMP in a specific market for electronic

²¹³ Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators of Electronic Communications (BEREC) and the Office (the BEREC Regulation), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0001:0010:EN:PDF>.

²¹⁴ Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (2010/572/EU), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:251:0035:0048:EN:PDF>

²¹⁵ Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0466&from=EN>.

²¹⁶ BEREC Common Position on geographical aspects of market analysis (definition and remedies) http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/common_approaches_positions/4439-berec-common-position-on-geographic-aspects-of-market-analysis-definition-and-remedies

²¹⁷ BEREC Common Position on best practice in remedies on the market for wholesale broadband access (including bitstream access) imposed as a consequence of a position of significant market power in the relevant market http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/common_approaches_positions/1126-revised-berec-common-position-on-best-practice-in-remedies-on-the-market-for-wholesale-broadband-access-including-bitstream-access-imposed-as-a-consequence-of-a-position-of-significant-market-power-in-the-relevant-market

communications networks, electronic communications services or associated facilities (i.e. the 'services market').

- A6.43 The Framework Directive requires that, where an NRA determines that a relevant market is not effectively competitive, it shall identify 'undertakings' with SMP on that market and impose appropriate specific regulatory obligations. For the purposes of EU competition law, 'undertaking' includes companies within the same corporate group (for example, where a company within that group is not independent in its decision making).²¹⁸
- A6.44 We consider it appropriate to prevent a dominant provider to whom an SMP service condition is applied, which is part of a group of companies, exploiting the principle of corporate separation. The dominant provider should not use another member of its group to carry out activities or to fail to comply with a condition, which would otherwise render the dominant provider in breach of its obligations.
- A6.45 To secure that aim, we apply the SMP conditions to the person in relation to which we have made the market power determination in question by reference to the so-called 'Dominant Provider', which we define as "*[X plc], whose registered company number is [000] and any [X plc] subsidiary or holding company, or any subsidiary of that holding company, all as defined in section 1159 of the Companies Act 2006*".

²¹⁸ *Viho v Commission*, Case C-73/95 P [1996] ECR I-5447. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:61995CJ0073:EN:PDF>.

Annex 7

Approach to market definition and SMP assessment

Introduction

A7.1 This annex sets out in general terms the processes that we have followed in defining the markets within this review, how and on what basis we assess and whether any operator has SMP in a given market. Sections 3, 4 and 5 (product market definition, geographic market definition and SMP analysis respectively) set out in more detail how we have applied our analytical approach in the WBA market.

Overview of approach

A7.2 The market review procedure requires us to analyse markets in order to determine whether they are effectively competitive, and then to decide on appropriate remedies if necessary. Before an assessment of competitive conditions is possible it is necessary to define the relevant market.

A7.3 The definition of the relevant market does not simply entail identifying services that resemble each other in some way, but the set of services (and geographical areas) that exercise some competitive constraint on each other. It therefore has two dimensions:

- the relevant products or services to be included within the market; and
- the geographic extent of the market.

A7.4 It is often practical to define the relevant product market before exploring the geographic dimension of the market.

A7.5 The market definition exercise is not an end in itself, but a means to assessing whether there is effective competition and thus whether there is a need for *ex ante* regulation. It is in this light that we have conducted our market definitions in this review.

2014 EC Recommendation and the three-criteria test

A7.6 As explained in Annex 6, in defining the market for market review purposes, we are required to define relevant markets appropriate to national circumstances in accordance with the principles of competition law. In doing so we have taken due account of the 2014 EC Recommendation, the accompanying Explanatory Note and the EC SMP Guidelines.

A7.7 As explained in Annex 6, the 2014 EC Recommendation identifies a set of product and service markets within the electronic communications sector in which *ex ante* regulation may be warranted. NRAs may also identify markets that differ from those in the 2014 EC Recommendation which may be susceptible to *ex ante* regulation having regard to the three-criteria test.

A7.8 The three-criteria test is related to the assessment of SMP and involves the assessment of similar evidence, but is analytically distinct. The three-criteria test focuses on overall market characteristics and structure, for the sole purpose of identifying those markets that are susceptible to *ex ante* regulation. In contrast, assessment of SMP involves determining whether an operator active in a market that has been identified as being susceptible to *ex ante* regulation should be made subject to *ex ante* regulation.²¹⁹

The time period under review

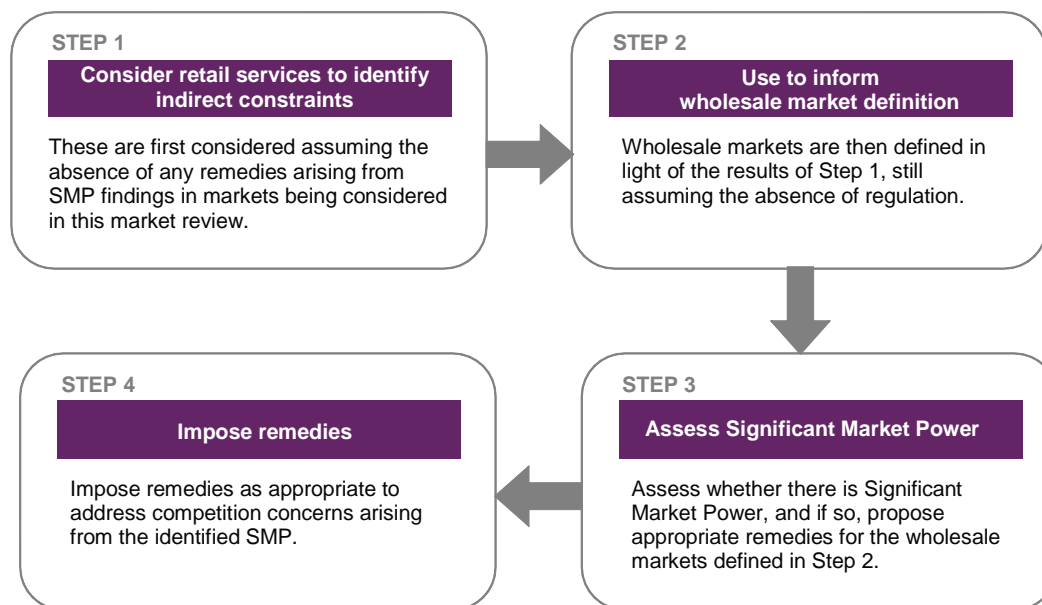
A7.9 Rather than just looking at the current position, market reviews look ahead to how competitive conditions may change in future. Our evaluation of the current market takes into account past developments and evidence, before then considering the foreseeable market changes that we expect to affect its development over the period to March 2021. This forward looking period reflects the period covered by this market review.

A7.10 The forward look period that we have used does not preclude us reviewing the market before that point should the market develop in a way we have not foreseen, to the extent that it is likely to affect the competitive conditions that are operating.

Market review process

A7.11 The market review process can be characterised as having four stages, which are shown in Figure A6.1 below.

Figure A6.1 Sequencing of market definition, SMP and remedies analysis



Source: Ofcom

A7.12 These steps are explained further in the following sub-sections.

²¹⁹ See the Commission Explanatory Note accompanying the 2014 EC Recommendation.

