
Wholesale Local Access and Wholesale Broadband Access Market Reviews

Review of competition in the Hull Area

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About this document

This document sets out the conclusions of our Wholesale Local Access and Wholesale Broadband Access Market Reviews in relation to the Hull Area.

Wholesale local access refers to the connections from the local telephone exchange to a home or business premises, which are used to provide services at the retail level. Wholesale broadband access refers to the provision of broadband over those connections.

We have concluded that KCOM continues to have significant market power in the wholesale local access and wholesale broadband access markets and have imposed a package of remedies to address this market power and promote competition in retail and wholesale fixed telecoms services in the Hull Area.

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1. Executive summary

- 1.1 Broadband has become an increasingly important service for both business and residential consumers in the UK. Its use 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 190GB per month per residential connection in the last three years, and broadband speeds have also increased, on average up from 23 Mbit/s to 44 Mbit/s over the same period.¹ Retail competition has been an important enabler of these changes by driving prices down, making broadband and data more affordable, and propelling technological innovation.
- 1.2 The Hull Area is regulated separately from the rest of the UK for most fixed telecommunications markets. This is because KCOM, rather than BT, is the owner of the only universal fixed network in the Hull Area. This statement concerns the Wholesale Local Access (WLA) and Wholesale Broadband Access (WBA) markets, both of which are wholesale markets that underpin retail broadband services.
- 1.3 There have been positive developments in retail broadband services for residential consumers and businesses in the Hull Area since the last reviews of these markets. At the time the last reviews were concluded in June 2014, KCOM had just started to deploy its fibre network. It has now rolled this out to 150,000 homes and business premises, and is expecting to complete its deployment by March 2019, reaching approximately 200,000 premises.² This network uses mostly Fibre to the Premises (FTTP) technology, which is capable of delivering broadband at both superfast and ultrafast speeds.³
- 1.4 MS3, an operator previously focused on providing telecoms services to businesses, has begun expanding its FTTP network to offer a residential fibre broadband service.⁴ CityFibre, a telecoms operator that owns fibre networks in many cities around the UK, has also built a small fibre network in parts of the Hull Area to offer local businesses ultrafast broadband via FTTP.⁵ In our Strategic Review of Digital Communications⁶, we set out the importance of encouraging, where possible, the deployment of new ultrafast broadband networks. We therefore welcome these investments in FTTP networks which, in our view, should provide consumers with the faster and more reliable broadband connections that are important in the daily lives of individuals and businesses.
- 1.5 While these emerging networks, along with small telecoms providers seeking to compete in broadband services, might be seen as offering the prospect for greater competition,

¹ Ofcom, *Connected Nations 2017*, pages 3 and 15; Ofcom, *Connected Nations 2015*, page 1.

² <https://www.kcomplc.com/business-insight/news-and-media/trading-update-and-management-change/> [accessed 29 May 2018] <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

³ We define superfast as download speeds from 30 Mbit/s up to 300 Mbit/s. We currently define ultrafast as services that offer a minimum download speed of 300 Mbit/s or more, but there is no generally accepted definition of ultrafast.

⁴ <http://www.connecthull.co.uk/#two> [accessed 25 April 2018].

⁵ <https://www.cityfibre.com/gigabit-cities/hull/> [accessed 27 April 2018].

⁶ Ofcom, 2016. *Making communications work for everyone: Initial conclusions from the Strategic Review of Digital Communications – Statement*.

competition in the Hull Area still lags significantly behind the rest of the UK. Competition is currently limited at both the wholesale and retail levels. Specifically: there is no competition from telecoms providers using their own equipment in KCOM's exchanges (an approach commonly used to compete in the rest of the UK); there is no cable operator; and none of the large national retail providers – such as Sky, TalkTalk and Vodafone – operate in the Hull Area. This means that the level of competitive pressure in the rest of the UK that has resulted in greater choice, higher quality and lower prices is not present to the same extent in the Hull Area.

- 1.6 Therefore, our objective for this review is to ensure that regulation of the WLA and WBA markets builds on the limited competitive growth we have seen, without undermining incentives for, and fair returns from, investment in fibre networks.

WLA and WBA markets

- 1.7 WLA involves the provision of a connection at a fixed location (i.e. to a customer's premises) from a point of aggregation of such connections which can be accessed by another telecoms provider. Use of inputs from the WLA market enables telecoms providers to deploy their own equipment to offer broadband, voice and other services to customers. The WBA market relates to wholesale broadband services, which allow telecoms providers to offer retail broadband where they do not have their own equipment to make use of WLA infrastructure. Telecoms providers seeking to offer retail broadband services can request to access KCOM's infrastructure via both markets. However, WLA services give providers more control over the retail services they can provide and have lower costs after the initial investment, meaning that WLA services may allow more scope to compete on price.
- 1.8 As in previous reviews, we find that KCOM has significant market power (SMP) in both markets and thus require it to provide wholesale services on reasonable request to competitors. However, until recently, KCOM has not offered fibre-based WLA or WBA services and telecoms providers have been reliant on its copper-based WBA service (with there being little demand for a copper-based WLA service). Since our consultation in June 2017, KCOM has now launched a fibre-based WBA service⁷ and published a draft Reference Offer for a fibre-based WLA service.⁸
- 1.9 Therefore, our primary aim in this review is to increase the take-up of wholesale services based on KCOM's network, thus increasing competition in retail broadband. A key part of this is improving the process for retail providers to request appropriate wholesale access services suitable for their needs. We consider that the measures we are imposing (outlined in Section 4) will achieve this by making the functioning of this process more visible, thereby making it easier for telecoms providers to make requests to KCOM for new access services or to develop a business case for the creation and deployment of new wholesale services by KCOM.

⁷ <https://www.kcomplc.com/regulatory/kcom-wholesale/broadband/> [accessed 4 May 2018].

⁸ <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/new-services/> [accessed 23 July 2018].

- 1.10 We consider that our modifications to the regulations, combined with the increase in interest by alternative telecoms companies to use KCOM's fibre network to provide services in Hull, should lead to increased retail competition and hence better outcomes for consumers in terms of the range and value for money of services available. However, should we consider in our next review that such improvements have not emerged and that Hull residents are particularly disadvantaged in terms of quality or price of broadband services we will need to examine whether more direct regulatory measures are required.
- 1.11 We have considered whether we should specify a range of specific access services that KCOM must offer, but at this stage consider that telecoms providers are best placed to request the services that will meet their needs. Given the shift in demand from consumers for higher speeds, we expect these will typically be fibre-based wholesale services.
- 1.12 Finally, in recognition of this shift in consumer demand and the lack of wholesale demand for copper-based broadband services by alternative providers in the Hull Area, we are reducing regulation of KCOM's copper network at the WLA level (i.e. removing the requirement to provide Local Loop Unbundling). This is consistent with our strategic aim, set out in the Strategic Review, to deregulate and simplify regulation.⁹

Our decisions

- 1.13 We have defined the Hull Area as a separate geographic market for the provision of WLA and WBA services. Our analysis of these markets has led us to conclude that KCOM has SMP in both the WLA and WBA markets in the Hull Area.
- 1.14 We are harmonising much of our regulation across the WLA and WBA markets, making the regulation identical in most instances. This reflects our expectation that services will increasingly be provided over fibre and, given the geography of the Hull Area and the topology of KCOM's network, the distinction between the WLA and WBA markets may diminish over time as wholesale services all become fibre-based and more similar in nature. This approach should also provide better clarity for KCOM and third parties about the scope of our regulation, consistent with our strategic aim of simplifying regulation.
- 1.15 The remedies we are imposing are summarised in Table 1.1 below. As well as harmonising both markets to a large extent, our decisions seek to achieve the following outcomes:
- addressing the potential competition concerns we have identified as a result of KCOM's SMP, namely KCOM refusing to supply wholesale services, unduly discriminating in favour of its own retail operations or other selected telecoms providers and charging excessive wholesale charges;
 - ensuring greater transparency in relation to requests for new wholesale services and the functioning of the process by which such requests are submitted and considered by KCOM; and

⁹ Ofcom, 2016. [Making communications work for everyone: Initial conclusions from the Strategic Review of Digital Communications – Statement](#), Section 8.

- creating greater transparency in relation to KCOM’s costs and charges for supplying wholesale services, to ensure that it is complying with its regulatory obligations.

Table 1.1: Summary of regulation KCOM must comply with in the wholesale markets

	Remedies
Wholesale local access	<p>Requirement to provide fibre network access on reasonable request, and on fair and reasonable terms, conditions and charges.</p> <p>Requirements relating to requests for new forms of network access</p> <p>Requirement not to discriminate unduly</p> <p>Requirement to publish a Reference Offer</p> <p>Requirement to notify changes to charges, terms and conditions</p> <p>Requirement to publish quality of service information as directed by Ofcom</p> <p>Requirement to notify changes to technical information</p> <p>Accounting separation</p> <p>Cost accounting</p>
Wholesale broadband access	<p>Requirement to provide network access on reasonable request, and on fair and reasonable terms, conditions and charges.</p> <p>Requirements relating to requests for new forms of network access</p> <p>Requirement not to discriminate unduly</p> <p>Requirement to publish a Reference Offer</p> <p>Requirement to notify changes to charges, terms and conditions</p> <p>Requirement to publish quality of service information as directed by Ofcom</p> <p>Requirement to notify changes to technical information</p> <p>Accounting separation</p> <p>Cost accounting</p>

2. Background

- 2.1 This document forms part of our Wholesale Local Access (WLA) and Wholesale Broadband Access (WBA) market reviews. The purpose of these reviews is to assess the state of competition in these markets and consider the extent to which *ex ante* regulation may be required for the provision of these services. Where we find that Significant Market Power (SMP) exists, we impose appropriate *ex ante* regulation to address our competition concerns. For the purposes of this review, we have considered the period to 2021; we will carry out and notify the next review in line with our obligations under the EU Framework and the Act.
- 2.2 This document sets out our decisions in relation to the WLA and WBA markets in the Hull Area.¹⁰
- 2.3 This section contains:
- an overview of the retail services considered in the review and the networks that support those services in the Hull Area;
 - a summary of existing regulation and our consultations; and
 - a summary of the market review process and the legal framework relating to it.

Wholesale local access

- 2.4 Wholesale local access involves the provision of a connection at a fixed location (i.e. to a customer's premises) from a point of aggregation of such connections which can be accessed by another telecoms provider, as illustrated in Figure 2.1 below. This connection is an input into a number of retail services, including retail telephony and broadband services.

Retail services delivered over local access networks

- 2.5 Retail telecoms services are differentiated on a number of dimensions, including not only the services sold as a bundle (or separately), but also on the features of each individual retail service. Voice usage may be bundled with the telecoms package (e.g. evening and weekend calls) or priced on a metred basis. Similarly, internet access is often differentiated on the basis of usage (e.g. capped monthly usage or unlimited monthly usage). The most significant differentiation is often seen in the content bundled with the telecoms package – ranging from bundles with nothing other than 'over the top' access to content such as Netflix, Amazon or YouTube, to packages bundling exclusive sports and other pay-TV content.

¹⁰ This document should be read in conjunction with the 2018 WLA Market Review Statement and 2018 WBA Market Review Statement. Of particular relevance to this document and the review of the markets in the Hull Area are our conclusions on how the WLA and WBA markets are defined. We discuss this in more detail in Section 3 of this document.

- 2.6 In relation to the speed of the internet access connection, a large number of bandwidth choices are available, but we have typically grouped these into four broad categories of download speeds as follows:
- narrowband internet access: download speeds up to the capacity of standard voice channel (i.e. up to 64 Kbit/s);
 - standard broadband (SBB): download speeds of up to 30 Mbit/s;
 - superfast broadband (SFBB): download speeds from 30 Mbit/s up to 300 Mbit/s; and
 - ultrafast broadband (UFBB): download speeds of 300 Mbit/s and above.¹¹
- 2.7 Narrowband and SBB speeds are typically delivered over copper access connections. With fibre and cable based local access connections, telecoms providers can offer SFBB or UFBB services (depending on the technology), as well as lower speeds if the end consumer so requires.¹²
- 2.8 In the Hull Area, SFBB and/or UFBB is currently available to approximately 150,000 premises.¹³ KCOM has announced plans that it will complete the deployment of its fibre network, covering approximately 200,000 properties, by March 2019.¹⁴

Wholesale broadband access

- 2.9 The WBA market sits between retail broadband services and the WLA market.
- 2.10 Building an access network or using Local Loop Unbundling (LLU) and Virtual Unbundled Local Access (VULA) services allow telecoms providers greater flexibility in the services that they offer to consumers. However, this also requires significant investment on behalf of the telecoms provider. Purchasing a WBA service allows telecoms providers to offer retail services without having to undertake the level of investment in infrastructure required to build a network. However, as WBA services aggregate traffic for handover at a limited number of connection points, the telecoms provider taking the service has less flexibility. Therefore, product differentiation among telecoms providers who use WBA services is focused more on retail level features. Figure 2.1 illustrates WBA services using the current copper access network.

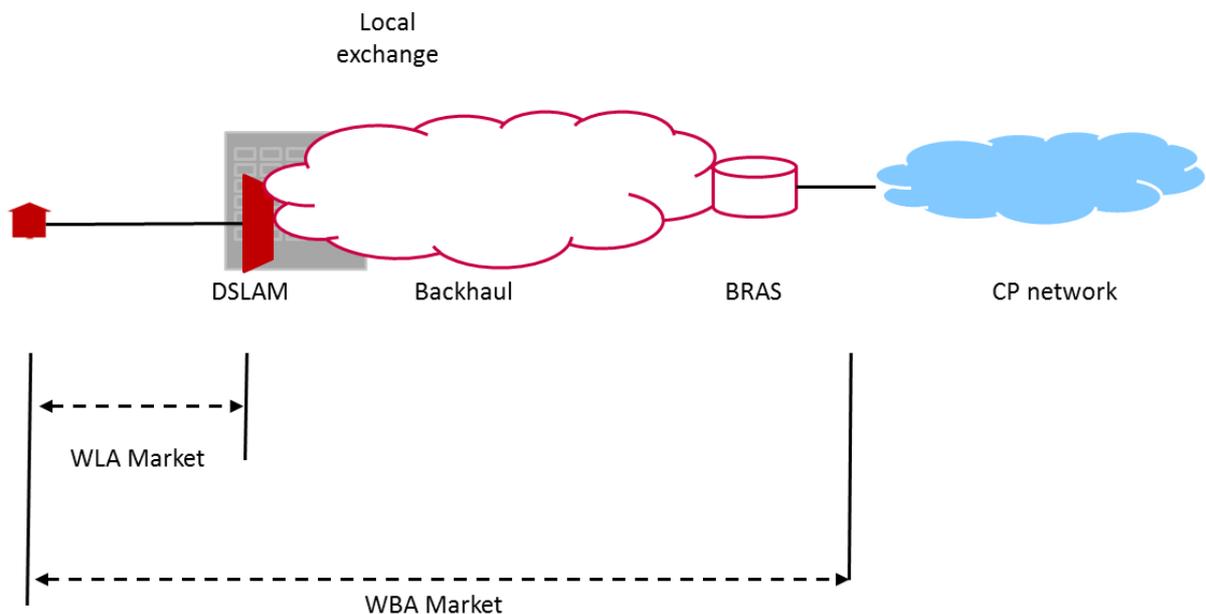
¹¹ There is no generally accepted definition of ultrafast. The [UK Government](#) currently defines ultrafast as 100 Mbit/s or greater.

¹² The European Commission refers to these as Next Generation Access (NGA) networks, which it defines as 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 already existing copper networks. In most cases NGA networks are the result of an upgrade of an already existing copper or co-axial access network. In the UK, fibre to the cabinet and fibre to the premises networks fall under that characterisation. See [Commission recommendation of 20 September 2010](#) on regulated access to Next Generation Access Networks (NGA).

¹³ <https://www.ispreview.co.uk/index.php/2018/02/kcom-see-full-fibre-broadband-surpass-copper-hull-uk-network.html> [accessed 8 May 2018].

¹⁴ <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

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



2.11 The WBA service shown above is built using a number of elements:

- the access network considered in the WLA market review, which includes the connection from the customer's premises to the local exchange;
- the broadband equipment at the local exchange (the Digital Subscriber Loop Access Multiplexor (DSLAM));¹⁵
- backhaul connectivity across the WBA provider's network; and
- the functionality of the Broadband Remote Access Server (B-RAS) which manages the consumer's internet sessions.

2.12 The characteristics of WBA services determine the main features of the retail broadband offers that they support.

- the maximum downstream and upstream speeds are determined by the specific equipment deployed by the WBA provider; and
- network dimensioning, which determines how the retail services function at times of high demand, is also determined by the WBA provider.

2.13 Retail providers using WBA services thus have fewer opportunities to innovate compared with providers who deploy and operate their own network.

¹⁵ 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.

The Hull Area

Network operators

- 2.14 KCOM is the incumbent telecoms provider in the Hull Area¹⁶, operating two fixed access networks: a copper network covering the whole of the Hull Area, and a newly deployed Fibre to the Premises (FTTP) network covering around 150,000 (75%) of homes and small businesses. KCOM has announced that it plans to extend its FTTP network to 200,000 homes and businesses by March 2019.¹⁷
- 2.15 Other telecoms providers have also invested in fibre infrastructure in the Hull Area. CityFibre, a telecoms operator that owns fibre networks in many cities around the UK, has built a small fibre network. This has been rolled out in partnership with Purebroadband, a Hull-based telecoms provider, and offers local businesses UFBB via FTTP.¹⁸ CityFibre also currently provides dark fibre to mobile base stations operated by Mobile Broadband Network Limited (MBNL).¹⁹
- 2.16 MS3, an operator previously focused on providing telecoms services to businesses, has recently begun expanding its FTTP network to offer a residential fibre broadband service and has deployed over 40km of fibre to date.²⁰
- 2.17 Alongside these fibre networks, there are three fixed wireless networks providing broadband services: Connexin, Purebroadband and Quickline. These providers offer speeds between 10 Mbit/s and 60 Mbit/s and together cover roughly 80% of the Hull Area.²¹
- 2.18 In addition, mobile networks also provide broadband services in the home or business premises. For example, EE offers a 4G router with advertised speeds of up to 200 M/bits.²²

KCOM wholesale services

- 2.19 Historically we have required KCOM to provide wholesale network access, but we have not required it to provide specific services such as LLU and VULA.²³ Instead we took the view that it would be more efficient if KCOM provided wholesale access in response to demand

¹⁶ 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.

¹⁷ <https://www.kcomplc.com/business-insight/news-and-media/trading-update-and-management-change/> [accessed 8 December 2017]; <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

¹⁸ <https://www.cityfibre.com/news/businesses-offered-choice-as-hull-becomes-a-gigabit-city/> [accessed 27 April 2018].

¹⁹ <https://www.cityfibre.com/news/20141112cityfibre-signs-dark-fibre-deals-with-ee-and-three-to-enhance-mobile-networks/> [accessed 27 April 2018]. MBNL is a network co-owned by EE and Three which is used to deliver mobile services.

²⁰ <http://www.connecthull.co.uk/#two> [accessed 25 April 2018].

²¹ <http://home.connexin.co.uk/> [accessed 2 May 2018]; <http://www.purebroadband.net/coverage> [accessed 2 May 2018]; <http://www.quickline.co.uk/home-connect-internet-only/> [accessed 2 May 2018].

²² <https://shop.ee.co.uk/dongles/pay-monthly-mobile-broadband/4gee-router/details> [accessed 8 May 2018].

²³ LLU is 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. VULA provides access to FTTC and FTTP network deployments. Telecoms providers connect to the VULA service at a 'local' aggregation point and are provided a virtual connection to the customer premises.

from third-party telecoms providers. This would ensure that KCOM only incurs costs for developing wholesale services that other providers actually want.

- 2.20 For WBA services, this has resulted in KCOM offering the following services:
- Connect Broadband Plus;
 - Connect Broadband Fibre Business and Residential²⁴; and
 - IPLine, which provides an IP service offering aggregated access for telecoms providers.
- 2.21 For WLA services this has resulted in KCOM not offering any specific services. However, following our consultation in June 2017, KCOM has published a draft Reference Offer for a fibre-based WLA service.

KCOM's FTTP network

- 2.22 As discussed above, KCOM is currently deploying FTTP and has already covered c.150,000 premises (75%), with plans to complete this deployment by March 2019. Given this, our expectation during the review period is that all broadband services in the Hull Area will increasingly be provided over fibre. One likely consequence of this is that the distinction between the WLA and WBA markets in the Hull Area may diminish over time.
- 2.23 As can be seen in Fig 2.1 above, WBA services involve the backhaul from the local exchange to the point of handover for WBA and also the broadband remote access server (BRAS). For a copper WLA network there is typically a very distributed set of local exchanges, but a much more concentrated number of points of handover for WBA services. In other words, not only does WBA save on installing equipment in many exchanges, it avoids the need to rent or build backhaul to each local exchange.
- 2.24 In a fibre network, the local exchanges can be consolidated, meaning that each (fibre) exchange can serve more premises than a local copper exchange. As a result, the number of points of handover for connecting to a WLA fibre service is much reduced. In a relatively densely populated area such as the Hull Area, this means that the points of handover for WBA and WLA services become more aligned.