Market definition

- A7.13 The starting point for identifying markets which may be susceptible to *ex ante* regulation is the consideration of retail services from a forward-looking perspective. The wholesale market is defined subsequent to this exercise being carried out. In relevant cases we then consider whether the wholesale market is one in which *ex ante* regulation may be appropriate (if so, we have then formally identified a relevant market).²²⁰
- A7.14 Consideration of retail services is logically prior to wholesale market definition because the demand for the upstream wholesale service is a derived demand, meaning that the level of the demand for the upstream input depends on the demand for the retail service.
- A7.15 This link between the retail and wholesale level means that the range of available substitutes at the downstream (e.g. retail) level will inform the likely range of competitive constraints acting at the upstream (e.g. wholesale) level. This is because a rise in the price of a wholesale service which is passed through to the price retail services may cause retail customers to switch to substitute retail services, reducing demand for the wholesale input. We refer to this as an indirect constraint.
- A7.16 Consequently, the analysis of the retail and wholesale levels of the supply-chain should be regarded as one exercise, the ultimate purpose of which is to define those wholesale markets in the UK where there may be a requirement for the imposition of *ex ante* regulation.²²¹

Demand-side and supply-side substitution

- A7.17 The boundaries between markets are determined by identifying competitive constraints on the price setting behaviour of firms. There are two main constraints to consider:²²²
- to what extent it is possible for a customer to substitute other services for those in question in response to a relative price increase (demand-side substitution); and
 - to what extent suppliers can switch, or increase, production to supply the relevant products or services in response to a relative price increase (supply-side substitution).
- A7.18 The hypothetical monopolist test (HMT) is a tool which can be used to identify close demand-side and supply-side substitutes.²²³ In this test, a product is considered to

²²⁰ See recital 5 and point 2 of the 2014 EC Recommendation.

²²¹ See, in this respect, recital 7 of the 2014 EC Recommendation which states that “*the starting point for the identification of wholesale markets susceptible to ex ante regulation is the analysis of corresponding retail markets*”. See also section 2.1 of the Explanatory Note to the 2014 EC Recommendation and paragraph 44 of the SMP Guidelines.

²²² See paragraph 38 of the SMP Guidelines, which also notes that potential competition also acts as a third source of competitive constraint on an operator’s behaviour, but is taken into account in the SMP assessment.

²²³ See paragraph 40 of the SMP Guidelines.

constitute a separate market if the hypothetical monopolist supplier could impose a small but significant non-transitory increase in price (SSNIP) above the competitive level without losing sales to such a degree as to make this price rise unprofitable. If such a price rise would be unprofitable, because consumers would switch to other products or because suppliers of other products would begin to compete with the hypothetical monopolist, then the market definition should be expanded to include the substitute products.

- A7.19 We must first therefore address the issue of which product(s) should form the starting point for the application of the HMT. This starting point can be referred to as the ‘focal product’²²⁴, and typically starts from the narrowest potential market definition.²²⁵
- A7.20 Having considered demand-side substitution we then, where relevant, assess supply-side substitution possibilities to consider whether they provide any additional constraints on the pricing behaviour of the hypothetical monopolist which have not been captured by the demand-side analysis. In this assessment, supply-side substitution is considered to be a low-cost form of entry which can take place within a reasonable timeframe (e.g. up to 12 months).
- A7.21 For supply-side substitution to be relevant not only must suppliers be able, in theory, to enter the market quickly and at low cost by virtue of their existing position in the supply of other products or geographic areas, but there must also be an additional competitive constraint arising from such entry into the supply of the service in question.
- A7.22 Therefore, in identifying potential supply-side substitutes, it is important that providers of these services have not already been taken into consideration. There might be suppliers who provide other services but who might also be materially present in the provision of demand-side substitutes to the service for which the hypothetical monopolist has raised its price. Such suppliers are not relevant to supply-side substitution since they supply services already identified as demand-side substitutes. However, the impact of expansion by such suppliers can be taken into account in the assessment of market power.

Relevance of existing regulation – the modified Greenfield approach

- A7.23 When we conduct our analysis we use the modified Greenfield approach.²²⁶ This requires us to assess whether markets are effectively competitive from a forward-looking perspective in the absence of any regulation that would result from a finding of SMP. To do otherwise would be circular.

²²⁴ This reflects the terminology used by the OFT (OFT, *Market definition*, December 2004, OFT403, www.of.gov.uk/shared_of/business_leaflets/ca98_guidelines/oft403.pdf).

²²⁵ Paragraph 3.2 of the OFT Market Definition Guidelines explains that ‘previous experience and common sense will normally indicate the narrowest potential market definition, which will be taken as the starting point for the analysis’.

²²⁶ See also Section 2.5 of the Explanatory Note to the 2014 EC Recommendation.

- A7.24 However, it remains appropriate to take into account *ex ante* regulation arising from SMP findings in markets either upstream from, or horizontally related to, the services of interest.

Bundling

- A7.25 A common feature of the retail telecoms sector is the supply of bundles of different services. However, the Explanatory Note explains that the fact that bundling is a trend observed at the retail level does not require the definition of retail market(s) for bundles. This is because evidence to date has not indicated that there is a need for *ex ante* regulation of bundles, which may contain a previously regulated input.²²⁷
- A7.26 The Explanatory Note goes on to explain that what matters in this regard is that:

“NRAs are able to ensure that the vertically integrated SMP operator’s regulated elements of the bundle can be effectively replicated (in terms of both technical and economic replicability) at the retail level, without an implicit extension of regulation to other components which are available under competitive conditions”.

Aggregating markets

- A7.27 In certain circumstances, it may also be appropriate to define a product or geographic market by grouping together services despite the absence of demand- and supply-side substitutability.

Homogeneity of competitive conditions

- A7.28 Aggregating markets on the basis of the homogeneity of competitive conditions can help streamline the subsequent market power analysis by reducing the need to review multiple markets for products, the provision of which is subject to homogeneous competitive conditions.
- A7.29 However, combining products and services based on homogenous competitive conditions, is – by definition – only appropriate where this would not substantively alter any subsequent findings of SMP (relative to defining those markets separately).
- A7.30 Our approach also takes into account the SMP Guidelines. In particular, in the context of geographic market analysis, the SMP Guidelines state that:

“According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different. [...]”²²⁸

- A7.31 Hence, subject to the relevant caveats above, where there are products (or geographic areas) where competitive conditions are sufficiently homogeneous, the

²²⁷ See Section 3.2 of the Explanatory Note to the 2014 EC Recommendation.

²²⁸ See paragraph 56 of the SMP Guidelines.

definition of the relevant market will include all of those products (or geographic areas) within one market.

Common pricing constraints

A7.32 Another factor that is sometimes considered in setting market boundaries is whether there exist common pricing constraints across customers, services or geographic areas (for example, areas in which a firm voluntarily offers its services at a uniform price). Where common pricing constraints exist, the products or geographic areas in which they apply could be included within the same relevant market even if demand-side and supply-side substitution is limited (or absent). Failure to consider the existence of a common pricing constraint could lead to unduly narrow markets being defined.

Geographic market

A7.33 In addition to the product(s) to be included within a market, market definition requires us to specify the geographic extent of the market in which conditions of competition are sufficiently similar.

A7.34 One approach would be to begin with a narrowly defined geographic area and then consider whether a price increase by a hypothetical monopolist in that area would encourage customers to switch to suppliers located outside the area (demand-side substitution) or telecoms providers outside the area to begin to offer services in the area (supply-side substitution). If demand- and/or supply-side substitution is sufficient to constrain prices, then it is appropriate to expand the geographic market boundary.

A7.35 We recognise that in certain communications (product) markets, there may be different competitive conditions in different geographic areas. In this case, we therefore have to consider whether it is appropriate to identify separate geographic markets for some services. Defining separate markets by geographic area may be problematic because, due to the dynamic nature of communications markets, the boundary between areas where there are different competitive pressures may be unstable and change over time.

A7.36 An alternative approach is to define geographic markets in a broader sense. This involves defining a single geographic market but recognising that this single market has local geographic characteristics. That is to say, recognising that within the single market there are geographic areas where competition is more developed than in other geographic areas. This avoids the difficulties of defining and remedying large numbers of markets and instability in the definition over time. Such an approach may also include the aggregation of markets as discussed above.

Market power assessment

A7.37 Having identified the relevant product and geographic market(s) and, where relevant having identified the market as susceptible to *ex ante* regulation, we go on to analyse each market in order to assess whether any person or persons have SMP as defined in section 78 of the Act (construed in accordance with Article 14 of the Framework Directive). Section 78 of the Act provides that SMP is defined as being equivalent to the competition law concept of dominance in accordance with Article 14(2) of the Framework Directive which provides:

“An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.”

A7.38 Further, Article 14(3) of the Framework Directive states that:

“Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking.”

A7.39 Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking or undertakings enjoy a position of dominance. Also, an undertaking may be designated as having SMP where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power.

A7.40 In assessing whether an undertaking has SMP, we take due account of the SMP Guidelines as we are required to do under section 79 of the Act.

The criteria for assessing SMP

A7.41 The SMP Guidelines require NRAs to assess whether competition in a market is effective. This assessment is undertaken through a forward-looking evaluation of the market (i.e. determining whether the market is prospectively competitive), taking into account foreseeable developments and a number of relevant criteria.²²⁹

A7.42 Our assessments of SMP are concerned with the prospects for competition over the review period of three years. Ultimately, we want to understand how the markets are likely to develop, and whether competition is likely to be, or become, effective during this review period. Below we set out certain key factors that we are likely to consider when assessing SMP.²³⁰

A7.43 Where a market is found to be competitive then no SMP conditions can be imposed. Section 84(4) of the Act requires that any SMP condition in that market, applying to a person by reference to a market power determination made on the basis of an earlier analysis, must be revoked.

Market shares

A7.44 In the SMP Guidelines, the EC discusses market shares as being an indicator of (although not sufficient to establish) market power:

“...Market shares are often used as a proxy for market power. Although a high market share alone is not sufficient to establish the possession of significant market power (dominance), it is unlikely

²²⁹ See, for example, paragraphs 19 and 20, and the opening words of paragraph 75, of the SMP Guidelines.

²³⁰ The factors listed in this annex are not intended to be exhaustive and other evidence may be relevant.

that a firm without a significant share of the relevant market would be in a dominant position. Thus, undertakings with market shares of no more than 25% are not likely to enjoy a (single) dominant position on the market concerned. In the Commission's decision making practice, single dominance concerns normally arise in the case of undertakings with market shares of over 40%, although the Commission may in some cases have concerns about dominance even with lower market shares, as dominance may occur without the existence of a large market share. According to established case-law, very large market shares – in excess of 50% – are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position...²³¹

A7.45 Market shares and market share trends provide an indication of how competitive a market has been in the past. If a firm has a persistently high market share, then that in itself gives rise to a presumption of SMP. However, changes in market share are also relevant to our assessment of prospects for competition. For example, a market share trend which shows a decline may suggest that competition will provide an effective constraint within the time period over which the SMP assessment is being conducted, although it does not preclude the finding of SMP.²³²

Other factors affecting competitive constraints

A7.46 In addition to market shares, the SMP Guidelines set out a number of criteria that can be used by NRAs to measure the power of an undertaking to behave to an appreciable extent independently of its competitors, customers and consumers, including:²³³

- the overall size of the undertaking;
- control of infrastructure not easily duplicated;
- technological advantages or superiority;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;
- vertical integration;
- highly developed distribution and sales network;
- absence of potential competition; and
- barriers to expansion.

²³¹ Paragraph 75 of the SMP Guidelines.

²³² Paragraph 75 of the SMP Guidelines.

²³³ SMP Guidelines, paragraph 78.

A7.47 A dominant position can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

A7.48 An SMP analysis may also take into account the extent to which products or services within the market are differentiated. The constraint from products or services outside the relevant market may also be a relevant factor.

Excessive pricing and profitability

A7.49 In a competitive market, individual firms should not be able to persistently raise prices above costs and sustain excess profits.

A7.50 The ability, therefore, to price at a level that keeps profits persistently and significantly above the competitive level is an important indicator of market power. The SMP Guidelines refer to the importance, when assessing market power on an *ex ante* basis, of considering the power of undertakings to raise prices without incurring a significant loss of sales or revenue.²³⁴ Factors that may explain excess profits in the short term, such as greater innovation and efficiency, or unexpected changes in demand, should however be considered in interpreting high profit figures.

A7.51 However, consistently low profits, i.e. profits at or below the cost of capital, cannot be taken as evidence of an absence of market power. It may simply be evidence of inefficiency or other factors such as predatory pricing. For example, if a firm with SMP were to have inefficiently high costs, it may charge a price above the level we would expect to see in a competitive market but this would not result in high profits. In addition, price regulation exists in many of the wholesale markets considered, and therefore low profits may simply be the result of existing regulation rather than a reflection of the underlying competitive conditions.

Barriers to entry and expansion

A7.52 Entry barriers are important in the assessment of potential competition.²³⁵ The lower entry barriers are, the more likely it is that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels. Moreover, the competitive constraint imposed by potential entrants is not simply about introducing a new product to the market. To be an effective competitive constraint, a new entrant must be able to attain a large enough scale to have a competitive impact on undertakings already in the market. This may entail entry on a small scale, followed by growth. Accordingly, whether there are barriers to expansion is also relevant to an SMP assessment. Many of the factors that may make entry harder might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact.

A7.53 A related factor is the growth in demand in the market. In general, telecoms providers are more willing to invest in a growing market (and less willing in a declining market). As a result, barriers to entry and expansion tend to be less of an impediment to competition in rapidly growing markets.

²³⁴ Paragraph 73 of the SMP Guidelines.

²³⁵ Paragraph 80 of the SMP Guidelines.

Countervailing buyer power

- A7.54 A concentrated market need not lead to harmful outcomes if buyers have sufficient countervailing buyer power to curtail the exercise of market power. In general, purchasers may have a degree of buyer power where they purchase large volumes and can make a credible threat to switch supplier or to meet their requirements through self-supply to a significant degree. It is important to note, however, that the volumes involved must be large enough to make a material difference to the profitability of the current supplier. That is, an individual wholesale customer must represent a significant proportion of the total volume supplied by the relevant telecoms provider.

Annex 8

Geographic analysis

A8.1 A key part of the process for our geographic market assessment is our analysis of data provided by telecoms providers regarding the geographic reach of their networks. This annex describes the approach and results of this geographical analysis.

A8.2 As described in Section 4, we use the local exchange as the relevant geographic unit in our assessment. At present, there are 5,571 local exchanges in BT's network.²³⁶

A8.3 The rest of this annex is structured as follows:

- data sources (from telecoms providers and other sources) used to conduct our analysis and an overview of our model;
- analysis of BT exchanges
- data on active circuits;
- grouping of exchanges and sensitivity analysis; and
- a map showing the geographic areas falling within Market A and Market B.

Data sources and model overview

A8.4 The inputs to our model come from the following sources:

²³⁶ As discussed in Section 4, we define the Hull Area (where KCOM is the predominant fixed network provider) as a separate geographical market. Accordingly, this Annex focuses on the UK excluding the Hull Area.