Strategic Review of Digital Communications

- 2.25 Our Strategic Review set out a ten-year vision for communications services in the UK.²⁵ This envisaged the UK becoming a world leader in the availability and capability of its digital networks, with widespread competing networks delivering choice, innovation and affordable prices to homes and businesses.
- 2.26 Our long-term strategy for fixed network competition and investment focuses on three main elements:

²⁴ These services were both launched following our consultation in June 2017.

²⁵ Ofcom, 2016. [*Making communications work for everyone: Initial conclusions from the Strategic Review of Digital Communications*](#).

- encouraging and enabling network investment by reducing the cost and barriers to that new investment;
- continuing to regulate access to the incumbent’s networks and services where network competition is not effective; and
- regulating access to SFBB and UFBB services to give both the incumbent and its competitors incentives to invest in new networks while protecting customers from excessive pricing.

2.27 The decisions set out in this review are consistent with this strategy.

Summary of existing regulation

Findings of the last WLA market review

2.28 In the 2014 Fixed Access Market Review (FAMR) we found that KCOM had SMP in the WLA market in the Hull Area and we applied remedies accordingly.²⁶ Table 2.2 summarises the remedies imposed on KCOM in the WLA market in the Hull Area.

Table 2.2: Remedies imposed on KCOM in the WLA market in the Hull Area in the 2014 FAMR Statement

Remedies
Requirement to provide network access on reasonable request, and on fair and reasonable terms, conditions and charges
Requirements relating to requests for new forms of network access
Requirement not to discriminate unduly
Requirement to publish a Reference Offer
Requirement to notify changes to charges, terms and conditions
Requirement to notify changes to technical information

Findings of the last WBA market review

2.29 In the 2014 WBA market review we found that KCOM held SMP in the Hull Area.²⁷ Table 2.3 summarises the remedies imposed on KCOM in the WBA market in the Hull Area.

²⁶ Ofcom, 2014. [Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 – Statement](#).

²⁷ Ofcom, 2014. [Review of the Wholesale Broadband Access Markets – Statement \(2014 WBA Statement\)](#).

Table 2.3: Remedies imposed on KCOM in the 2014 WBA Statement

Remedies
Requirement to provide network access on reasonable request, and on fair and reasonable terms, conditions and charges
Requirement not to unduly discriminate
Requirement to publish a Reference Offer
Requirement to notify charges, terms and conditions
Transparency as to quality of service
Requirement to notify technical information
Accounting separation

Consultations

- 2.30 On 31 March 2017, we published a consultation (March 2017 WLA Consultation) setting out our preliminary view on the state of competition in the WLA market in the UK excluding the Hull Area and our proposals for regulating that market. This consultation, further consultations, associated documents, clarifications and non-confidential responses can be found on our website.²⁸
- 2.31 On 22 June 2017, we published the 2017 Hull WLA and WBA Consultation, to gather stakeholders' views on our assessment of the state of competition in the WLA and WBA markets in the Hull Area and on our proposals for regulating these markets in the market review period.²⁹ This consultation and non-confidential stakeholder responses can be found on our website.³⁰
- 2.32 Also on 22 June 2017, we published a consultation (2017 WBA Consultation) setting out our preliminary view on the state of competition in the WBA market in the rest of the UK and our proposals for regulating that market. This consultation and non-confidential responses can be found on our website.³¹

Regulatory framework

- 2.33 The regulatory framework for market reviews is set out in UK legislation and is transposed from five EU Directives. These Directives impose a number of obligations on national

²⁸ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>.

²⁹ Ofcom, 2017. *Wholesale Local Access and Wholesale Broadband Access Market Reviews: Review of competition in the Hull Area*.

³⁰ [2018 WLA Statement](#).

³¹ [2018 WBA Statement](#).

regulatory authorities, such as Ofcom, one of which is to carry out periodic reviews of certain electronic communications markets.³²

2.34 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.

Relevant documents

The 2014 EC Recommendation

2.35 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.³³ 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.

2.36 We, as the national regulatory authority (NRA) in the UK, in accordance with competition law and taking due account of the 2014 EC Recommendation, have defined the relevant markets appropriate to our national circumstances in Section 3 of this statement. The WLA and WBA markets correspond to Markets 3a and 3b, respectively, in the Commission's Recommendation.

The EC SMP Guidelines

2.37 The EC SMP Guidelines include guidance on market definition, assessment of SMP and SMP designation.³⁴ In Section 3, we set out how we have taken the EC SMP Guidelines into account in reaching our proposals.

³² We set out the applicable regulatory framework and the approach to market definition and SMP assessment in more detail in Annexes 1 and 2.

³³ [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) (2014 EC Recommendation).

³⁴ [Commission guidelines on market analysis and the assessment of significant market power](#) under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (EC SMP Guidelines), 7 May 2018.

The NGA Recommendation and the Costing and Non-discrimination Recommendation

- 2.38 The 2010 EC Recommendation on Next Generation Access (NGA) aims to foster the development of the single market by enhancing legal certainty and promoting investment, competition and innovation in the market for broadband services, and in particular, the transition to next generation access networks.³⁵ It does so by setting out a common approach for the implementation of remedies with regard to such networks.
- 2.39 The 2013 EC Recommendation on Costing and Non-discrimination concerns the application of non-discrimination, price control and cost accounting obligations.³⁶ It provides further guidance on the regulatory principles established by the NGA Recommendation, in particular the conditions under which regulation of wholesale access prices should or should not be applied.
- 2.40 In reaching the decisions on relevant remedies set out in this statement we have taken due account of each recommendation. To the extent that any of our decisions depart from the recommendations, this reflects UK national circumstances in that it would be disproportionate to follow these in the unique circumstances of the markets in the Hull Area. In particular, for this reason, we are not imposing the following: specified forms of network access, equivalence of inputs; a technical replicability test; non-discrimination KPIs; or an economic replicability test.

BEREC Common Position

- 2.41 In December 2012, BEREC adopted a revised Common Position on best practice in remedies on the markets for WLA and WBA.³⁷ BEREC Common Positions are intended to assist NRAs 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. We have taken utmost account of each Common Position when imposing relevant remedies. To the extent that any of our decisions depart from the Common Positions, again this reflects UK national circumstances.

Relevant legal tests and statutory duties

- 2.42 Where we find 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.

³⁵ [Commission Recommendation of 20 September 2010](#) on regulated access to Next Generation Access Networks (NGA) (2010/572/EU).

³⁶ [Commission Recommendation of 11 September 2013](#) on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (C(2013) 5761) (2013 EC Recommendation).

³⁷ BEREC, 2012. [Revised BEREC common position on best practice](#) in remedies on the market for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location imposed as a consequence of a position of significant market power in the relevant market (BEREC Common Position on physical access); BEREC, 2012. [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 (BEREC Common Position on WBA).

When imposing 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 light of the policy objectives as set out in Article 8 of the Framework Directive.³⁸

- 2.43 Specifically, we explain why we consider each of the conditions 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.
- 2.44 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 decisions.
- 2.45 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 in this statement.

Forward look

- 2.46 Market reviews look ahead to how competitive conditions may change in the future. For the purposes of the review, we consider the period up to 2021, reflecting the characteristics of the relevant retail and wholesale services and the factors likely to influence their development.

Impact assessment and Equality Impact Assessment

- 2.47 The analysis presented in the 2017 Hull WLA and WBA Consultation constituted an impact assessment as defined in section 7 of the Act.
- 2.48 Impact assessments provide a valuable way of assessing the options for regulation and showing why the chosen option was preferred. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that, generally, we have to carry out impact assessments in cases where our conclusions would be likely to have a

³⁸ See Article 8(4) of [Directive 2002/19/EC](#) on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive).

significant effect on businesses or the general public, or where there is a major change in Ofcom's activities. However, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions.³⁹

Equality Impact Assessment (EIA)

- 2.49 Annex 3 sets out our EIA for this market review. We are 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.
- 2.50 It is not apparent to us that the outcome of our review is likely to have any particular impact on race, disability and gender equality. 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 race or gender equality or equality schemes under the Northern Ireland and Disability Equality Schemes.

Document structure

- 2.51 The structure of this document follows the structure of our analysis. In defining the relevant markets, we draw on our findings in the 2018 WLA and WBA market reviews, where we looked at the downstream services in order to inform upstream market definition, before assessing market power in these upstream markets (Section 3). We then set out our remedies (Section 4).

European consultation

- 2.52 We notified the European Commission (the Commission), BEREC and other national regulatory authorities of our final proposals for our market analysis and remedies on 21 June 2018, as required under Article 7 of the Framework Directive. The Commission issued a request for information on 2 July 2018, to which we responded on 5 July 2018.
- 2.53 The Commission responded on 19 July 2018 with no comments on the provisional determinations in our notification.⁴⁰

³⁹ For further information, see Ofcom, 2005, [Better Policy Making: Ofcom's approach to Impact Assessment](#).

⁴⁰ The Commission's letter is published [here](#).

3. Market definition and significant market power assessment

3.1 In this section, we set out our assessment of product and geographic market definition and market power for the Wholesale Local Access (WLA) and Wholesale Broadband Access (WBA) markets in the Hull Area.

3.2 WLA corresponds to Market 3(a) in the 2014 EC Recommendation, and WBA corresponds to Market 3(b).⁴¹ In our assessment of market definition for this review we have taken utmost account of that recommendation and the EC SMP Guidelines.⁴² The reason for carrying out a market definition assessment, including our general approach to doing so, is set out in Annex 2 of the 2018 WLA Statement.⁴³

3.3 Paragraph 46 of the EC SMP Guidelines set out the sequence of analysis which an assessment of market definition and market power should follow:

“Once the relevant product market is identified, the next step is to define its geographical dimension. It is only when the geographical dimension of the product or service market has been defined that a NRA may properly assess the competitive conditions on this market.”

3.4 Thus, according to the EC SMP Guidelines, the relevant product markets are to be defined first and then the relevant geographic markets are to be defined. The question of whether any firm has SMP in the relevant markets is then addressed as the final stage in the analysis. We have followed this sequence of analysis.⁴⁴

3.5 We set out our product and geographic market analysis in this section. In doing so, in a number of places we incorporate by reference our more detailed analysis set out in 2018 WLA Statement and 2018 WBA Statement where we analysed the equivalent markets for the UK excluding the Hull Area.⁴⁵ We then proceed to the analysis of competition and market power in the WLA and WBA markets in the Hull Area. The role of and approach we have taken to market definition is set out in Annex 2.

3.6 In summary, we:

- define the WLA market as a single product market for the supply of wholesale local access at a fixed location;

⁴¹ [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).

⁴² [Commission guidelines on market analysis and the assessment of significant market power](#) under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (EC SMP Guidelines), 7 May 2018.

⁴³ [2018 WLA Statement](#).

⁴⁴ We have also reflected the relevant aspects of the recent judgment of the Competition Appeal Tribunal (CAT) in the appeal of Ofcom’s 2016 Business Connectivity Market Review (2017 BCOMR judgment), which addressed market definition. [British Telecommunications plc v Office of Communications](#) [2017] CAT 25 (CAT BCOMR Judgment).

⁴⁵ [2018 WLA Statement](#), Section 3; [2018 WBA Statement](#), Sections 3 and 4.

- define the WBA market as wholesale broadband access services provided at a fixed location. For these purposes, wholesale broadband access services comprise the provision of 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;
- define the Hull Area as a separate geographic market from the rest of the UK for both the WLA and WBA product markets; and
- conclude that KCOM holds Significant Market Power (SMP) in the supply of WLA and WBA within the Hull Area over the review period.

Stakeholder responses

Market definition

3.7 Hull City Council⁴⁶, KCOM⁴⁷ and MS3⁴⁸ agreed with our proposed product and geographic market definition for the Hull Area. KCOM noted that our proposed product market definitions for WLA and WBA are consistent with those for the rest of the UK.

SMP assessment

3.8 Hull City Council⁴⁹, KCOM⁵⁰ and MS3⁵¹ also agreed with our proposed SMP assessment in the Hull Area.

3.9 Hull City Council stated that our proposed SMP finding is evidenced by the absence of national service providers (cable and, in the case of WBA, LLU operators) in the Hull Area, with competition based on a small number of fixed wireless providers. The Council said that the result of this is higher retail prices in the Hull Area than in the rest of the UK and the inability of consumers to purchase the triple and quad play bundles that are available elsewhere.⁵²

3.10 MS3 raised similar points to the Council, noting that KCOM's SMP is overwhelming and there is no viable wholesale offering in either the WLA or WBA markets.

3.11 While KCOM agreed with our SMP findings in the WLA and WBA markets, it believes that there is evidence of market entry and expansion based on competing FTTP networks.⁵³ It argued that infrastructure-based competition could become stronger over the review period with competing FTTP deployments by MS3 and CityFibre. However, in its response,

⁴⁶ Hull City Council response to the 2017 Hull WLA and WBA Consultation, page 1.

⁴⁷ KCOM response to the 2017 Hull WLA and WBA Consultation, page 4.

⁴⁸ MS3 response to the 2017 Hull WLA and WBA Consultation, page 1.

⁴⁹ Hull City Council response to the 2017 Hull WLA and WBA Consultation, pages 1-2.

⁵⁰ KCOM response to the 2017 Hull WLA and WBA Consultation, pages 4-5.

⁵¹ MS3 response to the 2017 Hull WLA and WBA Consultation, page 2.

⁵² Hull City Council response to the 2017 Hull WLA and WBA Consultation, response to question 3.2.

⁵³ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 3.2.2.

MS3 stated that its and CityFibre's networks pass a limited number of premises with no immediate prospect of accelerated rollout.⁵⁴ We discuss this in our SMP analysis below.

Structure of this section

WLA

- the definition of wholesale local access, the retail services it supports and our choice of focal product;
- analysis of retail indirect constraints: first from cable services, then from wireless services (including satellite, FWA and mobile broadband) and finally from leased lines;
- our conclusion on the definition of the product market for wholesale local access provided at a fixed location;
- our conclusion on geographic market definition; and
- our assessment and conclusion on market power in the market for wholesale local access provided at a fixed location.

WBA

- the definition of wholesale broadband access, the retail services it supports and our choice of focal product;
- analysis of retail indirect constraints and wholesale constraints in the presence of regulation in the market for wholesale local access at a fixed location;
- our conclusion on the definition of the product market for wholesale broadband access in the presence of regulation in the market for wholesale local access at a fixed location;
- our conclusion on geographic market definition; and
- our assessment and conclusion on market power in the market for wholesale broadband access provided at a fixed location in the presence of regulation in the market for wholesale local access.

Wholesale local access, the retail services it supports, and the choice of focal product

Definition of local access

- 3.12 Local access is identifiable at the retail level as the service underpinning most consumers' fixed voice and broadband packages. Upstream from this sit a number of possible wholesale markets, with the most upstream within the EU regulatory framework being "wholesale local access provided at a fixed location".

⁵⁴ MS3 response to the 2017 Hull WLA and WBA Consultation, response to question 3.2.

3.13 In the 2018 WLA Statement, we said that local access “defines the network assets that are used to provide connectivity to a range of downstream services at a point of interconnection close to the end user”.⁵⁵ We identified three key features of the access market:

- it may include a range of wholesale products, including access to “passive” infrastructure as well as some “active” products;
- services in the market are “service agnostic”, that is, they are not confined to supporting particular downstream services but allow downstream telecoms providers to offer a range of differentiated services and bundles to end consumers; and
- it relates primarily to local access connections at a fixed location⁵⁶, but in our market analysis we also consider whether services provided over mobile networks are sufficiently close substitutes for the services provided over fixed networks to be included in the same market.

Retail services that use WLA inputs

3.14 Demand for wholesale services (both at the WLA and WBA level) is derived from retail demand. This means that, if retail demand falls, for example in response to a price increase, wholesale demand will also be reduced. Therefore, it is relevant for the purposes of assessing the wholesale market definition to look at the retail services provided over local access connections.

3.15 While a range of retail services can be provided over a local access connection, as set out in the 2018 WLA and WBA Statements, our focus in this review is primarily on internet access at a fixed location.⁵⁷

3.16 As in the rest of the UK, retail services delivered over a local access network may be differentiated into services aimed primarily at residential customers and those aimed primarily at business customers. However, we do not make this distinction in the wholesale local access market because the features that differentiate business from residential services are applied downstream of the wholesale network access layer. Moreover, the strength of the constraints from services delivered over most alternative forms of access is unlikely to differ significantly between residential and business services.

Focal product – WLA

3.17 In the 2018 WLA Statement, we began the market analysis with a focal product of “copper/fibre connections at a fixed location”. This focal product includes local access using copper, FTTC and FTTP connections. As this was the type of network operated by BT, it was appropriate for the purposes of our review of the WLA market in the rest of the UK, in which we found BT to have SMP in the 2014 FAMR.

⁵⁵ [2018 WLA Statement](#), paragraph 3.35.

⁵⁶ This is consistent with the 2014 EC Recommendation.

⁵⁷ We outlined our findings in relation to other services such as voice and TV content services that rely on local access in the [2018 WLA Statement](#) – see paragraph 3.43.

- 3.18 In the Hull Area, there is a ubiquitous copper-access network owned and operated by KCOM. KCOM is also rolling out a fibre network using fibre to the premises (FTTP) technology which currently covers around 75% of households. KCOM expects to complete its fibre deployment by March 2019, with the majority of premises being served using a full-fibre connection and the remaining premises being served using FTTC.⁵⁸
- 3.19 While there are some differences between KCOM's network and that of BT's, as set out above, local access in the Hull Area is provided over a mixture of copper and fibre connections as it is in the rest of the UK. We therefore consider that this focal product is still the most appropriate for the Hull Area, as (a) it is the type of network operated by KCOM (which is the most prevalent in the Hull Area); and (b) we are reviewing a market (defined in the 2014 FAMR) in which KCOM was found to be the provider with SMP.⁵⁹
- 3.20 Secondly, this definition of the focal product includes services of all speeds. Hence, it recognises that the owner of local access infrastructure is inherently able to benefit from the economies of scope (and opportunity for leverage into different downstream services) from providing multiple downstream services, including internet access at different speeds. However, we also investigated whether starting with a more narrowly-defined focal product could result in the identification of narrower product markets and concluded that it would not. This is because consumer survey and other analysis suggested that there would be sufficient constraints in response to a SSNIP on packages offering either SBB or SFBB at a fixed location to render that SSNIP unprofitable.⁶⁰ The details of this analysis are set out in Annex 5 of the 2018 WLA Statement.
- 3.21 Having defined the focal product as "local access at a fixed location using copper/fibre connections", we consider the constraints on a hypothetical monopolist of this product below.

Retail indirect constraints – WLA

- 3.22 In the 2018 WLA Statement, we considered in detail the extent to which different retail services provided over cable and over wireless infrastructures would be likely to constrain a hypothetical monopolist of local access at a fixed location using copper/fibre connections. In general, constraints on wholesale charges from substitution by retail customers to alternative products at the retail level are referred to as indirect constraints. We rely on this analysis in reaching our conclusions below.⁶¹
- 3.23 Consistent with the applicable guidelines, we have defined the relevant product markets first, with geographic markets then being defined on the basis of differences in competitive conditions. Moreover, product characteristics, which determine the extent of substitution possibilities and hence product market definition, are largely similar across areas. In

⁵⁸ <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 29 May 2018].

⁵⁹ As noted earlier, in the 2014 FAMR, the definition of the WLA product market was also the same in both the UK outside the Hull Area and in the Hull Area.

⁶⁰ Respondents to the survey included a small number of Hull residents.

⁶¹ See paragraphs 3.60-3.120 of the [2018 WLA Statement](#) for our full analysis.

particular, voice and broadband services can be used to perform the same functions regardless of where they are delivered geographically, and all providers offer a range of SBB and SFBB services, with higher speeds commanding a price premium (as shown in Table 3.1 below).

Table 3.1: Fixed broadband prices in the Hull Area and in the rest of the UK⁶²

	KCOM	BT	Virgin Media
Price	£22-60 ⁶³	£25-45	£29-44 ⁶⁴
Connection/activation fee	£50	£10-20	£20
Contract length	18 months	18 months	12 months or 30 days
Usage limit	20GB-Unlimited ⁶⁵	30GB/Unlimited ⁶⁶	Unlimited ⁶⁷
Headline speeds (Mbit/s)	17, 30, 75 ⁶⁸ , 200 and 400	17, 52 and 76	50, 100, 200 and 300 ⁶⁹
Inclusive calls	Available as paid add-on	Unlimited UK weekend (more available as paid add-on)	Inclusive weekend calls to UK landlines, Virgin Mobile numbers, plus inclusive weekend minutes to 0870 numbers
TV content	None	SFBB packages include BT Sport, also available as add-on	Available as add-on

Source: KCOM website⁷⁰, BT information as presented in the 2018 WLA Statement Table 3.2.

3.24 As shown by the table above, while there are some differences in terms of speeds offered, data allowances and pricing, packages available in the Hull Area are broadly comparable to the rest of the UK. While KCOM's prices are in general somewhat higher than BT's, KCOM's prices are likely to reflect both the higher speeds offered over KCOM's FTTP network (at least for the relevant tariffs) and the absence of specific wholesale remedies or any material competition at the retail level.

⁶² Full list of KCOM prices available at http://pricing.kcomhome.com/media/1542/p05-s22_limitededitionconsumerbroadbandpackages.pdf (prices include VAT).

⁶³ Packages including a 400GB data allowance, which is sufficient for the vast majority of consumers, are priced up to £50 for the 400 Mbit/s speed option.

⁶⁴ Prices shown are for 12-month contract options. Up to 50 Mbit/s VIVID 50 fibre broadband, £29/£40 on a 30-day rolling contract; up to 100 Mbit/s VIVID 100 fibre broadband, £34/£45 on a 30-day rolling contract; up to 200 Mbit/s VIVID 200 fibre broadband, £39/£50 on a 30-day rolling contract; up to 300 Mbit/s VIVID 300 fibre broadband, £44/£55 month on a 30-day rolling contract.

⁶⁵ All speeds include an unlimited data option.

⁶⁶ Up to 52 Mbit/s Infinity has a monthly usage allowance of 30GB, £24.99.

⁶⁷ Acceptable use policy applies.

⁶⁸ FTTC speed provided where FTTP is not available.

⁶⁹ Up to 300 Mbit/s packages available on 92% of the Virgin Media network.

⁷⁰ http://pricing.kcomhome.com/media/1501/p05-s21_consumerbroadbandpackages.pdf.

- 3.25 As there are some differences between the products available in the Hull Area and those in the rest of the UK, we have set out below whether these have an impact on the extent of the constraint of alternative infrastructures on our focal product of local access at a fixed location using copper/fibre connections.

Local access over cable

- 3.26 In the 2018 WLA Statement, we concluded that a hypothetical monopolist of copper/fibre connections is unlikely to be able to profitably impose a SSNIP above the competitive level due to substitution to retail packages provided over cable. Cable networks in the rest of the UK offer broadband and voice services which are nearly indistinguishable from those provided over copper/fibre networks and have achieved a significant market share of around 40% in the areas of the UK where they are available. We therefore concluded that services provided over cable are a sufficiently close substitute for services over copper/fibre connections for us to include local access over cable connections in the product market.
- 3.27 Given the absence of any cable operator in the Hull Area or the realistic prospect of cable entry, the inclusion or exclusion of cable does not affect our market power assessment. However, as for WLA in the rest of the UK, we expand our focal product to include local access over cable connections.

Wireless access services

- 3.28 In the 2018 WLA Statement, we noted that wireless-based services are highly differentiated and in previous reviews have not been found to act as a constraint on a hypothetical monopolist of local access over copper/fibre or cable connections.⁷¹
- 3.29 We concluded that satellite services, traditional line-of-sight (LoS) FWA and wireless access based on cellular mobile technologies are at present an insufficient constraint on a hypothetical monopolist of services over copper/fibre and cable connections. For satellite services, LoS FWA services and mobile access over a smartphone, we concluded that this was likely to remain the case over the review period. However, we considered that some wireless technologies could begin to gain consumer acceptance as an alternative to a copper, fibre or cable connection with advances in wireless technologies such as future developments in LTE and the advent of 5G. Should such services become more widely available to consumers, and where they are able or likely to provide an effective constraint on retail services over copper/fibre or cable connections, we said that we would review our position accordingly.
- 3.30 The availability of satellite services and wireless access services based on cellular mobile technologies is very similar or identical inside the Hull Area and in the rest of the UK.⁷² We

⁷¹ [2018 WLA Statement](#), paragraph 3.115.

⁷² Paragraph 3.11 of the [2017 Hull WLA and WBA Consultation](#) noted that, although fixed data consumption in the Hull Area was somewhat lower than the average in the rest of the UK, it was still significantly higher than the allowances offered by most mobile tariffs. This suggested that mobile broadband is unlikely to be a stronger substitute in the Hull Area than in the rest of the UK.

note however, that FWA coverage across the Hull Area (specifically LoS FWA) is much higher than for the UK as a whole, with the majority of the Hull Area being covered by at least one fixed wireless provider.

- 3.31 In the 2018 WLA Statement we compared fixed-line broadband offers with a tariff from three fixed wireless operators, one of which (Air Net) is based in Hull.⁷³ We have reviewed the offers of other fixed wireless providers in the Hull Area⁷⁴ and found their product offerings to be broadly similar in terms of speeds, usage allowances and pricing (including setup charges).⁷⁵
- 3.32 Despite fixed wireless providers having been present in the Hull Area for many years and covering a large portion of the Hull Area, take-up of fixed wireless services has [§<], and we do not expect any significant rollout of these services in Hull during the review period. This suggests that in practice, only a limited number of consumers consider these services to be substitutes to the retail packages delivered over copper- and fibre-based connections on the KCOM network.
- 3.33 Given the low take-up of FWA services in the Hull Area, as well as the comparable product characteristics of both fixed broadband offerings and fixed wireless offerings between the Hull Area and the rest of the UK, we consider that our conclusion in the 2018 WLA and WBA Statements that FWA services are not close substitutes to fixed-line broadband connections also applies in the Hull Area.
- 3.34 In any case, while market definition precedes SMP assessment, we note that the inclusion of these FWA operators in the defined market would have very little impact on KCOM's share of connections due to their low take-up (KCOM would still have a greater than 90% share of all connections).

Leased lines

- 3.35 In the 2018 WLA Statement, we concluded that, given the existing price differences between local access services and leased lines, there is likely to be limited switching to leased lines in response to a small increase in the price of services provided over a local access connection. This is also the case in the Hull Area. The 2016 BCMR Statement noted that users do not appear to regard them as close substitutes and neither do telecoms providers⁷⁶, and that this was reflected in replies to the market research questionnaires and in telecoms providers' marketing of fibre-based services.⁷⁷

⁷³ [2018 WLA Statement](#), Table 3.3.

⁷⁴ We have gathered information from [§<].

⁷⁵ Data collected from [§<] and [§<].

⁷⁶ Ofcom, 2016. [Business Connectivity Market Review Statement – Review of competition in the provision of leased lines \(2016 BCMR Statement\)](#), Volume 1, paragraph 5.41. Leased line annual rental charges are above £6,000 (incl. VAT) for a 10Mbps or faster service, even taking account of term and volume discounts. This compares with an annual retail price of around £25-£60 per month (i.e. £300-£720 p.a.) for a residential broadband package (see Table 3.1 above). See http://pricing.kcomhome.com/media/1484/p07-s21_kcom-leased-line-retail-reference-offer.pdf.

⁷⁷ [2016 BCMR Statement](#), Volume 1, paragraphs 4.259-4.261.

- 3.36 We consider that the constraint exerted by leased lines connections on the pricing of services over local access at a fixed location is insufficient for leased lines to be included in the WLA market in the Hull Area, as in the rest of the UK.

Conclusion on WLA wholesale product market definition

- 3.37 Taking account of direct and indirect constraints acting on a hypothetical monopolist at the wholesale level, we have found that the product market for wholesale local access provided at a fixed location includes services delivered via cable connections (where available) as well as those delivered via copper/fibre. We recognise that local access in the form of cable connections is not available in the Hull Area, so the assessment of market power is unaffected by the inclusion or exclusion of cable in this geographic market.
- 3.38 We found that wireless services in the round do not act as a significant constraint on local access services delivered via copper/fibre or cable connections. However, there is potential for this to change in future as wireless technologies develop and, while we do not expect this to happen within this review period, in the future it may be appropriate to include at least some FWA services in the WLA market. We also find that leased lines do not constrain local access services provided over copper/fibre and cable connections.
- 3.39 In recognition of the reference market in the 2014 EC Recommendation and the potential for services provided over alternative technologies (such as FWA) to be included in the market in future, a technology-neutral description is appropriate and we define the market as “wholesale local access provided at a fixed location”. However, at present, the change in phrasing makes no practical difference to our assessment of market power.

Geographic market definition – WLA

- 3.40 As explained above, an area may be defined as a distinct geographic market if competitive conditions within the area are “sufficiently homogeneous” and “appreciably different” from the surrounding area. In the 2018 WLA Statement, we found that the Hull Area exhibits different characteristics to the rest of the UK. The incumbent operator in the Hull Area is KCOM, which operates the local access network (as opposed to BT in the rest of the UK) and is by far the largest supplier at the retail level. There has been no unbundling of KCOM’s exchanges and no rollout of competing cable infrastructure.
- 3.41 Stakeholders did not comment specifically on our proposals to find the UK excluding the Hull Area and the Hull Area to be separate geographic markets.⁷⁸ In its response to the 2017 Hull WLA and WBA Consultation, KCOM agreed that “the geographic scope of the relevant product market is the Hull Area”.⁷⁹
- 3.42 In the 2018 WLA Statement, we concluded that competitive conditions are unlikely to be homogenous between the Hull Area and the rest of the UK given that the areas are served by different providers and, for similar reasons, there is unlikely to be common pricing

⁷⁸ [2018 WLA Statement](#), paragraph 3.152.

⁷⁹ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 2.3.

behaviour absent regulation (or the threat of regulation). We adopt that reasoning here and conclude that the Hull Area and the rest of the UK lie in separate geographic markets.

- 3.43 We have also considered whether there are any material variations in competitive conditions within the Hull Area. However, while two other operators have invested in FTTP infrastructure, they are present only in small parts of the Hull Area and this is unlikely to change significantly over the review period. We have also considered whether there are any differences in pricing within the Hull Area that may suggest current or anticipated differences in competitive conditions. In the absence of price differentiation, a finding of a single geographic market for the Hull Area is likely to be appropriate. This is in line with the BEREC common position, which states:

“If prices of the incumbent and alternative operators are geographically uniform, that is, do not differ between geographical areas, this may be an indication of insufficient geographical variations in competitive conditions to justify the definition of subnational geographical markets.”⁸⁰

- 3.44 We have reviewed KCOM’s retail and wholesale prices and have not found any evidence of differentiated pricing between different areas within its network footprint.⁸¹ KCOM also has a universal service obligation (USO) which requires it to supply and maintain “Telephony Services” at a uniform price.⁸² Since the main costs of the access connection (duct, copper, exchange space and network maintenance) are recovered through the line rental, it follows that the retail pricing of local access will be uniform across the entire network area when the line rental is priced uniformly.
- 3.45 In addition, as we noted in the 2018 WLA Statement, a firm that has a monopoly position in one region may set a uniform price covering both the monopoly area and other areas where it faces competition in order to induce rivals to price less aggressively.⁸³ KCOM may therefore continue to set a uniform price even if competition were to develop in parts of the Hull Area.
- 3.46 We therefore consider that there are not separate geographic markets within the Hull Area.
- 3.47 Hence, in line with our longstanding practice, we consider that the Hull Area is a relevant geographic market for the purposes of analysing competition in the WLA market. We therefore define the relevant market as wholesale local access at a fixed location in the Hull Area.

⁸⁰ BEREC, 2014. [Common Position on geographical aspects of market analysis \(definition and remedies\)](#), paragraph 48.

⁸¹ KCOM’s wholesale broadband prices are available at <https://www.kcomplc.com/regulatory/kcom-wholesale/broadband/> [accessed 4 May 2018].

⁸² Universal Service ensures that basic fixed line services are available at an affordable price to all citizens and consumers across the UK. <https://www.ofcom.org.uk/consultations-and-statements/category-1/uso>

⁸³ 2018 WLA statement paragraph 3.161 and footnote 182 which refers to Dobson and Waterson, 2008. [Chain-Store Competition: Customized vs. Uniform Pricing](#).

Approach to assessment of market power in WLA in the Hull Area

- 3.48 SMP is defined in the Act as being equivalent to the competition law concept of dominance, that is, a position of economic strength affording a telecoms provider the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. In our assessment of competition in the WLA market, we have had regard to the criteria for assessing SMP set out in the European Commission’s SMP Guidelines.
- 3.49 The EC SMP Guidelines set out a non-exhaustive list of criteria to be considered in an SMP assessment⁸⁴, and state that a dominant position may derive from a combination of these criteria, which taken separately may not necessarily be determinative. Evidence on the most relevant SMP criteria should be considered in the round and findings should not be based on assessment of a single criterion. We regard the following criteria as particularly relevant to the assessment of SMP in the WLA market:
- market shares;
 - pricing and profitability;
 - barriers to entry and expansion; and
 - countervailing buyer power.
- 3.50 Above we have defined the relevant market for WLA in the Hull Area. However, market definition is not an end in itself, but rather a tool to help assess whether any telecoms provider possesses market power. In principle, products which are outside the market can still exert some constraining effect on the prices of products within it and we therefore also consider these (under the heading “external constraints”). Below we set out our assessment of whether KCOM will hold a position of SMP in the WLA market in the Hull Area over the review period.

Market shares

- 3.51 The EC SMP Guidelines note that “market shares can provide a useful first indication for the NRAs of the market structure”.⁸⁵ The EC SMP Guidelines also state that:
- single dominance is not likely if the undertaking’s market share is below 40%;
 - concerns can also arise at lower shares depending on the difference between the market shares of the undertaking in question and that of its competitors; and
 - very large market shares in excess of 50% are in themselves evidence of a dominant position, save in exceptional circumstances.
- 3.52 Historically, KCOM has enjoyed a 100% share of the WLA market in the Hull Area given the lack of network competition.

⁸⁴ [EC SMP Guidelines](#), paragraph 58.

⁸⁵ [EC SMP Guidelines](#), paragraph 54.

- 3.53 A recent development has been the market entry of MS3, a fibre operator. MS3 currently has 40km of network built across Hull and East Yorkshire⁸⁶, and has informed us that it intends to [redacted].⁸⁷
- 3.54 MS3 currently serves a small number of both retail and wholesale customers in the Hull Area and while it intends to increase this over the review period, it will still serve only a small fraction of customers in the Hull Area.
- 3.55 We consider that MS3 will not gain such market share as to reduce KCOM's share of local access to anything near the levels below which dominance would not be presumed. In particular:
- MS3's rollout of its FTTP network is currently limited to a trial rollout to 1,200 premises, which constitutes less than 1% of households in the Hull Area; and
 - [redacted], MS3's network will serve only a small number of customers in the Hull Area.⁸⁸
- 3.56 In summary, despite the deployment of some rival infrastructure in the Hull Area, KCOM currently holds a near 100% share of the WLA market. We consider that its market share is likely to remain close to 100% over the market review period.

Pricing and profitability

- 3.57 In a competitive market, individual firms would not be able to raise prices above costs and make returns above the cost of capital for a sustained period. The ability to price at a level that keeps profits persistently and significantly above the competitive level is an important indicator of market power.
- 3.58 Unlike BT, KCOM's wholesale access charges have not been subject to charge controls; instead, the primary form of pricing regulation has been a fair and reasonable charging obligation under the network access condition. KCOM's retail prices have also not been subject to *ex ante* regulation for some years.⁸⁹
- 3.59 KCOM's Regulatory Financial Statements (RFS), do not provide profitability data for WLA. Similarly, no data on prices for KCOM's wholesale local access services are available, reflecting the absence of any sales to third parties. We can, however, observe KCOM's retail prices. In the absence of price controls or competition at either the wholesale or retail levels, evidence that KCOM's retail prices were above the competitive level could indicate that KCOM has SMP in WLA, since competition concerns in local access stem from barriers to entry at the wholesale rather than the retail level. However, even if retail prices were not clearly excessive, this could still be consistent with the possession of SMP if this

⁸⁶ <http://www.connecthull.co.uk/#two> [accessed 25 April 2018].

⁸⁷ MS3 response to s.135 notice dated 4 April 2018.

⁸⁸ MS3 response to s.135 notice dated 4 April 2018 confirms that it has a [redacted] share of the local access market in the Hull Area, with [redacted] expansion forecast over the review period.

⁸⁹ In the [2009 Narrowband Statement](#), we imposed no undue discrimination and price publication remedies on KCOM's retail prices (paragraph 7.4). We did not maintain these remedies in the [2013 Narrowband Statement](#) in relation to calls, (paragraph 4.2) and retail regulation of exchange lines (including in relation to bundling involving broadband) was removed following the findings of the [2014 FAMR](#) (paragraph 6.35-6.37).

were justified on the basis of other evidence. This is because KCOM may have been influenced by the perceived threat of regulation if it had raised prices further in order to maximise profits.

- 3.60 In its response to the 2017 Hull WLA and WBA Consultation, KCOM argued that its retail prices for high-speed broadband provided over FTTP are “broadly in line with” comparable BT services.⁹⁰ However, Hull City Council said in its response that “retail prices are higher than across the rest of the UK” and “Hull consumers are unable to access bundles of broadband, media and mobile services typically offered across the rest of the UK”.⁹¹
- 3.61 As noted previously, KCOM’s retail prices are in general somewhat higher than BT’s. While KCOM now offers high-speed packages not available to most customers buying from telecoms providers using Openreach’s network, we recognise that KCOM’s prices are higher than those of Virgin Media’s comparable speed tariffs in the rest of the UK.
- 3.62 We further note that in the rest of the UK, BT makes returns which are increasing and above the cost of capital, meaning that if KCOM’s prices are at least as high as BT’s, returns are also likely to be above the cost of capital in the Hull Area.⁹²

Barriers to entry and expansion

- 3.63 We consider there are still high entry barriers to constructing a significant scale local access network. Entry would require very high levels of investment to install local access connections between customers’ premises and an entrant’s core network and would require a considerable period of time. Moreover, the costs associated with such investment are, to a large degree, likely to be sunk. This is because, once built, the physical network cannot be transferred to another location if it is no longer required at the original site and the components of the network either have low resale value or, where they involve recovery of assets, significant costs would be incurred in order to extract and resell them.
- 3.64 The CMA’s guidelines on the assessment of market power (OFT 415) explain why the presence of sunk costs is likely to create a barrier to entry:

“sunk costs might give an incumbent a strategic advantage over potential entrants. Suppose an incumbent has already made sunk investments necessary to produce in a market while an otherwise identical new entrant has not. In this case, even if the incumbent charges a price at which entry would be profitable (if the price remained the same following entry), entry may not occur. This would be the case if the entrant does not expect the post-entry price to be high enough to justify incurring the sunk costs of entry”.⁹³

⁹⁰ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.10.

⁹¹ Hull City Council response to the 2017 Hull WLA and WBA Consultation, page 2.

⁹² See Table 4.4 of the March 2018 WLA Statement where we show BT’s ROCE in WLA increasing from 10.2% in 2014/15 to 15.6% in 2016/17 (whereas the benchmark cost of capital was less than 9% over the period).

⁹³ Office of Fair Trading, 2004. [Assessment of market power](#), paragraph 5.10.

- 3.65 KCOM has extensive network infrastructure covering the entirety of the Hull Area. The asymmetry between KCOM, which has already incurred sunk costs in creating these networks, and potential entrants which have not, gives rise to barriers to entry. We also note that the Hull Area has a relatively small population from which an infrastructure operator can recover the large outlay in sunk costs that would be required to enter the market.
- 3.66 In its response to the 2017 Hull WLA and WBA Consultation, KCOM argued that infrastructure-based competition could become stronger over the review period with competing FTTP deployments by MS3 and CityFibre.⁹⁴ However, even after the initial time taken to deploy network infrastructure, it would take time for any new entrant to gain market share through competition with KCOM and the entrant would likely only be able to gain a small part of the market. These factors mean that there is a large structural barrier to entry and expansion, including for providers who are already present in parts of the market, such as MS3 and CityFibre.
- 3.67 In conclusion, we consider the barriers to entry and expansion remain high. We do not consider that the threat of entry or expansion by new or existing networks will significantly affect competitive conditions in the WLA market in the Hull Area in this review period.

Countervailing buyer power

- 3.68 In general, purchasers may have a degree of buyer power where they purchase large volumes and have a credible threat to switch supplier or to meet requirements through self-supply. In order for the threat to be effective, the volumes that are (or can credibly be) met from another source of supply need to be sufficient to have a material impact on the supplier's profitability. Practically, this requires volumes to be significant and to represent a material proportion of a supplier's total volumes.
- 3.69 Given the high barriers to entry, countervailing buyer power is weak because of the lack of alternative WLA suppliers in the Hull Area. We recognise that entry by certain providers with their own infrastructure may provide some wholesale customers with an alternative to KCOM in the medium to long term. However, given the current and anticipated extent of their networks over the review period and the substantial entry barriers which remain, wholesale customers are likely to have limited outside options (including self-supply) in access discussions with KCOM. Therefore, we conclude that countervailing buyer power will be insufficient to constrain KCOM during the period covered by this review.

External constraints

- 3.70 Our market power assessment aims to take all relevant competitive constraints, whether inside or outside the market as defined, into account. We consider external constraints – i.e. out-of-market products which some customers might regard as substitutes to in-the-market products – and their individual and joint impact on competition for in-the-market products as part of our assessment. External constraints by their nature tend to be

⁹⁴ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 3.2.2.

relatively weak, but they can, when taken together and in combination with competition within the market, constrain a firm's ability to exercise market power.