Table A8.1: Inputs and source

	Source	Description	Reference
1	Ordnance Survey	Delivery Points (DPs) per postcode for Northern Ireland (NI).	Ordnance Survey, AddressBase Premium Islands, Epoch 40, April 2016.
2	Ordnance Survey	DPs per postcode, for the UK excluding NI.	Ordnance Survey AddressBase Plus, March 2016.
3	Openreach	Correlation between BT Local Exchange Codes and Postcodes.	BT response to 1 st S135 Request, 8 October 2015.
4	Openreach	Number of MPF/SMPF active circuits, per Openreach customer, per BT Local Exchange.	BT response to S135 Request, 2 November 2016.
5	Openreach	Openreach customers' plans to roll-out LLU to BT Local Exchanges	BT response to S135 Request, 2 November 2016.
6	Virgin Media	Number of premises passed by Virgin Media's cable network.	Virgin Media response to 1 st S135 Request, 16 October 2015.
7	Virgin Media	Number of premises served by Virgin Media's cable network.	Virgin Media response to 1 st S135 Request, 16 October 2015.
8	BT Wholesale	IP Stream ADSL active circuits per BT Local Exchange and per BT Wholesale customer.	BT response to S135 Request, 2 November 2016.
9	BT Wholesale	WBC ADSL active circuits per BT Local Exchange and per BT Wholesale customer.	BT response to S135 Request, 2 November 2016.
10	Openreach	Number of premises reached by Openreach's fibre-enabled cabinets.	BT response to S135 request, 2 November 2016.
11	Openreach	Correlation between each fibre-enabled cabinet and serving Copper and Fibre Exchanges.	BT response to S135 request, 2 November 2016.
12	Openreach	Number of FTTC active circuits, per Openreach customer, per cabinet.	BT response to S135 request, 2 November 2016.
13	Openreach	List of cabinets where Openreach has confirmed plans to rollout fibre and number of premises.	BT response to S135 request, 2 November 2016.
14	Openreach	Correlation between each cabinet where Openreach has confirmed plans to rollout fibre and corresponding Copper and Fibre Exchanges.	BT response to S135 request, 2 November 2016.
16	Openreach	Test exchange codes, to be excluded from the analysis.	BT response to 1 st S135 Request, 8 October 2015.
17	Openreach	Invalid CP names in the data, used by BT for system testing only.	BT response to 1 st S135 request, 8 October 2015.
18	Openreach	MDF Codes of merged BT exchanges	BT response to 1 st S135 request, 8 October 2015 and correspondence from 17 March 2016.

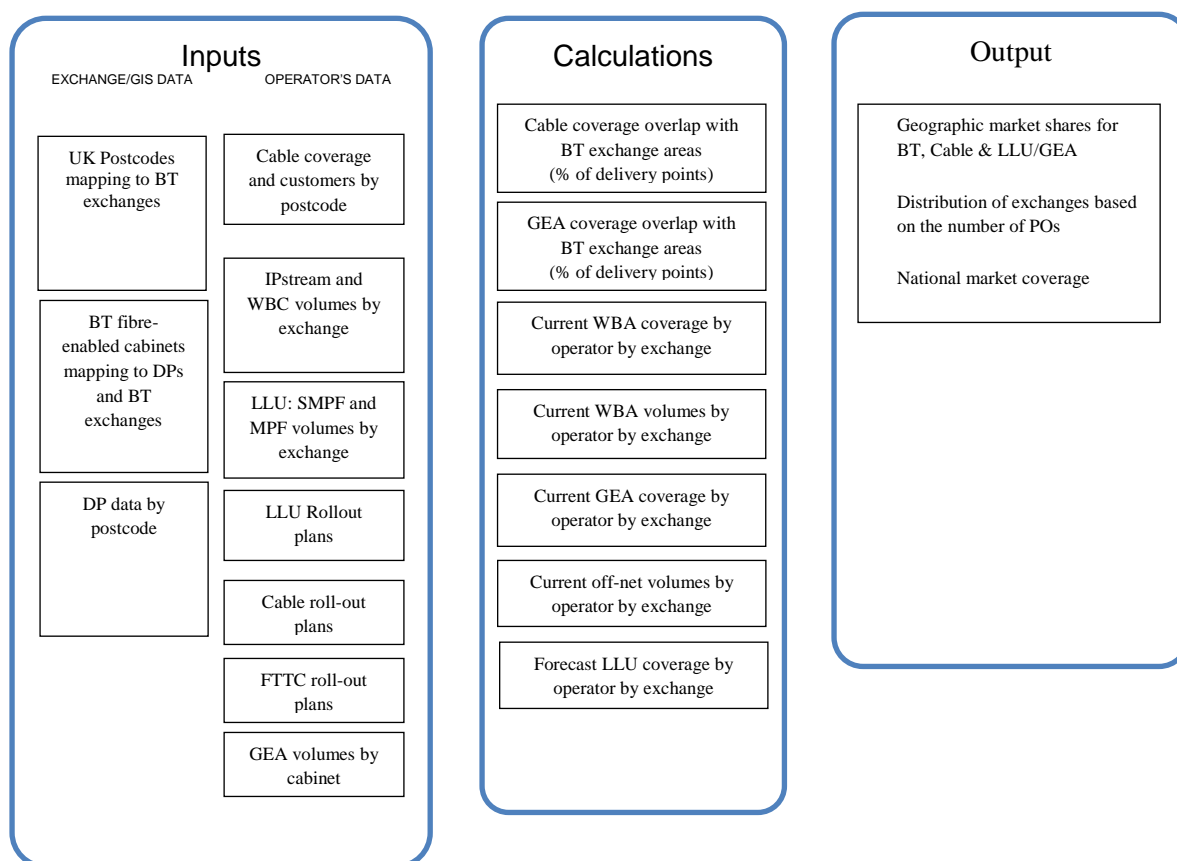
Overview of the structure of the model

A8.5 Figure A8.2 shows an overview of the main steps (inputs, calculations and outputs) of the model we used to assess and define geographic markets.

A8.6 The model determines the number of exchanges with any given number of operators present and the wholesale market shares within each of those exchanges. It also determines the national coverage of each operator in terms of exchanges and premises. We note that, throughout the model, we use the term

Delivery Point (DP) to refer to a range of premises where broadband can be delivered, not just residential buildings.

Figure A8.2: Overview of the model



Analysis of BT's exchanges

- A8.7 We have examined the data from BT as provided in responses to information requests (as set out in Table A8.1 above) against that used in the 2014 WBA Statement.
- A8.8 In the 2014 WBA Statement, we included 5,586 BT exchanges in our defined geographic markets (Market A, Market B) excluding the Hull Area. This included 26 exchanges where BT informed us it did not provide broadband services.
- A8.9 Since then, BT has merged some of its exchanges. Specifically, exchange CLFAR has been merged with CLWOO, CLFLE with CLMOO, CLHOL with CLCOV, EACHU with EAHLW, LNCNW with LNPOP, LWXEK with LWSKY, NSDIN with NSABO, SDGTWCK with SDHRLY, STBUCKH with STBEULI, SWRTH with SWCFATE, THSL/UD with THSL, WRBEL and WRSLO have been merged with WRSKEN, and WRECT and WRWKEN have been merged with WRFULM.
- A8.10 Furthermore, exchange SWNE/CH has been renamed to SWMCH, SWMT/EX has been renamed to SWMTEX, and SWNE/EX has been renamed to SWNEEX.
- A8.11 CMCVROM has been identified as no longer used and STWHTLY is a new exchange, where BT Wholesale provides IPstream and WBC services to several operators.

A8.12 Finally, there are also 19 exchanges where BT informed us it does not provide broadband services. These are: NSBAY, NSBNS, NSBRN, NSBVS, NSCRN, NSDRN, NSGRE, NSGRO, NSLMD, NSLPT, NSMAN, NSNBY, NSSCP, NSSOL, NSSPY, NSSST, NSTIM, SDSTMRD, and SDSTTN.

A8.13 These changes leave 5,571 exchanges.

Exchange size calculation

A8.14 For the purposes of our analysis, we used Ordnance Survey's AddressBase Plus database, which contains the current properties in the UK (excl. Northern Ireland), including addresses sourced from local authorities, Ordnance Survey and Royal Mail, all provided with an UPRN (Unique Property Reference Number). We note that this database has more records than CodePoint that we used in the last market review, as it includes objects without postal addresses and live records captured by local authorities but not matched to Royal Mail's Postcode Address File (PAF) data.²³⁷ We filtered out PO boxes and properties that were marked as "Demolished" or "Planning permission granted". We also removed parent records for properties with multiple occupancies, to prevent double counting. In addition, we filtered out classes of premises where we do not consider a broadband connection is likely to be delivered (e.g. "Woodland", "Named Pond", "Manhole/shaft", etc.). We finally counted the number of records in each postcode to estimate the number of DPs, and removed postcodes from the Hull Area.