- 3.71 We consider two services which may, in principle, be a potential source of external constraint on KCOM's market power. These are fixed wireless access (FWA) services and mobile broadband services.
- 3.72 In the case of FWA services, we find that take-up by consumers has so far been limited, even in geographic areas where the quality of services provided over fixed access connections tend to be relatively low or areas where there has been limited choice of alternative providers. This suggested that consumers do not yet regard FWA services as an adequate substitute for services provided over a copper/fibre or cable access connection. We also note that technological developments mean that higher quality FWA services are likely to be introduced in future and these might be seen by consumers as a sufficiently good alternative to a fixed access service to be included in the same market at some point in time. However, we consider that this will not impact on our market power findings in this review period.
- 3.73 While some respondents to the March 2017 WLA Consultation argued that we should take greater account of the price-constraining effect from FWA and mobiles in our market assessment for the rest of the UK, KCOM did not suggest that this was the case for the Hull Area in its response to the 2017 Hull WLA and WBA Consultation. Other respondents suggested that the constraining effect of FWA providers on KCOM was weak, even given the absence of other fixed-line competitors. MS3 noted that FWA providers supplied only "a few thousand" customers in the Hull Area, and with services which were inferior to KCOM's fibre services and "with little prospect of...significant growth". Hull City Council listed the fact that "competition is largely restricted to a small number of radio access providers" among the factors contributing to KCOM's SMP and retail prices which were above those in the rest of the UK.⁹⁵
- 3.74 As in the rest of the UK, for the great majority of customers, mobile services are used in addition to services over a fixed access connection, rather than as a substitute for one. Mobile broadband service characteristics and prices suggest that the great majority of fixed broadband customers are unlikely to view these as an adequate substitute. While it is possible that mobile services may become a stronger substitute in future (with the development of services over 5G wireless networks), the timing and extent to which this happens are uncertain.
- 3.75 In light of this, we consider that external constraints from FWA services and mobile services in the Hull Area are weak at present. As market shares, pricing and other evidence indicate that constraints from within the market are also weak, we consider that external

⁹⁵ In this regard, note that the definition of the market and the assessment of market power should be undertaken using the competitive price level as a benchmark (including in the SSNIP test). To the extent that consumer switching (for example, to FWA services) takes place only at prices above the competitive level, there would be a risk of defining the market excessively broadly and failing to identify market power. This error is known as the 'Cellophane Fallacy'. As we reach the same view on product market as that defined in the 2018 WLA Statement, we reduce the risk of this error.

constraints will not affect our market power findings in the WLA market in the Hull Area in the review period.

Conclusion on market power assessment on WLA in the Hull Area

- 3.76 We conclude that KCOM will continue to have SMP in the supply of wholesale local access at a fixed location in the Hull Area for the period of this review. This conclusion reflects:
- KCOM's market share, which is very high and expected to remain at levels consistent with a presumption of dominance throughout the period covered by this review;
 - the high barriers to entry into the WLA market, arising particularly from the scale of the investment needed to do so, and the fact that a large part of the costs incurred are likely to be sunk costs;
 - evidence that KCOM's prices are at least as high as (and in many cases higher than) those in the rest of the UK, where BT makes returns which are well above the cost of capital and has been found to have SMP;
 - the absence of significant countervailing buyer power; and
 - the weakness of constraints from services delivered over access networks outside the WLA market (most notably access over mobile or FWA connections).

Wholesale broadband access, the retail services it supports, and our choice of focal product

Definition of wholesale broadband access

- 3.77 WBA products are used to supply asymmetric broadband internet access services to retail customers. Asymmetric broadband internet access provides, at a minimum, an always-on capability that allows both voice and data services to be used simultaneously and provides speeds greater than dial-up connections.
- 3.78 As we set out in the 2018 WBA Statement, WBA products are built using a number of elements, all of which are rented by a WBA access seeker from a WBA provider like KCOM⁹⁶:
- the access network considered in the WLA market review, which includes the connection from the customer's premises to the exchange either using copper, fibre or a combination of copper and fibre;
 - the broadband equipment at the relevant subscriber line aggregation point, i.e. the exchange or street cabinet;
 - backhaul connectivity across the WBA provider's network (i.e. from the point of aggregation to the point of interconnection for hand-over to the telecoms provider using WBA); and
 - the functionality of the Broadband Remote Access Server (B-RAS) which provides management of the end consumer's internet sessions.

⁹⁶ [2018 WBA Statement](#), Figure 2.1.

Retail services that use WBA inputs

- 3.79 Demand for wholesale services is derived from retail demand and so it is relevant for the purposes of assessing the wholesale market definition to look at the retail services provided using these wholesale services. In the 2018 WLA Statement, we identified three broad categories of usage services over local access connections:
- internet access (typically via broadband, although some narrowband data usage remains by business consumers – e.g. ISDN2 or ISDN30)⁹⁷;
 - the ability to receive TV content (in particular cable TV, IPTV or as a complement to satellite TV services); and
 - the ability to make and receive voice calls.⁹⁸
- 3.80 In the 2018 WBA Statement, we note that a large majority of consumers now take broadband as part of a bundle of services including fixed voice and that some telecoms providers also offer packages including pay-TV and mobile services. However, we conclude that the existence or otherwise of a market for bundles at the retail level 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. What matters is whether there is (or could be) market power in the provision of at least one part of the bundle. We therefore have not evaluated whether there are separate markets for bundles at the retail level.
- 3.81 We state in the 2018 WBA Statement that, under the Modified Greenfield Approach (see Annex 2), in addition to the supply of WBA services to third parties, we also take account of telecoms providers offering retail services using the upstream access products regulated in the WLA market. However, there has been no take-up of WLA services in the Hull Area to date and, following this review, KCOM is no longer required to provide LLU services. Therefore, this does not affect our assessment of competition in the WBA market in the Hull Area, in contrast to our assessment in the rest of the UK where competition in retail broadband services on the basis of regulated access to LLU and VULA has been significant.

Focal product – including consideration of downstream access speeds

- 3.82 In the 2018 WBA Statement, we define wholesale SBB access services delivered over a copper/fibre connection as the appropriate focal product for the purposes of defining the WBA market. We then test the strength of the constraint between SBB and SFBB prices as part of the market definition process.
- 3.83 We explain that our choice of focal product for the purposes of defining the WBA market differs from the focal product used to define the WLA market because, unlike WLA products, WBA products are not service agnostic. This means that the WBA provider can

⁹⁷ ISDN is a digital exchange line service that supports telephony and some data services. ISDN30 is primarily used by larger businesses who require multiple lines, for example call centres. ISDN2 supports two voice or narrowband data channels (such data usage might include card payments or fax machines, for example).

⁹⁸ 2018 WLA statement, paragraphs 3.37-3.45.

control the speed and other characteristics of the downstream service offered by the retail provider to a greater extent than a WLA provider can.

- 3.84 Therefore, for our WBA market definition, we need to consider separately whether broadband lines of different speeds fall within the same product market. This primarily involves assessing the degree of substitutability between SBB and SFBB services.
- 3.85 Therefore, as a starting point, we identify wholesale SBB access services delivered over a copper/fibre connection as the appropriate focal product, as we did in the 2018 WBA Statement.⁹⁹
- 3.86 Demand for this wholesale focal product is a “derived demand”, that is, it is derived from demand for the downstream retail product. The (potential) constraints on the price of this wholesale focal product are indirect constraints arising from substitution at the retail level. The definition of the wholesale focal product should be no wider than that of the corresponding retail focal product. In the 2018 WBA Statement, we identify the retail focal product as retail packages offering SBB services delivered over a copper/fibre connection. We consider that this is also the appropriate retail focal product for the purposes of this assessment for the same reason set out in the 2018 WBA Statement.

Retail indirect constraints – WBA

Broadband of different speeds

- 3.87 Having chosen our retail focal product of retail packages offering SBB services delivered over a copper/fibre connection, we need to consider the strength of the constraint from retail packages offering SFBB services delivered over a fibre connection by a hypothetical monopolist of this focal product.
- 3.88 In Annex 5 of the 2018 WBA Statement, we build on our analysis from the 2018 WLA Statement and apply this to the WBA market. The 2018 WLA Statement included an assessment of the implications for market definition of retail price differentials, usage trends and forecasts, and evidence on consumers’ propensity to downgrade.¹⁰⁰ It also included a critical loss analysis of whether a SSNIP on SFBB would be constrained by switching to SBB, and vice versa, based on responses to our consumer survey. In the 2018 WBA Statement, we update the critical loss analysis to reflect the fact that the costs and charges for provision differ between WLA and WBA (reflecting their different levels in the supply chain) and, in accordance with the OFT Guidance, consider the results of our critical loss analysis in the round along with the other evidence.
- 3.89 As in the 2018 WBA Statement, we find that:
- Retail packages offering SBB services delivered over a copper/fibre connection would be constrained by retail packages offering SFBB services delivered over a fibre

⁹⁹ While KCOM does not currently offer SBB services over its fibre network, it could offer a full range of speeds over this network if it chose to.

¹⁰⁰ [2018 WLA Statement](#), Annex 5, paragraphs A5.64-A5.131.

connection and vice versa. The constraint on SFBB services from SBB services may be weaker (at least on the demand-side), but not to the extent that we would define separate markets on the basis of broadband speed.

- Retail packages offering faster SFBB services are likely to be constrained by switching to retail packages offering basic SFBB speeds.

3.90 As such the focal product is expanded to comprise retail broadband packages offering broadband services over a copper/fibre connection. In the next sub-section, we consider the extent to which retail services delivered over cable would act as a constraint on this focal product comprising retail packages of all broadband speeds.

Broadband access over cable

3.91 Cable networks in the rest of the UK offer broadband and voice services which are nearly indistinguishable from those provided over copper/fibre networks and have achieved a share of connections at around 40% in the areas of the UK where they are available. In the 2018 WBA Statement, we conclude that retail packages offering broadband services delivered over cable are a sufficiently close substitute to such services over copper/fibre connections and expand our focal product to retail packages offering broadband services delivered over a copper/fibre or cable connection.

3.92 Given the absence of any cable operator in the Hull Area or the realistic prospect of cable entry, the inclusion or exclusion of cable does not affect our market assessment. However, as for WBA in the rest of the UK, we expand our focal product to retail packages offering broadband services delivered over a copper/fibre or cable connection.

Wireless access services

3.93 Wireless-based broadband services are highly differentiated and have not been found to act as a constraint on a hypothetical monopolist of retail packages offering broadband services delivered over a copper/fibre or cable connection (including the 2018 WBA Statement). While there are some ongoing developments in the satellite and traditional LoS FWA sectors, we do not believe that changes over the review period will be significant enough such that either satellite or LoS FWA are likely to act as a significant constraint on a hypothetical monopolist of broadband over copper/fibre or cable connections.

3.94 As noted above, in the definition of the WLA market, fixed wireless providers have been present in the Hull Area for many years and have a high coverage of the Hull Area. However, take-up of fixed wireless services has remained low and this is consistent with our view that FWA services are not close substitutes for fixed-line broadband connections. We also note that, due to the low take-up, the inclusion of these FWA operators in the defined market would have very little impact on KCOM's share of connections in any case.

3.95 We consider that other forms of wireless access based on cellular mobile technologies remain presently as an insufficient constraint on a hypothetical monopolist of copper/fibre and cable access connections.

3.96 However, with advances in wireless technologies such as future developments in LTE and the advent of 5G, we expect that some wireless technologies could begin to gain consumer acceptance as an alternative to a copper/fibre or cable connection. Should such services become more widely available to consumers, and where they are able or likely to provide an effective constraint on retail services over copper/fibre or cable connections, we would review our position accordingly.

Leased lines

3.97 As set out above for WLA, we consider that the extent of substitutability between retail services over copper/fibre or cable local access and leased line connections is insufficient for leased lines to be included in the product market. This is consistent with our findings for both WLA and WBA in the rest of the UK.

Residential and business services

3.98 In the 2014 WBA Statement, we concluded that residential and business broadband packages are in the same product market for the following reasons:

- some businesses substitute between residential and business products;
- the evidence on product pricing suggests there is a chain of substitution across all broadband products; and
- supply-side substitution between different types of residential and business products is feasible.

3.99 In the 2018 WBA Statement, we conclude that there has not been a material change in market circumstances since 2014 and that broadband access used to supply residential and business customers are in the same product market.

3.100 No stakeholders which responded to our consultation commented on whether residential and business services should be included in the same product market. We have compared the broadband prices of KCOM, BT and Virgin Media below.

Table 3.2: Comparison of business broadband packages in Hull and the rest of the UK

	KCOM	BT	Virgin Media
Headline tariff (£/month, inc. VAT) ¹⁰¹	£25-180 ¹⁰²	£35-61	£38-62
Headline speed (Mbit/s)	17, 250, 500, 750, 1000	17, 52, 76	350
Usage (GB)	80 – Unlimited	Unlimited	Unlimited
Connection (inc. VAT)	£72+	£48+	£60+
Static IP	Included	Included	Included

Source: KCOM, BT and Virgin Media websites.

¹⁰¹ Business prices for 24-month contracts

¹⁰² Prices above £132 are for 1Gbps packages, which may be more comparable to leased line prices, and these prices are comparable to BT and Virgin Media starting prices for leased line services.

- 3.101 As we found for Table 3.1 above, Table 3.2 shows that, while there are some differences in terms of speeds offered, data allowances and pricing, packages available in the Hull Area are broadly comparable to those available in the rest of the UK. While KCOM's prices are in general somewhat higher than BT's, KCOM's prices are likely to reflect both the higher speeds offered over KCOM's FTTP network and the absence of specific wholesale remedies or any material competition at the retail level. As for the rest of the UK, comparing Table 3.1 with Table 3.2 shows an overlap between residential and business broadband tariffs.¹⁰³
- 3.102 As we explain in the 2018 WBA Statement, we also consider that entry into the business segment (or to the provision of particular service features) by a provider already serving the residential segment (or providing lower-grade business services) could be undertaken quickly and at low cost. It follows that a hypothetical monopolist of broadband packages offering business-grade services would face the threat of supply-side substitution (or at least entry or expansion) if another provider was present offering residential packages.
- 3.103 In conclusion, we remain of the view that broadband access used to supply residential and business customers are in the same product market.

Conclusion on WBA wholesale product market definition

- 3.104 Supported by the analysis for the WLA market as well as the 2018 WBA Statement, our analysis of indirect constraints in the WBA market shows that:
- retail packages offering SBB services delivered over a copper/fibre connection are likely to be constrained by retail packages offering SFBB services delivered over a fibre connection (and vice versa) and there is not further segmentation between faster SFBB packages and those offering basic SFBB speeds;
 - retail broadband services offered over cable (where available) are sufficiently close substitutes to such services over copper/fibre connections;
 - retail broadband services offered over wireless connections, such as satellite services, mobile data services and FWA, as well as services offered over leased lines, are not strong constraints on retail packages offering broadband services over copper/fibre or cable connections; and
 - the supply of broadband services to residential and business customers are in the same product market.
- 3.105 These indirect constraints will act on a hypothetical monopolist of wholesale SBB access services delivered over a copper/fibre connection such that the appropriate wholesale market is broadened to comprise broadband access (of all speeds) delivered over copper/fibre or cable connections. This is because WBA charges (and any supporting line rental product to offer a dual-play broadband package) are a large part of the costs of

¹⁰³ As in the rest of the UK, we find that there is some overlap between KCOM's higher-end residential packages and its lower-end business packages (for similar speeds and data allowance). While any premium for a business service that is comparable to a residential service might be expected to encourage substitution from business to residential products by some businesses, KCOM currently imposes restrictions on the use of residential products by business consumers and vice versa. For the purposes of market definition, however, these restrictions would not be relevant to a hypothetical monopolist test in which the hypothetical monopolist supplied either business or residential services but not both.

offering a retail broadband package. This is reflected in the critical loss analysis set out in Annex 5 of the 2018 WBA Statement.

- 3.106 Based on our assessment outlined in this section, we define the relevant product market as wholesale broadband access services provided at a fixed location. For these purposes, wholesale broadband access services comprise the provision of 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

Geographic market definition – WBA

- 3.107 As set out above, for WLA we have defined the Hull Area as a separate geographic market on the grounds of similarity of competitive conditions and common pricing.
- 3.108 We have considered whether there are any material variations in competitive conditions for WBA in the Hull Area. As explained above, there is currently no cable operator present. While two other operators have invested in FTTP infrastructure, they are currently present in small parts of the Hull Area and there is [3<] take-up of these services.
- 3.109 Furthermore, unlike in the rest of the UK where take-up of LLU and VULA services over Openreach’s network varies between different geographic areas, there has been no take-up of WLA services in the Hull Area.
- 3.110 Hence, in line with our longstanding practice, we define the Hull Area as a separate geographic market for the purposes of analysing competition in WBA.

Approach to assessment of market power in the WBA market

- 3.111 As for WLA, in our assessment of competition in the WBA market, we have had regard to the criteria for assessing SMP set out in the EC SMP Guidelines. The same criteria are relevant to the assessment of SMP in the WBA market:
- market shares;
 - pricing and profitability;
 - barriers to entry and expansion; and
 - countervailing buyer power.
- 3.112 Above we defined the relevant market for WBA in the Hull Area. However, market definition is not an end in itself, but rather a tool to help assess whether any telecoms provider possesses market power. In principle, products which are outside the market can still exert some constraining effect on suppliers within the defined market and we therefore also consider these below, under the heading ‘external constraints’.
- 3.113 When assessing SMP, it is appropriate to take account of the existing regulation that is upstream of the market which is being considered. Therefore, when we assess SMP in the WBA market in the Hull Area, we assume that the remedies we are imposing on KCOM in the WLA market in this statement are in place.

- 3.114 Below we set out our assessment of whether KCOM will hold a position of SMP in the WBA market in the Hull Area over the review period.

SMP assessment for WBA in the Hull Area

Market shares

- 3.115 We note above in our SMP assessment for the WLA market that, according to the EC SMP Guidelines, market shares in excess of 50% are in themselves evidence of a dominant position (save in exceptional circumstances). KCOM has a near 100% share of the WBA market in the Hull Area, leading to a strong presumption of SMP.
- 3.116 As set out in Section 4, KCOM will be required to offer wholesale local access to its fibre network at regulated prices. Some operators have expressed interest in using such a product, although others have suggested that they would be more likely to use a WBA service. It is therefore possible that KCOM's share of the WBA market could decline to some extent over the market review period, depending on the take-up of KCOM's WLA services. However, even where entry using WLA products occurs, it will take time for there to be any significant effect on KCOM's market share.¹⁰⁴
- 3.117 Given the limited network competition expected over the review period, the lack of any providers currently using WLA services over KCOM's network and the uncertainty over the extent of any future usage of such products, we consider that KCOM's share of the WBA market will remain well above 50% and possibly close to 100% over the review period.

Pricing and profitability

- 3.118 As discussed above, we are reviewing the framework around KCOM's Regulatory Financial Statements (RFS). KCOM's ROCE for WBA services is reported as 13%, comfortably above the benchmark cost of capital for this line of business.¹⁰⁵ However, this ROCE is exactly the same as that reported in all other regulated markets.¹⁰⁶ This constant 13% ROCE has been reported by KCOM since 2005 and does not reflect its true profitability. It is in fact an assumed, notional, rate of return which KCOM applies to the level of capital employed in order to calculate a notional figure for internal revenue in each market.¹⁰⁷ Hence we

¹⁰⁴ For example, evidence set out in the 2014 WBA statement showed that it took a number of years for the entry of LLU operators to have an effect on BT's share of the WBA market and that the scale of this effect depended on the number of LLU operators who entered the market. Given the smaller scale of the Hull Area and interest from mainly smaller providers, the effect of WLA-based entry on competition in WBA could take longer still.

¹⁰⁵ As explained in the [2018 WLA Statement](#), we use a benchmark cost of capital described as "other UK telecoms" for broadband services (Annex 20, paragraph A20.155). The rate for other UK telecoms was 8.9% (pre-tax nominal) in the 2018 WLA Statement, having been 9.8% in the 2016 BCR Statement.

¹⁰⁶ Including analogue, ISDN2 and ISDN30 exchange lines.

¹⁰⁷ According to KCOM's [Description of Cost Accounting System](#), "Wholesale revenue is derived to ensure a regulated return on mean capital employed is achieved for each market" (page 7). Page 3 says: "This cost of capital has been established at 13.0%". We understand that the wholesale revenue reported by KCOM every year is simply fixed at a level to derive a 13% ROCE. We will shortly be publishing a consultation on our approach to KCOM's regulatory financial statements to consider whether KCOM's reporting method is appropriate.

consider that the ROCEs reported by KCOM do not provide a reliable basis for inferring the extent of market power KCOM may have.

- 3.119 In addition, KCOM's retail broadband prices (analysed above) are at least as high as headline prices in the rest of the UK. We also find that introductory discounts from a range of providers in the rest of the UK typically make retail services noticeably cheaper than equivalent services in the Hull Area on a like for like basis.
- 3.120 We have also considered the level of pricing of KCOM's wholesale broadband access products. We find that, for both copper-based and fibre-based broadband services, the prices for these services are typically higher than the price of the equivalent services offered by BT in the rest of the UK.¹⁰⁸

Table 3.3: Wholesale broadband prices in Hull and the rest of the UK

BT product	KCOM product	BT (unltd)	KCOM 200GB	KCOM 400GB	KCOM (unltd)
ADSL2+ (up to 24Mbit/s)	FTTP 30/15	£13.50	£26.92	£30.46	£38.96
FTTC 40/10	-	£20.62	-	-	-
FTTC 55/10	-	£21.62	-	-	-
FTTC 80/20	FTTP 75/20	£22.62	£29.75	£32.58	£39.67
FTTP 220:20	FTTP 200/35	£31.62	£29.75	£34.00	£41.08
FTTP 330:30	FTTP 400/35	£51.62	£31.88	£35.42	£42.50

Source: Prices taken from BT and KCOM websites.

- 3.121 Overall, the evidence suggests that KCOM's prices are in many cases higher than those charged by BT in the rest of the UK. In the 2018 WBA Statement, we also note that BT's return on capital employed for WBA services in Market A (as defined in 2014) remains above the cost of capital. Therefore, if KCOM's prices are at least as high as BT's (as the table above indicates is typically the case), returns are also likely to be above the cost of capital in the Hull Area.

Barriers to entry and expansion

- 3.122 In principle, barriers to entry and expansion into the WBA market are lower than those into the WLA market as, to provide WBA services, a telecoms provider would only need to use WLA access products from KCOM rather than deploy an alternative network.

¹⁰⁸ We have compared BT's WLR+WBC prices with KCOM's wholesale prices for copper-based and fibre-based services. For KCOM's prices, see http://pricing.kcomhome.com/media/1418/p06-s33_connect_broadband_2_plus.pdf and http://pricing.kcomhome.com/media/1498/p13-s21_connect_broadband_fibre.pdf. For BT's WBC pricing, see https://www.btwholesale.com/assets/documents/Service_Provider_Price_List/WBC_Price_List_Entry_1June18_v3.xlsx. For BT's WLR pricing, see <https://www.openreach.co.uk/orgp/home/products/pricing/loadProductPrices.do?data=63iUyYbpRV%2Fdw36mtxo4r1nqs1m6OcKz301sgolk8P2FdiaKKPEfrCsJCb3sZkzJ>.

- 3.123 However, there has been no WLA entry in recent years and KCOM has refused requests for access in some cases.¹⁰⁹ Furthermore, given the migration of customers on broadband services supported by copper connections over to KCOM's FTTP network, we are no longer requiring KCOM to provide unbundled access to its copper access connections.
- 3.124 We are aware that KCOM is in the early stages of launching a fibre local access product called Wholesale FibreLine Local Access and has published a draft Reference Offer.¹¹⁰ This may make it easier for telecoms providers to provide WBA services using local access services. In Section 4 we set out details of the regulation that will apply to KCOM in the WLA market over the review period. The availability of WLA fibre products at regulated terms and prices will also reduce entry barriers into the WBA market.
- 3.125 However, as in previous reviews, the small size of the market in the Hull Area remains a significant barrier to entry. The small number of premises relative to the rests of the UK, as well as the need for different counterparty and interconnect arrangements, add transactions costs for providers with otherwise national (or near-national) coverage.
- 3.126 While barriers to entry to the WBA market in the Hull Area may be lower than the barriers to entry in the WLA market, they are still likely to remain significant over the review period, particularly in areas where KCOM has not deployed fibre. In an FTTP environment, differences between a WLA and a WBA fibre remedy are less significant than those between a WLA and a WBA copper remedy, but any entrant will take time to enter and establish itself in the market.
- 3.127 We therefore consider that barriers to entry into the WBA market remain significant, and we do not consider that the threat of entry or expansion by new or existing competitors (either network operators or potential WLA purchasers) will significantly affect competitive conditions in the WBA market in the Hull Area in this review period.

Countervailing buyer power

- 3.128 Given the high barriers to entry, countervailing buyer power is weak given the lack of alternative WBA suppliers in the Hull Area. We recognise that entry by certain providers with their own infrastructure, or entry by telecoms providers purchasing WLA services from KCOM, may provide some wholesale customers with an alternative to KCOM in the medium to long term. However, given the current and anticipated extent of alternative networks over the review period, the lack of any WLA purchasers and the significant entry barriers which remain, wholesale customers are likely to have limited outside options (including self-supply) in access discussions with KCOM. Therefore, we conclude that countervailing buyer power will be insufficient to constrain KCOM during the period covered by this review.

¹⁰⁹ We understand that telecoms providers have expressed an interest to KCOM for such access, including through the formal Statement of Requirements (SoR) process, but that these requests have not been accepted by KCOM.

¹¹⁰ <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/new-services/> [accessed 23 July 2018].

External constraints

- 3.129 As the external constraints relate to services provided at the retail level, those external constraints that are relevant to the WLA market in the Hull Area (i.e. FWA services and mobile broadband services) are also relevant to the WBA market.
- 3.130 As set out above, we find that external constraints from FWA services and mobile services in the Hull Area are weak at present. As market shares, pricing and other evidence indicate that constraints from within the WBA market are also weak, we consider that external constraints will not affect our market power findings.

Conclusion on market power assessment on WBA in the Hull Area

- 3.131 We conclude that KCOM will continue to have SMP in the supply of wholesale broadband access services provided at a fixed location in the Hull Area for the period of this review. This conclusion reflects:
- KCOM's market share, which is very high and expected to remain at levels consistent with a presumption of dominance throughout the period covered by this review;
 - the significant barriers to entry into the WBA market, combined with the absence of entry so far and the uncertainty over future demand for WLA fibre;
 - evidence that KCOM's prices are at least as high as (and in many cases higher than) those in the rest of the UK, including in Market A (as defined in the 2014 WBA Statement), where BT makes returns which are above the cost of capital;
 - the absence of significant countervailing buyer power; and
 - the weakness of constraints from services outside the defined WBA market (most notably access over mobile or FWA connections).

4. Remedies

- 4.1 In this section we cover the following:
- our approach to assessing what remedies are appropriate to address the competition concerns we have identified;
 - our assessment of the existing remedies in terms of promoting competition in the Hull Area; and
 - our decisions for remedies to address these concerns.
- 4.2 We consider that the remedies would achieve our statutory duties and satisfy the relevant legal tests. In reaching these decisions, 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 Hull Area, as set out in our Strategic Review.

Summary of decisions

- 4.3 Table 4.1 summarises the remedies that we are imposing on KCOM in the WLA and WBA markets in the Hull Area.

Table 4.1: Summary of remedies imposed on KCOM

	Existing remedies	Remedies imposed
WLA	Provide network access on reasonable request, and on fair and reasonable terms, conditions and charges	Provide network access on reasonable request, and on fair and reasonable terms, conditions and charges
	Requests for new forms of network access	Requests for new forms of network access
	Requirement not to discriminate unduly	Requirement not to discriminate unduly
	Publish a Reference Offer	Publish a Reference Offer
	Notify changes to charges, terms and conditions	Notify changes to charges, terms and conditions
	Notify changes to technical information	Notify changes to technical information
		Publish quality of service information *
		Accounting separation *
		Cost accounting *

	Existing remedies	Remedies imposed
WBA	Provide network access on reasonable request, and on fair and reasonable terms, conditions and charges	Provide network access on reasonable request, and on fair and reasonable terms, conditions and charges
	Requirement not to discriminate unduly	Requests for new forms of network access *
	Publish a Reference Offer	Requirement not to discriminate unduly
	Notify changes to charges, terms and conditions	Publish a Reference Offer
	Notify changes to technical information	Notify changes to charges, terms and conditions
	Publish quality of service information	Notify changes to technical information
	Accounting separation	Publish quality of service information
		Accounting separation
		Cost accounting *

Note: an asterisk () indicates where we are implementing a new remedy.*

4.4 We explain in detail below the basis for our view that these remedies address our competition concerns in each of the WLA and WBA markets.

Assessment of competition concerns

4.5 In light of our assessment of these markets and our SMP finding for KCOM in each of the WLA and WBA markets in the Hull Area, we consider that in the absence of *ex ante* regulation, KCOM will have the ability and incentive in each of these markets to:

- refuse to provide network access to other providers (or 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, such as in the handling of requests for new network access) and ultimately to the detriment of consumers;
- reduce the quality of its services to the detriment of consumers; and
- fix and maintain some or all of its charges for WLA or WBA services at an excessively high level.

4.6 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. Consistent with 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

- 4.7 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.
- 4.8 First, competition law would focus on preventing the abuse of a dominant position and may not place sufficient obligations on KCOM to facilitate effective downstream competition. In contrast, our experience is that *ex ante* regulation at the wholesale level can better promote effective downstream competition. Second, *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.
- 4.9 Third, we consider that providing greater certainty in the wholesale market is of paramount importance, both to KCOM and to its competitors, as this underpins competition in retail services, 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.
- 4.10 In the present circumstances of the Hull Area, we consider that competition law remedies alone would be insufficient to address the competition problems we have identified.

Conclusion following assessment of the competition concerns

- 4.11 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.

Assessment of existing remedies

- 4.12 When considering which remedies are appropriate to address our competition concerns set out above, we have assessed the extent to which the existing remedies have been effective in promoting competition in the Hull Area. Our analysis has been informed by discussions with third-party telecoms providers and observed market outcomes in the Hull Area.

Stakeholder discussions

4.13 We spoke with ten telecoms providers that operate in the Hull Area in order to enhance our understanding of the state of competition and the concerns of potential competitors to KCOM.¹¹¹ We discuss the key themes raised by these providers below.

Demand for a wholesale fibre access service

4.14 The providers have a strong interest in a fibre access service and many informed us that they had asked KCOM for some form of wholesale access to KCOM's fibre network since Lightstream (KCOM's retail fibre broadband service) was launched.

4.15 [X], [X] and [X] expressed a preference for a service similar to BT's GEA.¹¹² [X] said that although it would not purchase such a service, it may benefit from being able to purchase wholesale services from other providers that did buy a GEA-type service from KCOM.

4.16 On the other hand, [X], [X], [X] and [X], [X], stated a preference for a WBA-type service. [X].

Level of competition with KCOM

4.17 KCOM faces little competition in the Hull Area, mostly from fixed-wireless operators, and it still has the vast majority (over 90%) of broadband customers in the Hull Area.¹¹³

4.18 In 2016, MS3 began a trial of FTTP to residential consumers in west Hull, with the aim of deploying a network capable of connecting 1,200 premises.¹¹⁴ [X].¹¹⁵

4.19 [X] claimed that fixed-wireless operators are reaching their limits in terms of the number of customers they can serve in the urban areas of Hull. This is due to the number of wireless networks operating in the metropolitan areas of Hull and the limited availability of spectrum.

Observed outcomes

4.20 In this subsection we consider developments in the provision of retail broadband services and the extent to which the existing remedies imposed in each of the WLA and WBA markets have been successful in promoting retail competition.

¹¹¹ [X]

¹¹² GEA is a service provided by BT to fulfil the specific access obligation to provide Virtual Unbundled Local Access (VULA) and give access to its FTTC and FTTP networks. Telecoms providers connect to a GEA service at a 'local' aggregation point and are provided a virtual connection from this point to the customer premises.

¹¹³ As we explain in Section 3, FWA operators are outside the markets defined in this review and any constraining effect they have on KCOM's prices is weak at present.

¹¹⁴ <http://www.connecthull.co.uk/> [accessed 25 April 2018].

¹¹⁵ [X]

Investment in fibre networks

- 4.21 Since the previous reviews of these markets, we have seen significant investment in fibre networks in the Hull Area by the incumbent and by other telecoms providers.
- 4.22 When the last reviews concluded in June 2014, KCOM was at the start of its fibre network deployment and had passed only 15,000 premises. Nearly four years later and KCOM has announced that it is aiming to complete its FTTP plans with the aim of covering 200,000 homes and businesses by March 2019.¹¹⁶
- 4.23 Other telecoms providers have also invested in fibre infrastructure in the Hull Area. MS3 has begun expanding its FTTP network to offer a residential fibre broadband service under the 'ConnectHull' brand and has deployed over 40km of its FTTP network to date.¹¹⁷ [8].
- 4.24 CityFibre has built a small fibre network in the Hull Area. This has been rolled out in partnership with Purebroadband, a Hull-based telecoms provider, and offers local businesses ultrafast broadband via FTTP.¹¹⁸
- 4.25 In our Strategic Review, we explained our strategic shift to encourage the deployment of new ultrafast broadband networks. These investments in FTTP networks in the Hull Area are therefore welcome and should provide consumers with faster and more reliable broadband connections that are important in the daily lives of individuals and businesses.

Competition in the Hull Area

- 4.26 Despite these developments, the Hull Area still lags significantly behind the rest of the UK from a competition perspective, with limited competition at the wholesale and retail levels. There is no competition from telecoms providers using their own equipment in KCOM's exchanges (an approach commonly used to compete in the rest of the UK), despite an obligation to provide such access being in place since 2001; there is no cable operator; and none of the large national retail providers – such as Sky, TalkTalk and Vodafone – operate in the Hull Area, using KCOM's networks or otherwise.
- 4.27 As we have set out in Section 3, the limited competition that does exist comes largely from fixed-wireless operators and small telecoms providers using KCOM's wholesale services. The three largest fixed-wireless operators serve both business and residential customers, but combined, they have less than 10% of retail broadband consumers in the Hull Area. These shares are also in danger of shrinking as their customers are likely to seek more reliable and faster connections on KCOM's fibre network. This is the root of their interest in wholesale access to KCOM's fibre network.
- 4.28 The small telecoms providers using KCOM's network only serve business customers and use predominantly retail-minus white label services (although there is some use of WBA

¹¹⁶ <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

¹¹⁷ <http://www.connecthull.co.uk/#two> [accessed 25 April 2018].

¹¹⁸ <https://www.cityfibre.com/news/businesses-offered-choice-as-hull-becomes-a-gigabit-city/> [accessed 4 May 2018].

services).¹¹⁹ White label services are broadband packages that can simply be resold to retail customers. The virtue of white label services for a retail provider is that they require very little investment. The downside, from a competition perspective, is that they offer very little scope for innovation while retail-minus pricing similarly limits scope for price competition. The past lack of a wholesale fibre service has also meant that these competitors have been unable to offer equivalent services to KCOM and have become increasingly disadvantaged as retail customers take-up superfast and, ultimately, ultrafast broadband.

- 4.29 This illustrates that the level of competitive pressure present in the rest of the UK to offer greater choice, higher quality and lower prices is not present to the same extent in the Hull Area.
- 4.30 KCOM's prices are often higher than BT's (see Section 3) and this is likely to reflect both the higher speeds offered over its FTTP network and the absence of specific wholesale remedies, as well as the lower level of competition at the retail level.
- 4.31 That said, the presence of several small providers and the existence of competing fibre investments from MS3 and CityFibre offers the prospect of greater competition, at least at the retail level and provided appropriate remedies are in place. Our discussions with providers in the Hull Area confirmed a significant level of interest in making greater use of KCOM's fixed network to expand their geographic coverage and retail broadband offerings.

Approach to remedies

- 4.32 Based on the above, we therefore consider it necessary to ensure that regulations support competitive growth, while not undermining the incentives for KCOM and other telecoms providers to continue to invest in broadband networks.
- 4.33 In this regard, our focus is on KCOM's fibre network. KCOM is obliged to provide access on reasonable request in both the WLA and WBA markets, but until our consultation, there were no wholesale fibre services available. We understand that telecoms providers have expressed an interest to KCOM for such access, including through the formal Statement of Requirements (SoR) process, but that these requests have not been accepted by KCOM. There have been positive developments since our consultation which appear to reflect a change in approach by KCOM in response to our proposals. Specifically, it has launched a fibre-based WBA service¹²⁰ and published draft Reference Offer for a fibre-based WLA service.¹²¹ However, this does not eliminate our concern that a continued focus on KCOM's responsiveness to its potential wholesale customers is required.
- 4.34 Moreover, in our view KCOM's new fibre network presents a realistic opportunity for the small telecoms providers operating in the Hull Area to compete effectively in retail

¹¹⁹ I.e. where wholesale prices are derived from the retail price by subtracting retail costs rather than being built up from wholesale costs.

¹²⁰ <https://www.kcomplc.com/regulatory/kcom-wholesale/broadband/> [accessed 4 May 2018].

¹²¹ <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/new-services/> [accessed 23 July 2018].

broadband services, unlike services based on the legacy copper network and Local Loop Unbundling (LLU).

4.35 With regard to WLA, using KCOM's copper network via LLU requires significant investment and, while this was viable for the likes of Sky and TalkTalk in the rest of the UK, no form of LLU was taken up by operators in the Hull Area. On the other hand, Virtual Unbundled Local Access (VULA), the access by which competitors can offer superfast or ultrafast broadband services to customers, requires less investment. This is because telecoms providers do not need to purchase, install and operate their own access equipment to offer such services to premises across the Hull Area. However, no VULA service exists to date and, if a service is developed, it will take time to implement. In light of the indications of possible increased demand, we consider that there is a reasonable prospect competition through the use of WLA.

4.36 Our view is that telecoms providers operating in the Hull Area are best placed to steer the development of a wholesale fibre broadband service, as this would ensure that any service(s) developed meets their needs. Therefore, a key aim of this review is to improve the process for retail providers to request appropriate wholesale access services. Our view is that increasing the current, very limited, take-up of wholesale services based on KCOM's network will increase competition in retail broadband services. Specifically, we are amending the existing new forms of network access obligation to:

- empower telecoms providers to monitor KCOM's compliance and bring complaints to us, by requiring KCOM to provide public KPIs about SoR requests received, time taken and numbers accepted;
- improve transparency in relation to requests for new network access and the SoR process, by requiring KCOM to publish information on SoR requests, allowing other telecoms providers the opportunity to add their demand to the request; and
- improve accessibility to information about KCOM's wholesale services and the SoR process.

4.37 This is an addition to a full suite of remedies, including requirements on KCOM to provide access on fair and reasonable terms, conditions and charges and not to discriminate unduly, as well as obligations relating to transparency and financial reporting.

Remedies on KCOM

4.38 In this subsection we set out our remedies for the WLA and WBA markets. Our decisions on remedies in the WBA market, as with our decisions on the market definition and SMP, are taken in light of the remedies we are imposing in the upstream WLA market. However, in most cases, our decisions are the same for each market. Where there are differences, in either the remedy or the basis for imposing it, we highlight the relevant differences between the two markets.

4.39 We assess each remedy in turn, explaining:

- our proposals as set out in the 2017 Hull WLA and WBA Consultation;
- stakeholder responses to our proposals;

- our reasoning and decisions; and
- our consideration of the relevant legal tests for imposing the regulation.

4.40 The legal instruments that give effect to our remedies are set out in Annex 6.

Requirement to provide network access on reasonable request

Our proposals

- 4.41 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in each of the WLA and WBA markets requiring it to provide network access on reasonable request and on fair and reasonable terms, conditions and charges. In addition, we proposed that KCOM provide such access in accordance with such terms, conditions and charges as we may from time to time direct and comply with any direction we might make under this condition.
- 4.42 We proposed that, in considering whether charges are fair and reasonable, we would consider if they are set on the basis of Long-Run Average Incremental Cost Plus (LRIC+), including a reasonable rate of return and a reasonable contribution to the recovery of common costs. In order to inform our enforcement priorities, we proposed to use BT's wholesale charges for comparable bandwidths as a benchmark. We said that, if KCOM's charges are higher, it may then need to justify how they are consistent with (LRIC+) including a reasonable rate of return and a reasonable contribution to the recovery of common costs.
- 4.43 With regard to copper-based WLA services, given that none are available or consumed at present and KCOM is rolling out an extensive FTTP network (to which it is required to provide access), we proposed to exclude Local Loop Unbundling (LLU) from the WLA network access requirement. However, we proposed to retain the obligation on KCOM to provide Sub-Loop Unbundling (SLU) and the WBA obligation to provide access to its copper network.

Stakeholder responses

- 4.44 Hull City Council emphasised the importance for our regulation to include access to KCOM's fibre services and agreed with our proposed reduction of copper regulation in the WLA market.¹²²
- 4.45 Hull City Council also said that, rather than rely on providers to request network access, we should impose specific access obligations, e.g. Physical Infrastructure Access (PIA).¹²³ MS3 also commented on the benefits of designating access to KCOM's infrastructure and how such access would help it to accelerate its deployment of an alternative fibre network.¹²⁴ In contrast, KCOM did not consider it necessary to impose specific access obligations in either

¹²² Hull City Council response to the 2017 Hull WLA and WBA Consultation, pages 1 and 3.

¹²³ Hull City Council response to the 2017 Hull WLA and WBA Consultation, page 2.

¹²⁴ MS3 response to the 2017 Hull WLA and WBA Consultation, page 3.

market and, with regard to a PIA remedy, cited the fact that it is subject to Access to Infrastructure (ATI) Regulations.¹²⁵ KCOM said that a specific access obligation would mean it has to develop services, a process which is expensive and may not meet the particular needs of providers.¹²⁶

- 4.46 KCOM agreed with our proposed network access obligations, believing them to be appropriate and proportionate. KCOM made specific mention of our proposal to remove the LLU obligation and maintain the SLU obligation for distribution side (d-side) copper.¹²⁷

Pricing regulation

- 4.47 [§<]¹²⁸

4.48 KCOM disagreed with the proposed fair and reasonable charging obligation for several reasons, specifically¹²⁹: it is competitively constrained and, without evidence of excessive pricing, regulation is unnecessary; investment incentives will be negatively affected; and the use of LRIC+ is unnecessarily restrictive and does not give it a ‘fair bet’ on its investment.