A8.15 A similar approach to estimating the number of DPs by postcode in Northern Ireland was taken, using Ordnance Survey's AddressBase Premium Islands database. The two data sets were then combined into a single database. The combined database features 31,097,588 DPs. This is 8.62% higher than the DPs identified in the last market review (28,627,237). We believe that much of this increase is likely to be down to more detailed information on multiple occupancy premises. We expect that much of these newly identified multiple occupancy premises are located in urban areas rather than rural areas.

A8.16 The first step in our analysis is to estimate the total number of DPs in each exchange (the exchange size). To do this, we map each UK DP to a local exchange, by combining Ordnance Survey delivery point data for UK postcodes with BT's data mapping UK postcodes to each exchange. This allows us to estimate the size of each local exchange, in terms of the total number of DPs served.

A8.17 A small amount of data loss occurs in this process because: (i) some postcodes are being served by two or more exchanges; and (ii) some postcodes could not be matched.

A8.18 We considered several ways of allocating DPs to exchanges, to avoid double counting of postcodes being partly served by more than one exchange.

A8.19 We identified 24,071 postcodes which are being served by two, three or four different exchanges. These represent 488,674 DPs (1.56% of the total number of DPs in the UK).²³⁸ We do not have information at the granularity of individual DPs which would allow us to precisely identify which exchange each DP in these postcodes is served by.

²³⁷ Ordnance Survey AddressBase Plus Technical Specification v2.2 June 2015.

²³⁸ Ofcom calculations based on BT response to 1st s.135 request, 8 October 2015.

- A8.20 Given that we do not have information that would allow a more precise allocation of these DPs, we have considered how to treat them in our analysis. We could allocate DPs in each of the postcodes either to just one exchange area that serves that postcode, or share them between the exchange areas. Given that we do not have any information on how the premises in these postcodes are actually distributed between exchanges we consider either of these approaches could be used and on average will yield similar results in terms of the allocation of DPs between types of exchanges. However, the approach of allocating all DPs in a postcode to just one exchange area is simpler to implement and therefore our preferred approach.
- A8.21 We consider that allocating these postcodes to the relevant exchanges on a random basis avoids introducing any bias as to whether they are allocated to particular types of exchanges (e.g. Market A or Market B exchanges). We have therefore allocated the DPs in each of these postcodes to the first exchange name alphabetically from the list of exchanges that serve that specific postcode. We consider this to be a randomised approach with no bias towards allocating these postcodes to particular exchange types.
- A8.22 The main impact of this allocation of DPs is to affect our estimates of the size (in terms of DPs) of geographic markets, since some postcodes could be allocated to different exchanges which are within different geographic markets. In order to test the impact of our approach to these postcodes, we have examined how their allocation could affect our estimate of the size of different geographic markets. We identified the subset of postcodes being partly served by exchanges belonging to different geographic markets and found that this comprised 3,733 postcodes or 54,065 DPs, which represent 0.17% of UK DPs. The remaining 20,338 postcodes, corresponding to 434,610 DPs or 1.38% of UK's DPs, would not change geographic market if our allocation approach was different. We therefore consider that number of postcodes and the corresponding number of DPs that may be impacted by this allocation is very small.
- A8.23 In terms of the impact on the actual classification of exchanges, the allocation of DPs will only have an impact if the addition or exclusion of these DPs, from a particular exchange area, alters the estimated cable or fibre coverage of that area to the extent that it falls above or below the identified threshold. We have analysed the impact of these thresholds in more detail in section 4. In any case, as noted above, we do not have information at the granularity of DPs, which would allow us to classify these areas with higher precision.
- A8.24 Also, we note that we were unable to match 1.95% (31,696) of BT's postcodes, accounting for 1.20% of UK DPs.²³⁹ We compensated for this by uplifting the number of DPs in each exchange area by 11.9 DPs for each unmatched postcode served by each exchange area, i.e. the uplift is in proportion to the number of the unmatched postcodes in each exchange area.

Data on active circuits

- A8.25 We have used data received from telecoms providers to assess where telecoms providers are present in providing telecoms services.
- A8.26 The data from Openreach on active circuits includes broadband connections provided via MPF and SMPF on BT's copper network (either by BT or by an LLU

operator) and via superfast broadband connections provided via BT's fibre-enabled cabinets (GEA).

- A8.27 The data from Virgin Media includes active circuits using its cable network.
- A8.28 We recognise that some active circuits will be used for services we propose are outside the WBA market, such as symmetric services including Ethernet in the First Mile (EFM). Given the low proportion of active circuits within our analysis that fall outside the WBA market, we do not believe this is likely to have a significant effect on our analysis.

The principal operators (POs)

- A8.29 As discussed in paragraphs 4.38 to 4.42, we have defined five POs upon which our forward looking geographic market assessment is based. These are BT, Sky, TalkTalk, Virgin and Vodafone.

LLU roll-out plan data

- A8.30 We have analysed data on telecoms providers' planned roll-out of infrastructure to take advantage of LLU. The information on future roll-out plans identified the stages of each telecoms provider's most recent forecast roll-out plans based on Openreach's infrastructure planning process, namely:
- Step 1: Advanced Provisioning Order (APO) submitted by CP;
 - Step 2: APO survey completed by Openreach;
 - Step 3: Firm order submitted by CP;
 - Step 4: Multi User Area (MUA) build completed by Openreach; and
 - Steps 5 and 6: Point of Presence (POP) install completed and handed over to CP.
- A8.31 The first two steps provide telecoms providers with a view on whether their proposed roll-outs are feasible or not. Once Openreach responds (step 2), telecoms providers may confirm their order to Openreach (step 3). On receipt of a firm order Openreach carries out the necessary work to prepare, build and handover the LLU space to its telecoms provider customer (steps 4 to 6).
- A8.32 We consider planned LLU roll-out at either step 1 or 2 as "uncommitted", since there is little commitment to proceed with the order (or penalty associated with not proceeding). Once a firm order is submitted (step 3) we consider the roll-out to be "committed" because we consider it unlikely that an operator reaching Stage 3 (the 'Firm order received' stage) would reverse its decision to unbundle the exchange. This distinction between "committed" and "uncommitted" roll-out is consistent with our approach in the 2014 WBA Statement.²⁴⁰ We only include "committed" planned roll-out into our allocation of exchanges into geographic markets.

²⁴⁰ 2014 WBA Statement, paragraphs 4.99 – 4.115.

BT's FTTC network and overlap calculations

- A8.33 Alongside its copper network, BT has made significant progress in the deployment of FTTC. Its FTTC deployment is served from a subset of its local exchanges (which we call fibre-serving exchanges). Fibre-serving exchanges serve significantly wider geographic areas than a copper exchange could serve for the provision of broadband. A fibre-enabled cabinet may be served via copper and fibre from the same exchange or from different exchanges. Similarly, different groups of cabinets in a copper exchange area will be served by the same copper exchange but may be served by different fibre-serving exchanges. Some cabinets will not be fibre-enabled at all.
- A8.34 A telecoms provider can provide superfast broadband and related services to customers within a copper exchange area if its network reaches the corresponding fibre-serving exchanges.
- A8.35 We consider a CP to be present in the geographic area served by a BT copper exchange if the coverage of the fibre network that the CP's network can reach via fibre-serving exchanges is greater than 65% (in terms of DPs in the copper exchange). We discussed the choice of this threshold in more detail in paragraphs 4.57-4.65.
- A8.36 To calculate this threshold, we used data provided by BT on its fibre access network: the location of each fibre-enabled cabinet, its copper and fibre serving exchange(s), the number of DPs a cabinet serves in each postcode and the number of FTTC lines it serves on behalf of each telecoms provider. Data on planned fibre rollout with a similar level of granularity was also provided by BT.