4.49 KCOM argued that its pricing is constrained by competing network providers and that the prospect of further competition from the proposed network access obligation will offer a further constraint.¹³⁰ Without evidence that its prices are excessive, KCOM reasoned that the obligation is unnecessary and disproportionate.¹³¹

4.50 KCOM noted that other providers considering models for co-investment may look at the regulatory signal we are sending.¹³² KCOM stated that our proposed approach must therefore be consistent with our strategy of promoting investment in fibre, and a premature price intervention may risk a chilling effect on investment.

4.51 With regard to KCOM receiving a ‘fair bet’ on its investment and our proposal to impose pricing regulation at this time, KCOM noted that while its investment in FTTP began in 2012, deployment did not start until later.¹³³ It also argued that, given its FTTP investment has a materially different risk profile to FTTC and it is one of the first network operators to invest in FTTP, it should be allowed to benefit from sufficient of the upside potential of its investment to provide it with a ‘fair bet’. Looking at the following criteria, KCOM said setting prices on a LRIC+ basis is premature: time elapsed vs. expected payback period; perceived riskiness of initial investment; performance of investment against initial expectations; and level of returns.¹³⁴

¹²⁵ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.2.

¹²⁶ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.4.

¹²⁷ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.1.

¹²⁸ [§<]

¹²⁹ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.8.

¹³⁰ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.9.

¹³¹ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.10.

¹³² KCOM response to the 2017 Hull WLA and WBA Consultation, paragraphs 4.1.12-13.

¹³³ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.11.

¹³⁴ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.13.

- 4.52 In the event that we maintain our view that price regulation is required, KCOM argued that the use of LRIC+ to assess whether charges are fair and reasonable is unnecessarily restrictive and asked us to further explain why such a constraint is necessary.¹³⁵ Referencing the 2013 Cost Orientation Review Consultation, in which we accepted there may be an argument for the use of distributed stand-alone cost (DSAC) over fully allocated costs plus (FAC+), KCOM suggested that requiring charges within distributed long-run incremental cost (DLRIC) and DSAC floors and ceilings would be more proportionate.¹³⁶
- 4.53 KCOM also asked that we explain what a reasonable rate of return is in this context and noted that benchmarking its wholesale charges against BT's will need to reflect the approach we have taken to the regulation of BT's FTTP network in the rest of the UK.¹³⁷

Our reasoning and decisions

- 4.54 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets requiring it to provide network access on reasonable request and on fair and reasonable terms, conditions and charges. In addition, KCOM must provide such access in accordance with such terms, conditions and charges as we may from time to time direct and comply with any direction we might make under this condition.
- 4.55 The obligation is designed to promote effective competition in the relevant downstream services. In the absence of such a requirement, KCOM would have both the incentive and ability to refuse access to services in each of the WLA and WBA markets, thereby favouring its own retail operations. This would hinder sustainable competition in the corresponding retail markets, ultimately against consumers' interests. Furthermore, an obligation to provide access on reasonable request would be rendered meaningless if KCOM could set unfair terms and conditions for such access, as this would deter third parties.

Requirement to provide network access on reasonable request in the WLA market

- 4.56 Hull City Council argued that we should impose a requirement on KCOM to provide specific forms of network access. We have considered whether it would be appropriate to impose such an obligation, namely VULA. While we have had expressions of interest for access to KCOM's fibre, it is not clear to us what should be the priority for KCOM when developing an access service (i.e. whether access should be through a VULA service or one more closely aligned to WBA-type services). Accordingly, we consider that it would be preferable for the precise specifications of a fibre access service to come out of local industry demand.
- 4.57 Hull City Council also recommend that we impose a PIA remedy on KCOM. In addition, MS3 commented on the benefits of designating access to KCOM's infrastructure. While telecoms providers are free to request this access from KCOM (which it would need to assess as reasonable or not), we have not seen a similar level of demand for access to KCOM's physical infrastructure as we have for BT's in the rest of the UK and, given the

¹³⁵ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.15-16.

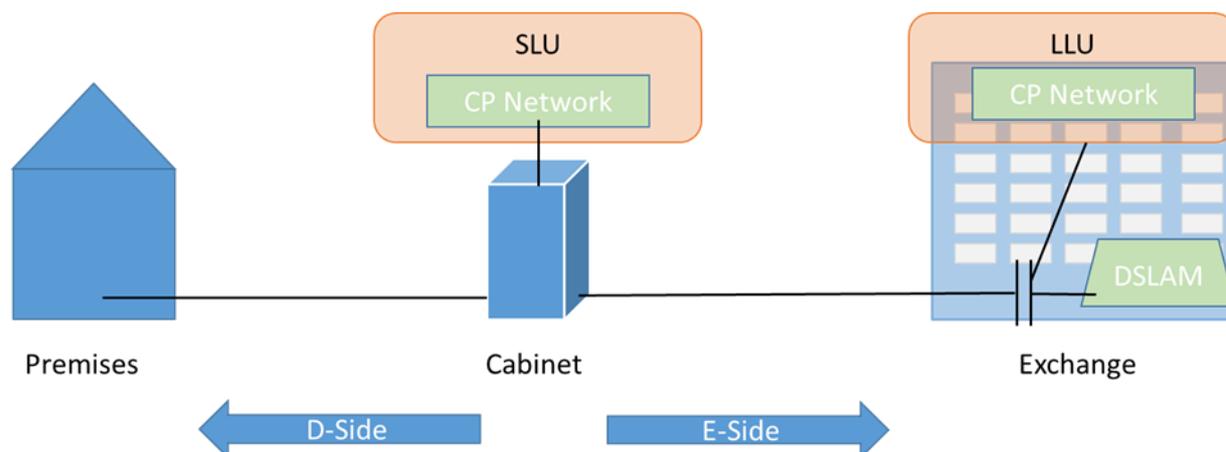
¹³⁶ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.17.

¹³⁷ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.18-19.

costs involved in implementing a successful remedy, we do not think such a specific obligation would be proportionate. In future reviews, should we consider that significantly more demand has emerged for access to KCOM's physical infrastructure, we will reconsider whether to impose a PIA remedy. In addition, as KCOM notes, it is subject to the ATI Regulation which allows telecoms providers to gain access to its infrastructure for the purpose of rolling out broadband.

- 4.58 We consider that an obligation to grant reasonable requests for network access, alongside a requirement to publish guidelines about how telecoms providers can obtain new forms of network access, strikes the right balance between ensuring that telecoms providers have access to the wholesale services they need to compete, and not requiring KCOM to incur the expense of developing services which might not meet the needs of providers.
- 4.59 When assessing whether a request is reasonable, particularly where such a request is for new network access that requires development, we expect KCOM to assess the costs involved in the development and subsequent provision of such access. We consider that such an assessment should be strictly limited to the costs directly associated with the development and provision of the service requested.
- 4.60 With regard to copper-based WLA services, given there are none available or consumed at present and KCOM is rolling out an extensive FTTP network, we are removing the requirement for KCOM to provide services that use e-side (exchange side) components of the copper network; specifically, we no longer consider a request for LLU to be reasonable.
- 4.61 As we note above, use of LLU over copper requires significant upfront investment. While this investment was considered commercially viable for access to the BT network (i.e. the UK excluding the Hull Area) over a decade ago, our discussions with national LLU operators confirmed that none considered it was a worthwhile investment in the Hull Area today, given the upfront costs to adapt to the specific conditions of KCOM's network.
- 4.62 Smaller, Hull-based, telecoms providers have never sought LLU access, which we consider is related to the relatively high cost of investment versus the expected returns in the relatively small Hull Area. We consider that the balance of investment costs and expected revenue through the use of a wholesale FTTP access service in the Hull Area are significantly more attractive to local telecoms providers. This is supported by what Hull-based access seekers have told us (see above) as well as the promotion of fibre connections by KCOM in the Hull Area.
- 4.63 However, we are retaining the option for telecoms providers to request a service that uses d-side (distribution side) copper components, i.e. SLU. We consider that there may be demand for such access in areas where KCOM has invested in FTTC rather than FTTP, or where KCOM has not yet deployed fibre.

Figure 4.3: The e-side and d-side components of a network



Requirement to provide network access on reasonable request in the WBA market

- 4.64 We are requiring KCOM to provide wholesale broadband network access on reasonable request to copper and fibre services in the WBA market. We also considered imposing a specific network access remedy on KCOM in the WBA market in the Hull Area. However, as explained in Section 2, the differences between a VULA and a WBA fibre remedy in an FTTP environment are less significant than those between LLU and a WBA copper remedy. Therefore, the concerns outlined above regarding uncertainty about where demand from telecoms providers will be greatest and about service specification are again relevant.
- 4.65 Telecoms providers operating in the Hull Area currently purchase copper-based WBA services to compete in retail broadband services. The fact that access to KCOM’s fibre network has not been available in the past has made copper access vital for protecting current levels of competition in retail broadband services in the Hull Area, in advance of telecoms providers gaining fibre access from KCOM. As such, we are retaining the obligation on KCOM to provide access to its copper network on reasonable request.

Requirement for charges to be fair and reasonable

- 4.66 As identified in Section 3, we find that KCOM has SMP in both the WLA and WBA markets in the Hull Area. We believe that, as a result of this lack of effective competition, there is a risk that KCOM would fix and maintain wholesale prices at an excessively high level in each of these markets. This would have adverse consequences for consumers through elevated retail prices. We also consider that KCOM would have weaker incentives to reduce costs and improve efficiency.
- 4.67 A regulatory constraint on KCOM's WLA and WBA prices is appropriate in order to address this risk, but in designing our remedy, we have taken account of the extent of KCOM’s investment. In particular, we recognise that KCOM has been investing in an FTTP network since 2012 and should be permitted to benefit from sufficient upside potential from its investment to offset the downside risk of failure. We consider issues related to a ‘fair bet’ on KCOM’s FTTP investment below.
- 4.68 We are therefore imposing a fair and reasonable charging obligation in each of the WLA and WBA markets. KCOM’s charges are fair and reasonable if they are consistent with

making a reasonable rate of return and reasonable contribution to common cost recovery. If called upon to assess this, we would undertake an analysis of its costs and charges, including an examination of the 'fair bet' principle in the context of the appropriate rate of return.

- 4.69 However, in order to inform our enforcement priorities, we will consider how the charges for KCOM's wholesale services compare to BT's charges for wholesale services of comparable bandwidths in the rest of the UK. If KCOM's charges are in excess of these benchmarks, we are likely to give further scrutiny to those charges in order to ascertain whether they are consistent with a reasonable rate of return and a reasonable contribution to the recovery of common costs. The use of BT's charges as a benchmark is not intended as proof that any KCOM charges above this benchmark are not fair and reasonable, but rather to provide a threshold above which KCOM is aware that we will need to be satisfied its charges are consistent with the above.
- 4.70 Benchmarking will give consumers in the Hull Area a level of protection similar to that enjoyed by consumers in the rest of the UK. Furthermore, as we would interpret a reasonable rate of return in a way which is consistent with the 'fair bet' principle, this does not damage KCOM's incentives to complete its FTTP rollout (see below).
- 4.71 KCOM suggested that it is constrained competitively, but there is currently no wholesale competition and limited alternatives at the retail level. Specifically, retail competition is confined to fixed wireless access and mobile broadband, both of which we find to lie outside the relevant markets at this time. KCOM has SMP in the WLA and WBA markets and, in the absence of competition, we remain of the view that it would have the ability and incentive to refuse or restrict access and set excessive wholesale charges. A fair and reasonable charging obligation is the minimum form of price regulation in order to address this risk.
- 4.72 KCOM said that this is disproportionate without any evidence being provided that it has or will charge excessive prices. However, we consider that the fact KCOM has SMP and might, by virtue of its ability and incentives, set excessive wholesale charges justifies imposing a fair and reasonable charging obligation.
- 4.73 KCOM also raised the issue of investment incentives and the necessity for pricing regulation not to conflict with our broader strategy for incentivising investment in fibre networks. Because we will acknowledge KCOM's investment risk in any assessment of its charges, our approach is consistent with our broader strategy while reflecting the competitive conditions in the Hull Area (see below).
- 4.74 Regarding KCOM's concern about regulatory signals, we emphasise that our decision to impose price regulation on KCOM's FTTP network is a result of its SMP in the Hull Area. As stated above, the Hull Area still lags significantly behind the rest of the UK from a competition perspective, with limited competition at the wholesale and retail levels. Furthermore, we consider that our approach to benchmarking against BT's charges for comparable services provides the correct regulatory signals, so as to preserve incentives and allow a 'fair bet' on fibre investment (see below).

‘Fair bet’ on KCOM’s FTTP investment

- 4.75 We said in the Consultation that, in deciding whether KCOM’s charges are fair and reasonable, we would consider whether a charge was “set on the basis of Long-Run Average Incremental Cost Plus (LRIC+) basis, including a reasonable rate of return and a reasonable contribution to the recovery of common costs”.¹³⁸
- 4.76 In its consultation response, KCOM expressed concern that, as worded, our proposals to regulate KCOM’s charges would not provide it with a ‘fair bet’ on its investment in FTTP and would disincentivise its future FTTP rollout.¹³⁹ KCOM suggested that our proposed price regulation was too onerous given the riskiness of its investment and said that the proposed use of LRIC+ to assess whether charges are fair and reasonable was premature and disproportionate. KCOM also said that our proposals needed to reflect the approach we take to the regulation of BT’s FTTP networks.¹⁴⁰
- 4.77 Where charges are required to be “set on the basis of Long-Run Average Incremental Cost Plus (LRIC+), including a reasonable rate of return and a reasonable contribution to common costs”, the impact of the regulation depends on the rate of return that is considered reasonable in any particular case. We recognise that incentives for investment require KCOM to be offered a ‘fair bet’, and this may mean that returns above the cost of capital are reasonable where risky investments turn out to be successful. As we explain above, in assessing whether KCOM’s charges are fair and reasonable, we will consider whether they are consistent with making a reasonable rate of return and a reasonable contribution to the recovery of common costs, which includes taking account of a ‘fair bet’. This is consistent with providing a ‘fair bet’ on KCOM’s FTTP investments.
- 4.78 The primary way of informing our enforcement priorities will be by comparison with BT’s charges for comparable services. These charges are themselves consistent with the offer of a ‘fair bet’ to BT, as we confirmed in the 2018 WLA Statement. KCOM’s regulated WLA and WBA prices will therefore, for the purposes of our enforcement priorities, be benchmarked against BT’s with a presumption that such charges will be sufficient to provide KCOM with a ‘fair bet’ on its investment. While we have not conducted a detailed examination of the costs of and returns on KCOM’s FTTP network, based on our analysis in relation to BT’s FTTC network and BT’s and other operators’ existing and planned investments in FTTP, we expect that KCOM will be able to charge the same prices and make a reasonable rate of return. However, if KCOM considers it appropriate to charge more than the benchmark in order to be provided with a fair bet, we would undertake a more detailed examination of its costs and returns when assessing whether its prices are fair and reasonable.

¹³⁸ [2017 Hull WLA and WBA Consultation](#), paragraph 4.53.

¹³⁹ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.8.

¹⁴⁰ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.19.

4.79 We explain below why, in light of our analysis for the 2018 WLA Statement, we consider that benchmarking against BT's charges is consistent with providing KCOM with a 'fair bet'. In the 2018 WLA Statement, we explained that the pricing regulation we imposed on BT¹⁴¹:

- i) preserves BT's incentives for investment;
- ii) provides BT with a 'fair bet' on its past investments in FTTC as well as its future investments in FTTP¹⁴²; and
- iii) preserves the incentives on efficient competitors to go ahead with their plans to roll out FTTP networks.

4.80 Unlike BT, KCOM has not invested substantially in FTTC and does not face competition from rival telecoms providers deploying fibre networks to any significant extent (in contrast to BT in the rest of the UK). KCOM itself states that although investment began in 2012, its FTTP deployment "did not begin [at] scale until much later".¹⁴³ We are therefore primarily concerned with the implications of regulation for returns on KCOM's recent and future investments in FTTP rather than its past – and more modest – investments in FTTC.

4.81 In the 2018 WLA Statement, we concluded that the regulation imposed on BT is sufficient to provide both BT and its competitors with incentives to invest in FTTP networks. We consider that benchmarking against BT's charges will provide similarly good incentives for KCOM, for the following reasons:

- Charges for BT's higher bandwidth services, including those which can only be provided over FTTP, are not charge controlled. We expect BT and other providers, including KCOM, to charge a premium for the higher speeds of FTTP-based services. The constraint from the 40/10 VULA charge control on BT for higher speed services may also weaken over time as higher speeds become more popular and demand grows.
- KCOM points out that its retail prices for high-speed broadband provided over FTTP are already "broadly in line with" comparable BT services.¹⁴⁴ For example, for a 200 M/bits service, BT's monthly price (including upfront charges) is £58.32 and KCOM's is £60.78.¹⁴⁵ This voluntary alignment by KCOM suggests that costs are also likely to be broadly in line and that prices at these levels are consistent with a reasonable return on investment.

¹⁴¹ Ofcom, 2018. [Wholesale Local Access Market Review \(2018 WLA Statement\)](#), Volume 1, paragraph 9.25.

¹⁴² A fair bet means that an investor can expect to earn a return that covers its cost of capital. For 'risky' investments, this will only happen where the potential for upside (with returns above the cost of capital) balances the potential for failure (with returns below the cost of capital).

¹⁴³ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.11. We note that, by investing later, KCOM is likely to have invested under conditions of lower risk than BT – in particular, knowledge of the premium on superfast broadband (SFBB) that could be sustained, coupled with robust take-up. BT's wholesale SFBB price premium increased over the period since launch driven by the introduction of higher-speed variants (2018 WLA Statement, Annex 6, footnote 288). At the retail level, the SFBB price premium has been broadly stable in recent years (2018 WLA statement, Annex 5, paragraph A5.72), but is nevertheless significant (at around £5-£10 per month).

¹⁴⁴ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.10.

¹⁴⁵ Prices are for an 18-month contract with unlimited usage. BT's service includes weekend calls and has upfront charges of £59.99. KCOM's service does not include any calls and has upfront charges of £50.

- Unlike some of BT's rivals who are investing in FTTP, KCOM already has its own network of ducts and poles. If KCOM can use its existing duct network to deploy new fibre, the forward-looking costs of FTTP rollout are likely to be significantly reduced.¹⁴⁶
- BT's rivals had already announced plans to invest in FTTP networks and had successfully raised finance for this purpose, in some cases after our proposals to charge-control VULA 40/10 were published.¹⁴⁷ Similarly, KCOM announced in November 2017 that it planned to complete its investment in FTTP (totalling £85m and covering 200,000 properties) by March 2019.¹⁴⁸ KCOM's announcement was therefore made in the knowledge of the regulation to which it could be subject in the relevant period.¹⁴⁹
- The fact that KCOM has chosen to roll out FTTP instead of FTTC suggests that KCOM expects the return on its FTTP investments to be greater than it would have been if it had chosen to deploy FTTC to a significant extent.

4.82 The regulation we are applying to KCOM is consistent with the approach we took to price regulating BT's FTTP deployment. In locations where BT can provide a GEA 40/10 service over either FTTC or FTTP, only the charge for the FTTC service is controlled. However, where BT rolls out FTTP to new premises not currently served by FTTC, the 40/10 VULA charge control does apply to the FTTP service. This ensures that customers in these areas are not worse off than those in areas where FTTC is available. As KCOM has a very limited FTTC network against which FTTP investments will compete in most cases, we consider that the appropriate benchmark for services at or around 40 Mbit/s in the Hull Area is the VULA 40/10 charge-controlled rate applied to BT's FTTP connections in places where FTTC is not available.

4.83 We consider that this approach will provide KCOM with good incentives to invest going forward and is consistent with allowing KCOM a 'fair bet' on its investment.

Legal tests

4.84 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.

4.85 Section 87(3) of the Act authorises Ofcom to set SMP service 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 Act authorises Ofcom to set SMP services conditions to be imposed on a dominant provider in

¹⁴⁶ For similar reasons, we have proposed to allow BT's rivals in the rest of the UK to use BT's duct and pole infrastructure at regulated charges. We estimated that this could reduce the average cost per home of deploying an FTTP network by up to 50% (from £500 to £250 excluding lead-ins).

¹⁴⁷ [2018 WLA Statement](#), Volume 1, paragraph 9.162.

¹⁴⁸ <https://www.kcomhome.com/news/articles/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

¹⁴⁹ In addition, in its response to our s.135 notice dated 26 March 2018, KCOM said "the final mix of FTTC and FTTP is yet to be determined. However, ... we have a preference to deploy FTTP wherever possible".

relation to price controls and rules on the recovery of costs and cost orientation regarding the provision of network access, subject to the conditions of section 88 of the Act being satisfied.

4.86 When considering the imposition of such conditions in a particular case, we must take into account the following six factors set out in section 87(4):

- the technical and economic viability (including the viability of other network access services, whether provided by the dominant provider or another person), having regard to the state of market development, of installing and using facilities that would make the proposed network access unnecessary;
- the feasibility of the provision of the proposed network access;
- the investment made by the person initially providing or making available the network or other facility in respect of which an entitlement to network access is proposed (taking account of any public investment made);
- the need to secure effective competition (including, where it appears to Ofcom to be appropriate, economically efficient infrastructure-based competition) in the long term;
- any rights to intellectual property that are relevant to the proposal; and
- the desirability of securing that electronic communications services are provided that are available throughout the Member States.