Virgin Media's network and cable overlap calculations

- A8.37 Virgin Media provided data on its broadband cable coverage by specifying the number of DPs it can presently offer service to in each postcode and the number of DPs it is currently serving. We confirmed that this data relies on assumptions that are in line with Ordnance Survey's CodePoint database.²⁴¹
- A8.38 Our choice of AddressBase Plus in this market review means that some postcodes now appear to have significantly higher estimated number of DPs compared to what was reported in CodePoint. To compensate for this, we calculated an uplift factor/adjustment for each UK postcode that is equal to the proportion of DPs reported in AddressBase Plus over the number of DPs reported in CodePoint; we then applied this uplift factor to Virgin Media's estimates.
- A8.39 Furthermore, since Virgin Media's footprint does not align exactly with BT exchange areas, we have had to map Virgin Media's network onto BT's local exchange areas, to assess competitive conditions within each exchange area (our relevant geographic unit).
- A8.40 The data provided by Virgin Media had a minor inconsistency in that some premises that were served or passed by Virgin Media could not be mapped onto any of BT's local exchanges.
- A8.41 To deal with the issue, we uplifted the number of premises Virgin Media served or passed in other areas by the proportion of premises that could not be mapped. The

²⁴¹ Virgin Media's email, 6 September 2016.

unmapped served premises account for 0.13% of the total number of DPs passed. The corresponding uplift factor is small and it is very unlikely to affect our assessment. As such, we have attempted to reduce the mismatch of postcodes but, taking into consideration that the underlying datasets are provided by different stakeholders and they are based on different databases of UK postcodes, we do not consider it practically feasible to perfectly match all postcodes.

- A8.42 In terms of UK DPs, Virgin Media coverage increased [X] between December 2012 and October 2015.²⁴² The increase is partly attributed to additional network being rolled out by Virgin Media, as well as the fact that we are using new, more detailed data on premises with multiple occupancies, typically in urban, densely populated areas (as explained earlier).
- A8.43 As set out in Section 4, we consider Virgin as being present within a local exchange when the overlap is at least 65%. At the end of October 2015, there were [X] local exchanges where Virgin Media's coverage is at least 65%. In comparison, at end of December 2012, there were [X] exchanges where Virgin's overlap was at least 65%.²⁴³
- A8.44 We have not considered Virgin Media's roll-out plans, for reasons explained in paragraph 4.47.

Grouping of exchanges and sensitivity analysis

- A8.45 Once we have determined the exchanges in which we consider POs to be present we allocate exchanges into two distinct geographic markets. We place exchanges where only BT, or BT+1PO are present into Market A and exchanges where BT+2 or more POs into Market B.
- A8.46 In summary, the two geographic UK WBA markets excluding Hull are shown in Table A8.3 below.

Table A8.3: Geographic market definition, December 2016

	Number of exchanges	UK coverage
Market A	1,201	1.96%
Market B	4,370	97.32%

Source: Ofcom calculation from data provided by Openreach, Virgin and KCOM.

Sensitivity analysis to committed roll-out

- A8.47 For POs using LLU (excluding BT), we consider planned LLU deployments as explained in paragraphs A8.30 – A8.32 above. As explained in paragraph 4.47, we have not included Virgin Media's planned network roll-outs in our assessment. We

²⁴² Ofcom calculations based on BT response to 1st s.135 Request, 8 October 2015 and Virgin Media response to 1st s.135 Request, 16 October 2015.

²⁴³ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin Media response to 1st s.135 Request, 16 October 2015.

show the sensitivity to committed roll-out, as opposed to no roll-out, in Table A8.4 below.

Table A8.4: Impact of LLU and Fibre Rollout

	No. of exchanges and proportion of UK premises without accounting for planned LLU & Fibre roll-out		No. of exchanges and proportion of UK premises with accounting for "committed" planned LLU & Fibre roll-out	
Market A	1336	2.34%	1201	1.96%
Market B	4235	96.94%	4370	97.32%

Source: Ofcom calculation from data provided by Openreach and Virgin.²⁴⁴

Sensitivity analysis for Virgin Media and FTTC coverage threshold

A8.48 To inform our assessment, we have conducted further analysis to consider the impact of reducing the threshold that determines whether Virgin Media and BT's FTTC are present at the level of an exchange. Table A8.5 shows that 0.69% of UK premises would be reclassified if the threshold is moved from 65% to 50% and 1.02% being reclassified if the threshold is moved from 65% to 80%.²⁴⁵ We also set out the impact of the sensitivity to the thresholds in paragraph 4.63.

Table A8.5: Impact of altering cable and fibre operator presence threshold

	No. of exchanges and proportion of UK premises where threshold $\geq 50\%$		No. of exchanges and proportion of UK premises where threshold $\geq 65\%$		No. of exchanges and proportion of UK premises where threshold $\geq 80\%$	
Market A	906	1.27%	1201	1.96%	1605	2.97%
Market B	4665	98%	4370	97.32%	3966	96.30%

Source: Ofcom calculation from data provided by Openreach and Virgin.²⁴⁶

A8.49 Table A8.6 shows that no premises would be reclassified if the cable operator's presence threshold is moved from 65% to 50% and less than 0.01% (only one exchange) being reclassified if the threshold is moved from 65% to 80%.²⁴⁷

²⁴⁴ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin response to 1st S135 Request, 16 October 2015.

²⁴⁵ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin response to 1st S135 Request, 16 October 2015.

²⁴⁶ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin response to 1st S135 Request, 16 October 2015.

²⁴⁷ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin response to 1st S135 Request, 16 October 2015.

Table A8.6: Impact of altering cable operator presence threshold only

	No. of exchanges and proportion of UK premises where threshold $\geq 50\%$		No. of exchanges and proportion of UK premises where threshold $\geq 65\%$		No. of exchanges and proportion of UK premises where threshold $\geq 80\%$	
Market A	1201	1.96%	1201	1.96%	1202	1.97%
Market B	4370	97.32%	4370	97.32%	4369	97.32%

Source: Ofcom calculation from data provided by Openreach and Virgin.²⁴⁸

Comparison with 2014 WBA

A8.50 Table A8.7 provides a comparison between the market definition (excluding the Hull Area) in the 2014 WBA market review and our proposed market definition in this consultation. It shows the number of exchanges classified in Markets A and B in 2014, further broken down by the number of POs. The table compares this with the number of exchanges we propose to classify in Markets A and B in this consultation. These exchanges are also broken down by number of POs.

Table A8.7: Breakdown of exchanges in Market A and Market B in the 2014 WBA market review and as proposed in this consultation

	Exchanges in 2014			Exchanges for this review		
Market A	3,170 ²⁴⁹	2508	BT-only	1099	1,182 ²⁵⁰	Market A
		662	BT+1	83		
Market B	2,390	1124	BT+2	295	4,370	Market B
		721	BT+3	2611		
		545	BT+4	1464		

Source: Ofcom calculation from data provided by Openreach and Virgin.

²⁴⁸ Ofcom calculations based on BT response to 1st S135 Request, 8 October 2015 and Virgin response to 1st S135 Request, 16 October 2015.