4.87 In reaching our decision that KCOM should be subject to requirements to provide network access on reasonable request, we have taken each of the above six factors into account. In particular, having considered the economic viability of building access networks within this review period to achieve ubiquitous coverage that would make the provision of network access unnecessary, we consider that the SMP conditions are required to secure effective competition, including economically efficient infrastructure-based competition, in the long term in each of the WLA and WBA markets. The requirements for KCOM to meet only reasonable network access requests also ensure that due account is taken of the feasibility of the proposed network access, and of the investment made by KCOM initially in providing the network.

4.88 We are also required to ensure that the conditions satisfy the tests set out in section 88 of the Act as the requirements place controls on network access pricing, insofar as charges are required to be fair and reasonable. Section 88(1)(a) of the Act requires that Ofcom must not impose pricing conditions unless it appears 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,' KCOM may fix or maintain some or all of its prices at an excessively high level so as to have adverse consequences for end-users of public electronic communications services.

4.89 Section 88(1)(b) of the Act requires that the pricing conditions should be appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on the customers of public electronic communications services.

- 4.90 We consider that the fair and reasonable charges obligations will prevent KCOM from setting charges that are excessively high or that impact other wholesale providers' ability to compete with KCOM in downstream markets and so will support the aim of promoting improved efficiency.
- 4.91 We also consider that the provision of network access on fair and reasonable terms will promote sustainable competition by ensuring that other telecoms providers can effectively compete downstream. We consider this to be the appropriate approach for the purposes of conferring the greatest benefits on customers of downstream services.
- 4.92 We are also required, under Section 88(2) of the Act, to take account of KCOM's investment in matters to which the condition relates. We believe that fair and reasonable charges will allow KCOM's costs to be taken into account and will also provide for common cost recovery and an appropriate return on capital. These conditions are therefore an appropriate basis upon which to control KCOM's prices.
- 4.93 We have considered our duties under section 3 and all the Community requirements set out in section 4 of the Act. The conditions are aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of consumers by facilitating the development of competition in downstream markets.
- 4.94 Section 47(2) requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:
- objectively justifiable, in that they facilitate and encourage access to KCOM's network in the WLA market and in the WBA market, and therefore promote competition to the benefit of consumers;
 - not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
 - proportionate, in that they are the least onerous obligations we could apply to address KCOM's market power in the WLA and WBA markets, in contrast to imposing specific access obligations, and do not require it to provide access if it is not technically feasible or reasonable; and
 - transparent, in that the conditions are clear in their intention to ensure that KCOM provides access to its network in order to facilitate effective competition.
- 4.95 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified in each of the WLA and WBA markets, in line with section 87(1) of the Act.

Requests for new forms of network access

Our proposals

- 4.96 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in the WLA market and to impose an SMP condition on KCOM in the WBA market, requiring it to publish guidelines that set out the process by which it will address requests

for new forms of network access, and to deal with any request in accordance with those guidelines (the Statement of Requirements (SoR) process).

Stakeholder responses

- 4.97 KCOM agreed with the proposed obligation.¹⁵⁰ KCOM said the proposal achieves the right balance between enabling telecoms providers to get the wholesale access they need, but without forcing it to develop services – a process which is expensive and may not meet providers’ requirements. KCOM agreed that providers are best placed to define the services they need.
- 4.98 MS3 also agreed with our proposed approach of relying on the obligation to create new forms of network access.¹⁵¹ However, it noted that this will only succeed if we enforce the obligation to ensure KCOM responds to requests as soon as reasonably practicable.
- 4.99 KCOM stated that it is content to publish an appropriate level of non-confidential detail, but that the requirement to notify Ofcom each time it receives a request is excessive given other proposed monitoring requirements.¹⁵²
- 4.100 Hull City Council agreed with our proposal for KCOM to publish the procedure for acquiring new forms of network access and expressed its interest in comparing KCOM’s performance with the proposed KPIs.¹⁵³
- 4.101 KCOM also agreed with our proposals for publishing KPIs, including escalation routes within the guidance and being clear whether an SoR falls within a regulated market.¹⁵⁴

Our reasoning and decisions

The WLA market

- 4.102 We have decided to impose an SMP condition on KCOM in the WLA market requiring it to publish guidelines that would set out a process by which it will address requests for new forms of network access, and deal with any request in accordance with those guidelines. In addition, KCOM must comply with any direction we might make under this condition.
- 4.103 This regulation supports access seekers (that is a party that has requested access) in ensuring that there is a fair, reasonable and transparent process for assessing requests for new forms of network access. To make such a request, a telecoms provider must provide KCOM with a SoR against which the reasonableness of the request can be assessed.
- 4.104 We consider this obligation to be vital in bringing effective competition to the WLA market in the Hull Area, and therefore to the retail market, resulting in benefits to consumers in the form of increased choice of service and lower prices. This SMP condition will enable telecoms providers to request access to KCOM’s fibre network, allowing them to compete

¹⁵⁰ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.4.

¹⁵¹ MS3 response to the 2017 Hull WLA and WBA Consultation, page 3.

¹⁵² KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.21.

¹⁵³ Hull City Council response to the 2017 Hull WLA and WBA Market Review, page 2.

¹⁵⁴ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraphs 4.1.22-24.

by offering their own high-speed broadband services. This is particularly important given that we are not imposing a specific network access remedy.

- 4.105 In the past, KCOM has not offered fibre-based WLA or WBA services and telecoms providers have been reliant on its copper-based WBA service (with there being little demand for a copper-based WLA service). We are encouraged by KCOM's introduction of new fibre-based services¹⁵⁵, which appears to reflect a change in its approach in response to our proposals, but this does not eliminate our concern that a continued focus on KCOM's responsiveness to its potential wholesale customers is required.
- 4.106 In the absence of such a requirement, KCOM would have the incentive and ability to refuse to provide new forms of network access at the wholesale level, leveraging its SMP in the wholesale market into a downstream market. This has the potential to harm competition by placing third-party telecoms providers at a disadvantage compared with KCOM's downstream retail business in terms of their ability to introduce new services to meet consumers' needs.
- 4.107 The obligation includes all the requirements set out in the current SMP condition, but also includes some additional requirements. KCOM will be required to:
- Publish information (redacted to protect the commercial confidentiality of the access seeker) on each SoR request it receives, sufficient to enable other telecoms providers to consider whether they are interested in such access. To support this, we are requiring KCOM to implement a process that enables an access seeker to identify to KCOM the information in the SoR that is to be treated as confidential.
 - Publish prominently on its website non-confidential SoR data in the form of Key Performance Indicators (KPIs).
 - Include in any response rejecting a request for new network access, information about the avenues of redress.
 - Be transparent where its SoR process applies to any particular request for new network access.
- 4.108 We explain these changes and our rationale for imposing them below. Given the extent of the changes we are making, the revised requirements will come into force 56 days after the date of this statement in order to give KCOM the time to implement the necessary changes, including revising its SoR guidelines.¹⁵⁶

Publication of SoR requests

- 4.109 The Hull Area includes approximately 194,000 business and residential locations (equivalent to 0.7% of UK premises) that could be served with a fixed line and/or broadband service. This fact, alongside the small size of telecoms providers operating in the Hull Area (with the exception of KCOM), means that certain types of access that would benefit many telecoms providers and help stimulate greater retail competition might not

¹⁵⁵ KCOM has launched business and residential variants of a fibre-based WBA service (<https://www.kcomplc.com/regulatory/kcom-wholesale/broadband/>) and published a draft Reference Offer for a fibre-based WLA service (<https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/new-services>).

¹⁵⁶ We note that KCOM has already started to implement changes to [its SoR process](#) following our consultation.

be developed as the requests might not be reasonable given the volume forecasts provided in individual requests.

- 4.110 To mitigate this risk, we are requiring KCOM to publish information about all SoR requests it receives on its website. The requirement is for KCOM to publish sufficient information to allow a third-party telecoms provider to consider whether it is also interested in such access. We envisage that this will allow other telecoms providers to express an interest for the same network access while KCOM is considering the request, so that KCOM's consideration of the request is based upon all the telecoms providers that want this type of access and their collective forecast demand. KCOM is required to publish this information within five days of receiving an SoR and to allow other telecoms providers adequate time to review this information and make expressions of interest before making its decision in relation to the SoR.
- 4.111 We consider that it is vital to the success of this new approach that this information about SoR requests is published prominently on KCOM's website.
- 4.112 To support this obligation, we proposed that KCOM should inform us each time it receives an SoR request. However, in light of KCOM's response and the other transparency obligations, we have decided not to impose this requirement to inform us of SoR requests. We consider that our ability to respond to any stakeholder concerns about compliance including our information collection powers is sufficient to monitor whether KCOM is satisfying the obligation to publish all SoR requests on its website.
- 4.113 Alongside this we are also requiring KCOM to comply with any direction we might make under this SMP condition. Should we consider that this information is not being displayed prominently enough, we will consider issuing a direction specifying more detail on where and how this information must be published.
- 4.114 We consider that these obligations will increase transparency which will be beneficial to facilitating the development of new network access services. We recognise that while this obligation may remove any potential first-mover advantage from providers seeking access, it is proportionate to help develop effective retail competition.
- 4.115 We also appreciate that there may be aspects of SoR requests that are commercially sensitive and should not be published by KCOM in meeting this obligation. The obligation is not intended to require KCOM to publish any information which would breach the commercial confidentiality of a requesting party or obligations under competition law. We therefore also require that KCOM implements a process to determine with the access seeker what information requesting parties consider to be confidential.

Publication of KPIs

- 4.116 We are imposing a requirement on KCOM to publish KPIs on certain aspects of its SoR process on its website in order to provide transparency. We consider that this is necessary to enable us and competing telecoms providers to observe how effectively the SoR process is working and to monitor any potential discrimination.
- 4.117 The KPIs we are imposing are:

- the number of requests received by KCOM;
- the number of requests that are unanswered by KCOM 25 working days or more after receipt;
- the number of requests that are unanswered by KCOM 75 working days or more after receipt;
- the number of requests accepted;
- the number of requests rejected;
- the number of requests for which KCOM took longer than 25 working days to reject;
- the number of requests for which KCOM took longer than 45 working days to reject;
- the number of project plans agreed between KCOM and access seekers;
- the number of project plans agreed between KCOM and access seekers more than 80 days after the SoR request was received; and
- the number of project plans agreed between KCOM and access seekers more than 95 days the SoR request was received.

4.118 We require that KCOM publish this data every six months for the preceding six-month period (in respect of August to January, and February to July).

Options of redress for rejected SoRs

4.119 In the event that KCOM rejects an SoR request, it must inform the requesting provider of the avenues of redress available. This includes any dispute resolution process that KCOM has, in addition to the dispute resolution process under the Act.

4.120 As previously stated, many of the competing providers in the Hull Area are relatively small and may not have the resources to fully evaluate the available options should KCOM reject their SoR request. By requiring KCOM to provide this information, the available options would be transparent should providers disagree with KCOM's decisions in response to SoR requests.

Transparency as to when SoRs relate to regulatory obligations

4.121 Within its existing guidelines, KCOM distinguishes between services that fall within regulated markets (in which it is required to grant network access on reasonable request) and those that do not. KCOM considers SoRs for services which are not required by regulation as commercial propositions. The distinction is important because:

- For services which KCOM is not obliged to provide under an SMP condition, KCOM has greater scope as to how it considers a request. Subject to any requirements of competition law, an SoR can be assessed on the basis of its fit with KCOM's assets, skills and resources, its commercial attractiveness, and the opportunity cost to KCOM.
- For services which KCOM is obliged to supply as a result of an SMP finding, KCOM is required to provide network access if the request is reasonable.

4.122 As such, knowing whether an SoR relates to KCOM's regulatory obligations is vital for requesting telecoms providers to understand their position. For example, where an initial request is classified as not relating to KCOM's regulatory obligations for particular reasons, a telecoms provider can consider whether to submit a different SoR which would fall under KCOM's regulatory obligations and may have a greater chance of being accepted.

Additionally, knowing the classification of an SoR can provide transparency on whether or not there is an option of bringing a complaint or referring a dispute to Ofcom under SMP conditions.

- 4.123 We are therefore adding a requirement on KCOM to provide transparency on whether an SoR is a request for a service that falls within the regulated WLA market and is therefore subject to the formal SoR process, or whether it falls outside of the regulated markets and is therefore being considered as a commercial proposition. This will add clarity as to the status, process and timings that apply to a telecoms provider's request.

The WBA market

- 4.124 We have decided to impose the same SMP condition on KCOM in the WBA market as we are imposing in the WLA market. While we are requiring KCOM to provide WLA fibre services (following a reasonable request for access), given KCOM is only in the early stages of launching such a service, we consider it is vital that there is a clear and transparent process for telecoms providers to request new network access in the WBA market.¹⁵⁷ This is so that telecoms providers obtain the access to KCOM's fibre network that they need to compete effectively in the provision of retail services. The fact that the process covering transparency and information about avenues of redress will be the same in both the WLA and WBA markets, will also assist providers seeking access.

Legal tests

- 4.125 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.126 Section 87(3) of the Act authorises the setting of SMP services conditions in relation to the provision of network access and these conditions may, pursuant to section 87(5) of the Act, 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 the periods and at the times required by or under the conditions. We consider that the conditions will assist in securing fairness and reasonableness in the way in which requests for network access are made and responded to, as provided for under section 87(5)(a). Section 87(6)(b) of the Act also 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.
- 4.127 In making our decisions, we have also taken into account the factors set out in section 87(4) of the Act. In particular, having considered the economic viability of building access networks to achieve ubiquitous coverage that would make the provision of network access unnecessary, we consider that the SMP condition is required in each of the WLA and WBA markets to secure effective competition, including economically efficient infrastructure-based competition, in the long term.

¹⁵⁷ Our future decisions in the WBA market will take the likely effect of our WLA remedy into account.

- 4.128 We have considered our duties under section 3 of the Act. We consider that, in ensuring access seekers are able to make requests for new forms of network access based on an agreed SoR process, the conditions will in particular further the interests of consumers in relevant markets by the promotion of competition, investment and innovation. In this regard we have taken particular account of section 3(4)(d) of the Act, which highlights the desirability of encouraging investment and innovation in relevant markets.
- 4.129 We have considered the Community requirements as set out in section 4 of the Act. We consider that the conditions will promote competition in relation to the provision of electronic communications networks and encourage the provision of network access for the purpose of securing efficiency and sustainable competition in the markets for electronic communications networks and services.
- 4.130 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:
- objectively justifiable, in that their purpose is to support the provision of access to KCOM's network and non-discrimination obligations in the processing of requests for new network access;
 - not unduly discriminatory, in that they apply to KCOM which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
 - proportionate, in that they are the least onerous obligations we could apply to require KCOM to set out the general process for requests for new forms of network access and thus encourage competition at the retail level, while allowing the detail of the process to be agreed between the dominant provider and industry; and
 - transparent, in that they are clear the intention is to support the provision of access to KCOM's WLA and WBA networks in order to facilitate downstream competition.
- 4.131 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Requirement not to discriminate unduly

Our proposals

- 4.132 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in each of the WLA and WBA markets prohibiting it from unduly discriminating in relation to the provision of network access.

Stakeholder responses

- 4.133 KCOM agreed that the proposed no undue discrimination obligation is appropriate and that an EOI obligation would be disproportionate.¹⁵⁸

¹⁵⁸ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.25.

Our reasoning and decisions

- 4.134 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets requiring it not to unduly discriminate. We consider the obligation is necessary as KCOM has the ability and incentive to unduly discriminate against other telecoms providers in favour of its own retail divisions. For example, KCOM could decide strategically to provide the same services but within different delivery timescales.
- 4.135 Discriminatory behaviour by KCOM in the supply of WLA and WBA services could undermine a level playing field in the relevant downstream markets to the detriment of competition and consumers. A non-discrimination remedy helps to maintain a level playing field between KCOM's downstream businesses and other telecoms providers who wish to use KCOM's WLA and WBA services in the Hull Area.
- 4.136 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 operator providing exactly the same services to all telecoms providers (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 telecoms providers (including the SMP provider's own downstream divisions) would be provided on a truly equivalent basis, an arrangement which has become known as Equivalence of Input (EOI). An EOI obligation removes any degree of discretion to the provision of access as between provision for self-supply and to third parties.
- 4.137 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 flexibility and result in a more practical and cost-effective implementation of wholesale inputs in cases where it is economically justified. Such a form of 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.
- 4.138 Given the particular characteristics of the Hull Area, we do not consider that it is appropriate to impose a requirement on KCOM to provide network access on an EOI basis. Our decision is based on the limited uptake of WLA and WBA services by competing providers in the Hull Area and the absence of a pre-existing EOI obligation (such as that BT is subject to under the BT Undertakings). Imposing an EOI requirement as an SMP condition in the Hull Area now would be disproportionate as it would require KCOM to significantly re-engineer existing systems and processes in order to comply with it.
- 4.139 We will interpret the no undue discrimination obligation in a manner consistent with Chapter 3 of our Access Guidelines.¹⁵⁹ In this chapter, we explain that the aim of such a condition is to ensure that a vertically integrated SMP operator does not treat itself in a

¹⁵⁹ Oftel, 2002. [Imposing access obligations under the new EU Directives](#), Annex 1.

way that benefits itself, its subsidiaries or its partners in such a way as to have a material adverse effect on competition. Furthermore, we explain in the Access Guidelines that:

“In order to ensure compliance with its obligations as regards non-discrimination under the AID [Access and Interconnection Directive], in general, an SMP operator should ensure that:

- a) it applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners; and
- b) it can objectively justify any differentiation.”

4.140 We have also taken due account of the 2013 EC Recommendation on costing and non-discrimination in making our decision to impose a no undue discrimination condition on KCOM.¹⁶⁰ There are three recommendations relevant in this regard:

- that NRAs should ensure that the SMP operator provides wholesale inputs on at least an Equivalence of Output (EEO) 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; and
- that NRAs should require SMP operators subject to a non-discrimination obligation to provide access seekers with regulated wholesale inputs that allow the access seekers to effectively replicate technically new retail offers of the downstream retail arm of the SMP operator, in particular where EOI is not fully implemented.

4.141 We consider that the no undue discrimination obligation we are imposing is consistent with the 2013 EC Recommendation on costing and non-discrimination. Recommendation 10 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(s).

4.142 We note that the Recommendation also provides for the application of a technical replicability test, whether undertaken by the SMP operator and provided 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.

4.143 Having taken due account of the Recommendation in relation to technical replicability, we are maintaining our approach that the additional imposition of a technical replicability test in these markets is not appropriate or proportionate in light of UK national circumstances. This is the case notwithstanding that KCOM has been and will continue to be subject to a package of SMP remedies including a general network access, no undue discrimination and certain transparency obligations. At this stage, we consider that it is premature to consider imposing detailed technical replicability test requirements on KCOM and to do so would

¹⁶⁰ [Commission Recommendation of 11 September 2013](#) on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (C(2013) 5761).

increase the regulatory burden (and ultimately pass costs on to consumers in Hull Area) without any significant prospect that it would result in benefits to competition. This is the same reason why we have decided not to impose specific network access remedies and other remedies such as EOI, non-discrimination KPIs and an economic replicability test on KCOM at this time.

Legal tests

- 4.144 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.145 Section 87(6)(a) of the Act authorises the setting of SMP services conditions requiring the dominant provider not to discriminate unduly against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access.
- 4.146 We have considered our duties under section 3 and all the Community requirements set out in section 4 of the Act. In particular, the conditions are aimed at promoting competition and securing efficient and sustainable competition for the maximum benefit of consumers by preventing KCOM from leveraging its SMP through discriminatory behaviour into related downstream markets.
- 4.147 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:
- objectively justifiable, in that they provide safeguards to ensure competitors, and hence consumers, are not disadvantaged by KCOM discriminating in favour of its own downstream activities or between competing providers;
 - not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
 - proportionate, in that they are the least onerous obligations we could apply to seek to prevent discrimination that would adversely affect competition and ultimately cause detriment to consumers rather than requiring strict equivalence; and
 - transparent, in that the conditions are clear in what they are intended to achieve.
- 4.148 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Transparency and notification obligations

- 4.149 We are imposing a set of obligations on KCOM designed to promote transparency, reduce the risk of undue discrimination and ensure that telecoms providers are able to make effective use of the dominant provider's network access. The obligations, which are discussed in more detail below, are:
- a requirement to publish a Reference Offer;
 - a requirement to notify changes to charges, terms and conditions;
 - a requirement to notify changes to technical information; and
 - a requirement to publish quality of service information.

Requirement to publish a Reference Offer

Our proposals

- 4.150 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in each of the WLA and WBA markets requiring it to publish a Reference Offer.
- 4.151 We proposed to align the Reference Offer requirement in the WBA market with the requirement in the WLA market by requiring KCOM to include information relating to traffic and network management in its Reference Offers for WBA services.