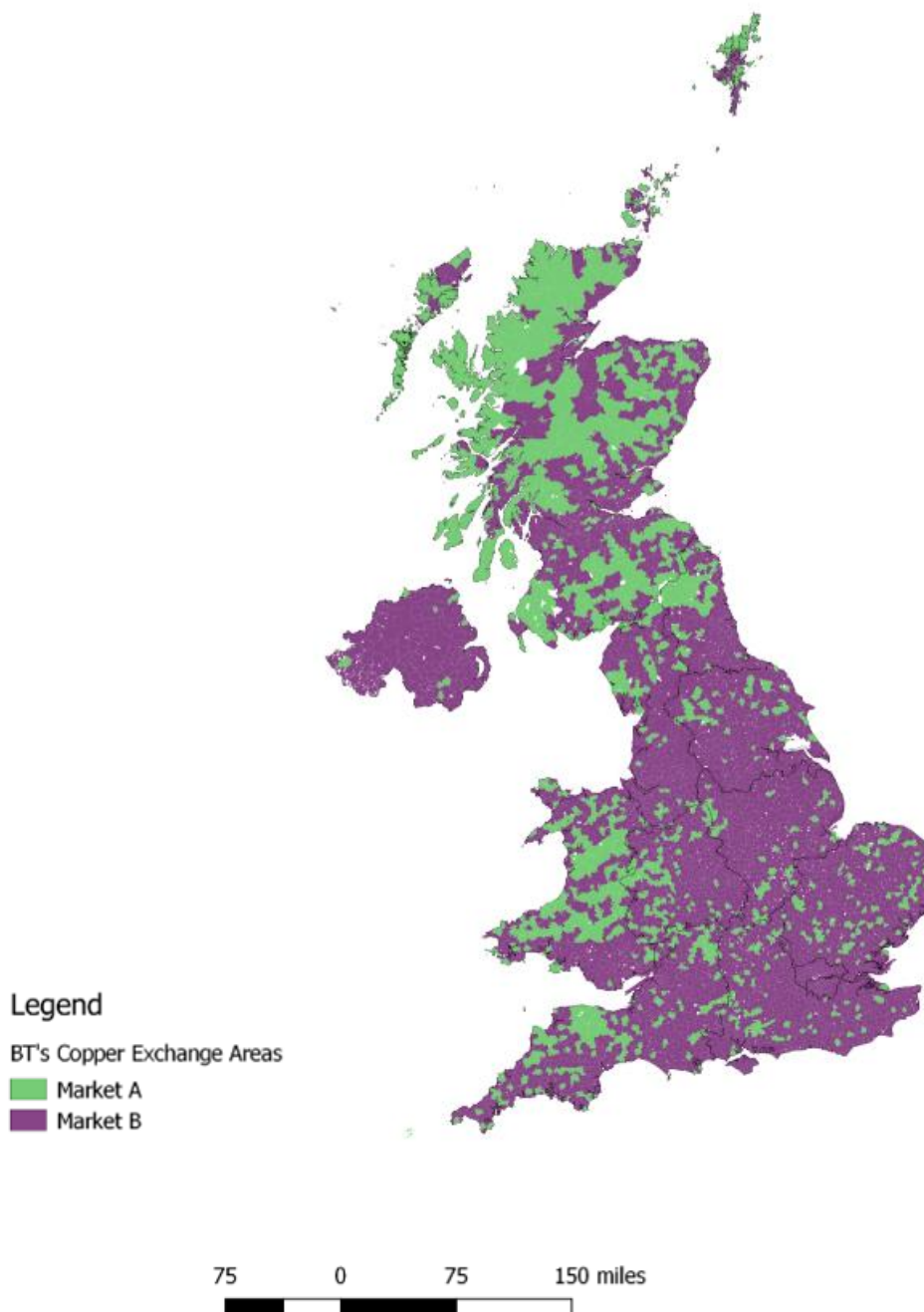
²⁴⁹ In the 2014 WBA Statement, Market A also included 26 exchanges in which there are no current active telecoms providers, as we explained in paragraph A8.11. This means Market A actually contained 3,196 exchanges.

²⁵⁰ Market A also includes 19 exchanges in which there are no current active telecoms providers, as we explained in paragraph A8.15. This means that Market A contains 1,201 exchanges.

Map of geographical coverage of markets

A8.51 Figure A8.8 provides a geographic representation of Market A and Market B, highlighting those parts of the country covered by each Market.

Figure A8.8: Geographical map of Market A and Market B coverage



Annex 9

Equality Impact Assessment

Introduction

- A9.1 Ofcom is required by statute to assess the potential impact of all our functions, policies, projects and practices on the following equality groups: age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation.²⁵¹ An equality impact assessment (EIA) also assists us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- A9.2 Unless we state otherwise in this document, it is not apparent to us that our proposed remedies will have a differential impact on any particular group of consumers or equality group.
- A9.3 Further, we have not considered it necessary to carry out separate EIAs in relation to additional equality groups in Northern Ireland: political opinion and dependants.²⁵² This is because we anticipate that our proposals would not have a differential impact on people in Northern Ireland with those characteristics compared to consumers in general.

Equality impact assessment

- A9.4 We have considered whether the proposed remedies would have a differential impact on any particular group of consumers. In particular, we have considered whether the proposed remedies would have a different or adverse effect on UK consumers and citizens with respect to the following equality groups: age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation, and, in Northern Ireland, political opinion and persons with dependants.
- A9.5 The intention behind our approach to regulating the WBA markets is to promote competition to the ultimate benefit of end consumers by, for example, requiring any telecoms provider with significant market power (SMP) to provide access to their networks on regulated terms (including charging).
- A9.6 Ofcom regularly carries out market research to understand how certain equality groups engage with communication services.²⁵³ We have used this research to inform our equality impact assessment.

²⁵¹ Ofcom has a general duty under the 2010 Equality Act to have due regard to the need to eliminate discrimination, advance equality of opportunity between those who share a relevant 'protected characteristic' (age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation) and those who do not, and to foster good relations between persons who share a relevant protected characteristic and those who do not.

²⁵² In addition to the characteristics protected under the 2010 Equality Act, under Northern Ireland equality legislation persons who have dependents or hold a particular political opinion are also protected.

²⁵³ https://www.ofcom.org.uk/_data/assets/pdf_file/0015/101292/technology-tracker-data-tables-h1-2017.pdf and https://www.ofcom.org.uk/_data/assets/pdf_file/0029/96941/Disabled-consumers-access-and-use-of-communications-services-and-devices-2016.pdf

- A9.7 While our research identifies some differences in take-up and use of fixed line services by different groups (e.g. based on age), our proposed regulation is aimed at promoting competition across the range of services that rely on WBA. We therefore do not consider that our proposals will have a differential or detrimental impact on any defined equality group. Rather, we consider that our proposals will further the interests of all consumers that use retail services reliant on WBA, including those that share relevant protected characteristics.

Annex 10

Glossary

4G: Fourth generation of mobile telephony systems, including the LTE technology standard.

Access Network: The part of the network that connects directly to customers from the local exchange.

Asymmetric Digital Subscriber Line (ADSL): A type of digital subscriber line technology, a data communications technology that enables faster data transmission over copper telephone lines rather than a conventional voiceband modem can provide.

Bandwidth: The rate at which data can be transmitted. Usually expressed in bits per second (bit/s). Also sometimes known as throughput.

BDUK: Broadband Delivery UK.

BEREC: Body of European Regulators for Electronic Communications.

BT: British Telecommunications plc.

BT Consumer: A division of BT concerned with the consumer retail market.

BT Wholesale & Ventures: The division of BT which provides wholesale services to communications providers.

Charge Control: A control which sets the maximum price that a telecoms provider can charge for a particular product or service (or basket of products or services). Most charge controls are imposed for a defined period.

CMR: Ofcom's Communications Market Reports.

Competition and Markets Authority (CMA): An independent public body that brings together the previous role of the Competition Commission as well as many of the competition and consumer functions of the OFT.

Connected Nations Report: An annual report published by Ofcom the availability and quality of broadband across the UK.

Consumer Price Index (CPI): The official measure of inflation of consumer prices in the United Kingdom.

Core Network: The backbone of a communications network, which carries different services such as voice or data around the country.

D-side: Distribution side. The segment of BT's access network between the Primary Cross Connection Points (street cabinets) and Distribution Points.

DCMS: Department of Culture, Media and Sport.

Digital Subscriber Line (DSL): A family of technologies generically referred to as DSL, or xDSL used to add a broadband service to an existing phone line provided using a pair of copper wires (known as a twisted copper pair).

Digital Subscriber Line Access Multiplexer (DSLAM): A network device, located in a telephone exchange or street cabinet that provides broadband services to multiple premises over the copper access network using DSL technologies.

Distribution Point (DP): A flexibility point in BT's access network where final connections to customer premises are connected to D-side cables. Usually either an underground joint or a connection point on a telegraph pole where dropwires are terminated.

Downstream BT: BT's downstream operations, by which we mean BT Consumer or any other downstream operation owned or operated by BT.

Duct and Pole Access (DPA): A wholesale access service allowing a telecoms provider to make use of the underground duct network and the telegraph poles of another telecoms provider.

Ducts: Underground pipes which hold copper and fibre lines.

E-side: Exchange side. The segment of BT's access network between telephone exchanges and Primary Cross Connection Points (street cabinets).

EC: European Commission.

Equivalence of Input (EOI): A remedy designed to prevent a vertically-integrated company from discriminating between its competitors and its own business in providing upstream inputs. This requires BT to provide the same wholesale products to all telecoms providers including BT's own downstream division on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes, and includes the provision to all telecoms providers (including BT) of the same commercial information about such products, services, systems and processes.

Ethernet: A packet-based technology originally developed for use in Local Area Networks (LANs) but now also widely used in telecoms providers' network for the transmission of data services.

FAMR: Fixed Access Market Review.

Fibre To The Cabinet (FTTC): An access network structure in which the optical fibre extends from the exchange to a street cabinet. The street cabinet is usually located only a few hundred metres from the subscriber's premises. The remaining part of the access network from the cabinet to the customer is usually copper wire but could use another technology, such as wireless.

Fibre To The Premises (FTTP): An access network structure in which the optical fibre network runs from the local exchange to the customer's house or business premises. The optical fibre may be point-to-point – there is one dedicated fibre connection for each home – or may use a shared infrastructure such as a GPON. Sometimes also referred to as Fibre to the home (FTTH), or full-fibre.

Fixed wireless: An access service where the connection between the network and the equipment located at the customer premises is provided over the radio access medium.

Full Time Equivalent (FTE): A measure of resources or work, defined by reference to the capacity of a full time employee. An FTE of 1 is equivalent to one full time employee.

Fully allocated cost (FAC): An accounting approach under which all the costs of the company are distributed between its various products and services. The fully allocated cost of a product or service may therefore include some common costs that are not directly attributable to the service.

G.fast: A DSL standard that supports higher bandwidth transmissions than ADSL and VDSL technologies over short copper lines.

Generic Ethernet Access (GEA): BT's wholesale service providing telecoms providers with access to BT's FTTC and FTTP networks in order to supply higher speed broadband services. BT currently meets its obligation to provide VULA using the GEA service.

Gigabit Passive Optical Network (GPON): A fibre access network architecture where part of the network is shared by multiple customers.

Hull Area: The area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under Section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc (KCOM).

Internet Protocol (IP): Packet data protocol used for routing and carriage of messages across the internet and similar networks.

Internet Service Provider (ISP): An organisation that provides internet access services.

Latency: A measure of delay in a telecommunications network, typically the transmission time for a packet of data to traverse the network.

Leased Line: A permanently connected communications link between two premises dedicated to the customer's exclusive use.

Local Loop: The access network connection between the customer's premises and the local serving exchange, usually comprised of two copper wires twisted together.

Local Loop Unbundling (LLU): A process by which a dominant provider's local loops are physically disconnected from its network and connected to a competing provider's networks. This enables operators other than the incumbent to use the local loop to provide services directly to customers.

Long Reach VDSL (LR-VDSL): LR-VDSL uses VDSL technology but makes use of the frequency ranges assigned to both ADSL and VDSL, and utilises higher signal power. LR-VDSL also uses vectoring to minimise the impact of cross-talk and interference, which would otherwise reduce the speed available to customers.

Main Distribution Frame (MDF): An internal wiring frame where local loops are terminated and connected to exchange equipment by jumpers.

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.

Modified Greenfield Approach: An approach to analysing markets, where we consider a hypothetical scenario in which there are no *ex ante* SMP remedies in the market being considered or in any markets downstream of it.

Next Generation Access (NGA) Networks: Wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over copper access networks. In most cases, NGAs are the result of an upgrade of an already existing copper or co-axial access network.

Next Generation Network (NGN): A network that uses IP technology in the core and backhaul to provide all services over a single platform.

NMR: Narrowband Market Review.

NRA: National Regulatory Authority.

Ofcom: The Office of Communications.

ONS: The Office of National Statistics.

Openreach: The access division of BT established by Undertakings in 2005.

Physical Infrastructure Access (PIA): A regulatory obligation under which BT is required to allow telecoms providers to deploy NGA networks in the physical infrastructure of its access network.

Primary Cross Connection Point (PCP): A street cabinet (or equivalent facility) located between the customer's premises and BT's local serving exchanges, which serves as an intermediary point of aggregation for BT's copper network.

Regulatory Financial Statements (RFS): The financial statements that BT is required to prepare by Ofcom. They include the published RFS and Additional Financial Information provided to Ofcom in confidence.

Shared Metallic Path Facility (SMPF)/Shared Access: The provision of access to the copper wires from the customer's premises to a BT MDF that allows a competing provider to provide the customer with broadband services, while BT continues to provide the customer with conventional narrowband communications.

Significant market power (SMP): The significant market power test is set out in European Directives. It is used by national regulatory authorities (NRAs), such as Ofcom, to identify those telecoms providers which must meet additional obligations under the relevant Directives.

Small and Medium Sized Enterprises (SME): Businesses with 249 or fewer employees.

Standard broadband (SBB): A broadband connection that can support a maximum download speed of less than 30Mb/s.

Statement of Requirements (SoR): A mechanism by which telecoms providers can request KCOM to provide a service, which should meet guidelines published by KCOM on information required for it to consider the request.

Strategic Review of Digital Communications: Also referred to as the Digital Communications Review (DCR), is a document Ofcom published in February 2016 which set out a ten-year vision for communications services in the UK.

Sub-Loop Unbundling (SLU): Like local loop unbundling (LLU), except that telecoms providers interconnect at a point between the exchange and the customer, usually at the cabinet.

Superfast Broadband (SFBB): A broadband connection that can support a maximum download speed of between 30Mbit/s and 300Mbit/s.

Telecoms provider: A person who provides an electronic communications network or provides an electronic communications service.

The 2003 Act: The Communications Act 2003.

Ultrafast Broadband (UFBB): Broadband services which delivers headline download speeds greater than 300Mbit/s.

USO: Universal Service Obligation.

Vectoring: A performance improvement technique that reduces the effect of crosstalk on copper lines. It is based on the concept of noise cancellation via the co-ordination of line signals.

Very-high-bit-rate digital subscriber line (VDSL): DSL technologies offering superfast broadband speeds. On Openreach's FTTC network which uses VDSL technology, services of up to 80Mb/s downstream and 20Mb/s upstream are currently offered. VDSL, in this Consultation, refers to all generations of the technology.

Virtual Local Area Network: A subdivision of the capacity within the network allowing individual traffic streams to be managed. VLANs are used within Openreach's GEA service to separate each user's data traffic through the Openreach network.

Virtual Unbundled Local Access (VULA): A regulatory obligation requiring BT to provide access to its FTTC and FTTP network deployments which allows telecoms providers to connect at a 'local' aggregation point and are provided a virtual connection from this point to the customer premises.

Voice over Internet Protocol (VoIP): The method of carrying voice calls on fixed and mobile networks by packetizing speech and carrying it using IP.

Weighted Average Cost of Capital (WACC): The cost of funds used for financing a business.

Wholesale Broadband Access (WBA): The WBA market concerns the wholesale broadband products that Telecoms Providers provide for themselves and sell to each other.

Wholesale Line Rental (WLR): The service offered by Openreach to other telecoms providers to enable them to offer retail line rental services in competition with BT's own retail services.

Wholesale Local Access (WLA): The market that covers fixed telecommunications infrastructure, specifically the physical connection between customers' premises and a local exchange.