Stakeholder responses

- 4.152 [redacted].¹⁶¹
- 4.153 KCOM agreed that the proposed obligation is proportionate.¹⁶²
- 4.154 Hull City Council agreed that KCOM should provide transparent costs in order to help providers to access wholesale services.¹⁶³

Our reasoning and decisions

- 4.155 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets to publish a Reference Offer. 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.
- 4.156 The requirement on KCOM to publish a Reference Offer will ensure stability in these markets as, without it, incentives to invest might be undermined and market entry less likely.
- 4.157 In addition, the publication of a Reference Offer will potentially allow for quicker negotiations, avoid possible disputes and give confidence to those purchasing wholesale services that they are being provided on non-discriminatory terms. Without this, market entry might be deterred to the detriment of the long-term development of competition and hence consumers.
- 4.158 In both markets the Reference Offer must set out (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;

¹⁶¹ [redacted].

¹⁶² KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.26.

¹⁶³ Hull City Council response to the 2017 Hull WLA and WBA Consultation, page 2.

- information relating to technical standards for network access, interfaces and points of interconnection and conditions for access to ancillary, supplementary and advanced services;
 - conditions relating to maintenance and quality, e.g. service level agreements (SLAs) and guarantees (SLGs), 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;
 - details of traffic and network management; and
 - details of measures to ensure compliance with requirements for network integrity.
- 4.159 We are adding the requirement to include information relating to traffic and network management in the WBA market condition. Given the downstream nature of WBA services, we consider that such information will be important to telecoms providers in determining how the network is run, particularly in relation to when a customer exceeds their monthly data limit. Similarly, we consider that telecoms providers will find details of measures to ensure compliance with requirements for network integrity useful in ensuring that KCOM's network is being properly maintained and operated. This means that the Reference Offer requirements in the WBA market match the requirements in the WLA market.
- 4.160 Where KCOM provides its downstream divisions with network access that is different to the network access provided to other telecoms providers, and set out in a Reference Offer, KCOM must publish a Reference Offer setting out the details of the network access it provides to itself.
- 4.161 For the avoidance of doubt, we expect KCOM to publish a Reference Offer only where it is offering services in a market. However, this includes where KCOM provides network access to itself.

Legal tests

- 4.162 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets within the Hull Area meet the relevant tests set out in the Act.
- 4.163 Section 87(6)(c) of the 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.
- 4.164 We consider that the conditions meet our statutory obligations and the Community requirements under sections 3 and 4 of the Act.
- 4.165 The requirement to publish a Reference Offer will, in combination with the requirement not to unduly discriminate, facilitate service interoperability and allow telecoms providers to make informed decisions about future entry into downstream markets. Further, the obligation will enable purchasers to adjust their downstream offerings in competition with

KCOM, in response to changes in KCOM's terms and conditions. Finally, the obligation will make it easier for Ofcom and other telecoms providers to monitor any instances of discrimination. Therefore, we consider that the conditions in particular further the interests of consumers in relevant markets by the promotion of competition in line with section 3 of the Act.

4.166 We consider that the conditions meet the Community requirements set out in section 4 of the Act. In particular, the conditions promote competition and encourage the provision of network access and service interoperability for the purpose of securing efficient and sustainable competition for the maximum benefit of consumers. The publication of a Reference Offer will mean that other telecoms providers would have the necessary information readily available to allow them to make informed decisions about entry into downstream markets.

4.167 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:

- objectively justifiable, in that they encourage competition, provide market stability and help us to monitor discriminatory behaviour through the publication of terms and conditions;
- not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
- proportionate, in that they are the least onerous obligations we could apply to require KCOM to publish details of its WLA and WBA offerings, and only information that is necessary to allow telecoms providers to make informed decisions about competing in downstream markets is required to be provided; and
- transparent, in that the conditions are clear in their intention that KCOM publish details of its WLA and WBA offerings.

4.168 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Requirement to notify changes to charges, terms and conditions

Our proposals

4.169 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in each of the WLA and WBA markets requiring it to notify changes to charges for wholesale network access services.

4.170 We proposed to decrease the notice period for changes to charges for existing network access in the WLA market from 90 days to 56 days, and to increase the respective period in the WBA market from 28 days to 56 days. We also proposed a 28-day notice period for new network access and price reductions in both markets.

Stakeholder responses

4.171 KCOM agreed that the proposed obligation is proportionate.¹⁶⁴

Our reasoning and decisions

4.172 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets requiring it to notify, by means of a written notice – an access charge change notice (ACCN) – changes to charges for wholesale network access services.

4.173 This remedy complements the network access and no undue discrimination obligations. Notification of changes to charges at the wholesale level assists transparency for the monitoring of potential anti-competitive behaviour and gives warning of charge changes to competing providers who buy WLA and 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 offerings in response to charge changes at the wholesale level. Notification of changes therefore helps to ensure stability in markets, without which incentives to invest might be undermined and market entry made more difficult.

4.174 The ACCN must include the following:

- a description of the network access in question;
- a reference as to where the terms and conditions associated with the network access in question can be found in KCOM’s Reference Offer;
- the date on which the new charges take effect (or the period over which the new charges will apply);
- the current and proposed charge; and
- other charges for services that would be directly affected by the proposed charge.

4.175 Table 4.2 below details the specific notice periods we are imposing in each market.

Table 4.2: Notice period requirements

Relevant notice periods by market	
WLA	56 days for changes to charges for existing network access; 28 days for notification of charges for new network access; and 28 days for price reductions and price changes relating to the end of a temporary ¹⁶⁵ price reduction.

¹⁶⁴ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.27.

¹⁶⁵ A temporary price means a price reduction for a particular product or service, applicable to all customers on a non-discriminatory basis, which is stated to apply for a limited and predefined period and where the price immediately on expiry of that period is no higher than the price immediately before the start of that period, i.e. a special offer. A 28-day notice period also applies to any increase in prices that may occur at the end of a special offer (where the price immediately following the end of the special offer is no higher than the price immediately before the start of the special offer).

Relevant notice periods by market

WBA	56 days for changes to charges for existing services; 28 days for notification of charges for new network access; and 28 days for price reductions and price changes relating to the end of a temporary price reduction.
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- 4.176 We consider that the notification periods will allow sufficient time for other telecoms providers to make necessary changes to their downstream services.
- 4.177 With regard to changes to charges for existing network access, we consider that 56 days is an appropriate notification period for existing services in both the WLA and WBA markets. We recognise that this is a shortening of the period in the WLA market and a lengthening of the period in the WBA market. However, given our view that WBA access services over KCOM's fibre network will be very similar to WLA fibre access services, we consider that this warrants there being the same notification period in both markets.
- 4.178 In the 2018 WLA Statement we required BT to provide 90 days' notice for existing and new WLA services to allow competing providers time to make modifications to their network to support changes. However, the market in the Hull Area is much smaller than that in the rest of the UK, and the size and complexity of BT's and its competitor's networks are greater than KCOM's. While we recognise the potential for the development of WLA services in the Hull Area which are akin in those found in the rest of the UK, we do not consider that the current specific market conditions in the Hull Area warrant a longer notice period. In the future, following an expected increase in competition in the WLA market, we intend to review the length of the notice period in advance of the next cycle of market reviews.
- 4.179 We also consider that 28 days is an appropriate notification period for price reductions for access services in both the WLA and WBA markets. Price reductions can often be part of a special offer to which conditions are attached, so the shorter notice period would also apply to such conditions. In the case where prices are being reduced, we recognise that industry and customers benefit from shorter notification periods. For example, there may be advantages in having a shorter notification period for price reductions that could encourage migration to newer or more efficient services. However, a notice period is still required on the basis that KCOM is vertically integrated and there would be a concern that its retail division could have an advantage over competitors.
- 4.180 We consider that modifications to these notification periods may be permissible on a case-by-case basis. Therefore, if there is a general industry need to have a shorter notice period in a given situation, we may be able to accommodate this.
- 4.181 As concerns the notification period for new network access, it reflects the lesser administrative impact of notification of charges for new services. The impact is less since there will not be existing customers for whom wholesale price changes might require

revisions to their own pricing or other commercial decisions. The existing service(s) provide the set of input services currently relied on by downstream telecoms providers and are protected by the longer notification period. We therefore consider that 28 days remains an appropriate notification period for new network access in both the WLA and WBA markets.

- 4.182 While price notification may have a ‘chilling’ effect (where other telecoms providers follow KCOM’s prices rather than set prices of their accord), taking into account the market structure of WLA and WBA in the Hull Area (i.e. near monopoly on the part of KCOM), this consideration does not undermine the rationale for imposing a notification of changes to charge conditions. Therefore, we believe it is appropriate for KCOM to be subject to an obligation to notify changes to its charges for wholesale network access services in order to provide transparency, time to plan for changes and stability needed to facilitate investment and entry.

Legal tests

- 4.183 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.184 Section 87(6)(b) of the 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 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 for an access contract.
- 4.185 In imposing this requirement, we have considered our duties under the Act, including our general duties under section 3, and all the Community requirements set out in section 4, of the Act. We note in particular that the condition is aimed at promoting competition and securing efficient and sustainable competition for the maximum benefits of consumers by ensuring that telecoms providers 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.
- 4.186 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:
- objectively justifiable, in that there are clear benefits from the notification of changes in terms of ensuring that providers are able to make informed decisions within an appropriate timeframe about competing in downstream markets;
 - not unduly discriminatory, in that the conditions apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
 - proportionate, in that only information that other telecoms providers would need to know (in order to adjust for any changes) would have to be notified. Proposed notification periods are the minimum required to allow changes to be reflected in downstream offers which are appropriate to the competitive conditions we find in each of the WLA and WBA markets; and
 - transparent, in that the conditions are clear in their intention and implementation.

- 4.187 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Requirement to notify changes to technical information

Our proposals

- 4.188 In the 2017 Hull WLA and WBA Consultation, we proposed to retain an SMP condition on KCOM in each of the WLA and WBA markets requiring KCOM to notify changes to technical information at least 90 days in advance of KCOM entering into a contract to provide new network access or making changes to existing network access, unless we consent otherwise.

Stakeholder responses

- 4.189 KCOM agreed that the proposed obligation is proportionate.¹⁶⁶

Our reasoning and decisions

- 4.190 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets requiring it to publish technical information at least 90 days in advance. Under the obligation, KCOM has to publish any new or modified technical characteristics, points of network access and technical standards.
- 4.191 The aim of the obligation, which complements the requirement to publish a Reference Offer (including technical information), is to ensure that telecoms providers buying WLA and WBA services in the Hull Area are provided with appropriate advance notification of changes to technical characteristics. This is to ensure that providers have sufficient time to respond to changes that 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 make changes to its network in order to support changes in the points of network access or configuration.
- 4.192 We consider this remedy is important in the WLA and WBA markets to ensure that telecoms providers who compete in downstream markets are able to make effective use of existing or, where applicable, new wholesale services provided by KCOM. Technical information therefore includes information on network configuration, locations of the points of network access and technical standards (including any usage restrictions and other security issues).
- 4.193 We continue to consider that 90 days is an appropriate safeguard period to allow telecoms providers to modify their network to support a new or changed technical interface, or support a new point of access or network configuration.

¹⁶⁶ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.29.

Legal tests

- 4.194 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.195 Section 87(6)(b) of the 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.
- 4.196 In imposing this requirement, we have considered our statutory obligations and the Community requirements under sections 3 and 4 of the Act.
- 4.197 We consider that, by ensuring other telecoms providers are given sufficient time to make any changes to technical specifications that might affect their businesses, the conditions in particular further the interests of customers in relevant markets by the promotion of competition in line with section 3 of the Act. Further, we consider that, in line with section 4 of the Act, the conditions promote competition in relation to the provision of electronic communications networks and encourage the provision of network access and service interoperability for the purposes of securing efficiency and sustainable competition in downstream markets for electronic communications networks and services, resulting in the maximum benefit for retail consumers.
- 4.198 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:
- objectively justifiable, in that they enable competing telecoms providers to make full and effective use of network access. The period allows telecoms providers time to react to proposed changes without imposing an unnecessarily long notification period on KCOM that may restrict its ability to develop and deploy new features or services;
 - not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
 - proportionate, in that only information other telecoms providers would need to know in order to adjust for any changes would have to be notified and they provide an appropriate safeguard for telecoms providers, allowing them time to react to technical changes and modify their networks; and
 - transparent, in that it is clear in its intention that KCOM notify technical information.
- 4.199 We consider that the conditions are consistent with the BEREC Common Positions on WLA and WBA, including the best practice remedies falling under the objective “Transparency”. We consider that it is also consistent with BP16 (WBA) and BP22 (WLA) requiring the timely availability of relevant information according to lead times relating to new wholesale services.
- 4.200 For the reasons set out above, we consider that the condition is appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Requirement to publish quality of service information

Our proposals

4.201 In the 2017 Hull WLA and WBA Consultation, we proposed imposing an SMP condition on KCOM in the WLA market and to retain an SMP condition on KCOM in the WBA market, requiring it to publish such quality of service (QoS) information that we may from time to time direct for the purpose of securing transparency.

Stakeholder responses

4.202 KCOM agreed that our proposed requirement to publish QoS information is proportionate.¹⁶⁷

Our reasoning and decisions

4.203 We have decided to impose an SMP condition on KCOM in each of the WLA and WBA markets requiring QoS information to be published as directed by us.

4.204 As a vertically integrated operator, KCOM has the ability to favour its own downstream business over third-party telecoms providers by discriminating on price or non-price factors such as the terms and conditions of access. The latter could involve variations in quality of service (either in service provision and maintenance or in the quality of network service provided by KCOM to external providers compared to its own retail operations). This has the potential to distort competition at the retail level by placing third-party telecoms providers at a disadvantage in terms of the services they can offer consumers to compete with the downstream retail business of the vertically integrated operator. Where it includes a distinction between internal and external supply, the publication of QoS information by KCOM can allow other telecoms providers in the Hull Area to ensure that the service they receive is equivalent to that provided by KCOM to its own retail divisions.

4.205 Additionally, KCOM has the ability and incentive to reduce QoS where such action would reduce its costs (thus increasing its profits). This consumer harm is a direct result of KCOM's market power as, in a competitive market, providers are driven to maximise QoS to acquire and retain customers. The publication of QoS information by KCOM enables us to monitor QoS and ensure that the QoS received by consumers in the Hull Area is comparable to that received by consumers in the rest of the UK.

4.206 In previous reviews, we have imposed the obligation on KCOM in the WBA market only. This reflected that KCOM offers WBA services that are used by third-party telecoms providers to compete in retail broadband services, therefore increasing KCOM's incentive to discriminate on QoS in favour of its own retail service. Our approach in the WBA market mirrored the approach taken for BT in Market A.

4.207 We consider that there remains a risk of discrimination in relation to QoS, and a risk that KCOM might simply reduce its QoS to inflate its profits, to the detriment of consumers.

¹⁶⁷ KCOM response to the 2017 Hull WLA and WBA Consultation, paragraph 4.1.28.

KCOM's FTTP network is due to be completed in this market review period and our expectation that it will soon offer fibre access services in one or both of these markets, given there is greater scope for use of WLA services on an FTTP network. As such, we are imposing a QoS transparency obligation in both the WLA and WBA markets to address the risk of QoS discrimination and intentionally poor QoS in relation to legacy copper and new fibre services.

- 4.208 This obligation requires KCOM to publish information as directed by us, rather than requiring KCOM to publish specific information from the date of the imposition of the obligation. This is the same as the condition imposed in previous WBA reviews and is designed to support transparency as to QoS in the Hull Area. However, we may consider specifying KPIs in the future if we consider that it becomes necessary and proportionate to do so.
- 4.209 We consider that our decision is in line with the BEREC common positions that apply in each of the WLA and WBA markets, each of which states that "SMP operators may have an incentive to discriminate in favour of their own downstream operations in relation to the quality of wholesale access products." The common position goes on to recommend that National Regulatory Authorities "should impose a generic requirement on SMP operators to provide Key Performance Indicators (KPIs) as a means to monitor compliance with a non-discrimination obligation".¹⁶⁸

Legal tests

- 4.210 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.211 Section 87(6)(b) of the 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.
- 4.212 Ofcom has considered its duties under section 3 of the Act. We consider that, in providing for the possibility of ensuring the network access telecoms providers receive from KCOM is equal to that provided by KCOM to its own retail divisions, the conditions in particular further the interests of consumers in relevant markets by the promotion of competition.
- 4.213 Further, we consider that the conditions meet the Community requirements in section 4 of the 2003 Act and in particular promote competition in relation to the provision of electronic communications networks and encourage the 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 of broadband internet access services.
- 4.214 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:

¹⁶⁸ [BEREC Common Position on physical access](#), pages 14-16 and [BEREC Common Position on WBA](#), pages 13-15.

- objectively justifiable in that by providing for the possibility of publishing KPIs they create conditions which enable competing operators to make full and effective use of network access;
- not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
- proportionate as they are the least onerous obligations we could apply in relation to QoS and only require KCOM to publish information as directed by Ofcom in line with the aim of this obligation; and
- transparent in that they are clear that the intention of the conditions is to require KCOM to publish quality of service information related to the WLA and WBA markets in the Hull Area, as directed from time to time.

4.215 For all the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in accordance with section 87(1) of the Act.

Regulatory financial reporting

4.216 As explained in the following sub-sections, we are imposing cost accounting and accounting separation obligations on KCOM in each of the WLA and WBA markets. These obligations result in KCOM producing regulatory financial statements covering these markets. This approach differs from the approach taken in the previous reviews of these markets, in which we only imposed accounting separation in the WBA market. Our rationale for applying each of these remedies is set out below, but broadly it is that we consider that there is a need for more reliable financial information for these markets to support our monitoring of the effectiveness of the obligations we are imposing, especially given that KCOM is likely to begin offering new wholesale services on its fibre network during the review period. We are imposing SMP conditions in a form which we consider is appropriate in light of our market analysis.

4.217 As identified above, previously we would update the regulatory financial reporting obligations imposed on KCOM by amending the 2004 Regulatory Reporting Statement.¹⁶⁹ Now, we are (revoking the SMP conditions to the extent still they still exist) in relation to each of the services markets referred to in the 2004 Regulatory Reporting Statement (as amended) and imposing regulatory financial reporting obligations through SMP Condition 8. For the avoidance of doubt, this does not represent a change to the substance of the accounting separation and cost accounting conditions as set out in the 2004 Regulatory Reporting Statement; it is a 'structural' change to the way in which the financial reporting obligations are imposed and is aimed at clarifying KCOM's obligations. The structural nature of this change can be seen in the table below, where we set out the equivalent conditions in the 2004 Regulatory Reporting Statement and SMP Condition 8. There are no substantive changes to the text, only textual updates aimed at consistency with the other SMP conditions.

¹⁶⁹ Ofcom, 2004. [*The Regulatory Financial Reporting Obligations on BT and Kingston Communications – Final Statement and Notification*](#).

Table 4.3 Equivalence table, 2004 Regulatory Reporting Statement and SMP Condition 8

Number in the 2004 Regulatory Reporting Statement	Number in SMP Condition 8
OB8	8.8
OB9	8.9
OB10	8.10
OB11	8.11
OB12	8.12
OB13	8.13
OB14	8.14
OB15	8.15
OB16	8.16
OB17	8.17
OB18	8.18
OB19	8.19
OB20	8.20
OB21	8.21
OB22	8.22
OB23	8.23
OB24	8.24
OB25	8.25
OB26	8.26
OB27	8.27
OB31	8.28
OB32	8.29

- 4.218 We set out below the basic requirements for these accounting separation and cost accounting obligations, and our rationale for imposing them. However, these obligations are underpinned by detailed directions for regulatory financial reporting which specify what information we require KCOM to provide in each of these markets. We will be consulting soon on a new set of directions which will amend what information KCOM is required to publish. These new directions follow KCOM's introduction of a new regulatory cost accounting system.

Stakeholder responses

- 4.219 Hull City Council commented generally that the cost transparency proposals should help to create a wholesale market which allows for retail competition, while ensuring that KCOM is not deterred from making further investment in the Hull Area.¹⁷⁰

Requirements for accounting separation

Our proposals

- 4.220 In the 2017 Hull WLA and WBA Consultation, we proposed an accounting separation obligation on KCOM in the WLA market and to retain an accounting separating obligation on KCOM in the WBA market.

Stakeholder responses

- 4.221 Stakeholders did not comment specifically on our proposal to impose an accounting separation obligation on KCOM in the WLA market and to retain an accounting separating obligation on KCOM in the WBA market.

Our reasoning and decisions

- 4.222 Paragraph 3 of Point 1 of the European Commission's 2005 Recommendation on accounting separation states that¹⁷¹:

"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".

- 4.223 In the 2014 Regulatory Reporting Statement, in connection with BT, we considered the purposes of regulatory reporting, which is supported by the imposition of an accounting separation obligation. In that statement we said that regulatory reporting "should provide us with the information necessary to make informed regulatory decisions, monitor

¹⁷⁰ Hull City Council response to the 2017 Hull WLA and WBA Consultation, page 2.

¹⁷¹ [Commission Recommendation of 19 September 2005](#) on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC) (2005 EC Recommendation).

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”.¹⁷² 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”.¹⁷³ We consider that the same regulatory objectives apply to the markets in the Hull Area as they do to the rest of the UK, and that our decision to impose an accounting separation obligation, together with a cost accounting obligation (see below), will help ensure that these regulatory reporting objectives are met.

- 4.224 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, and (for certain remedies) compliance with, the remedies imposed as part of a market review.
- 4.225 The accounting separation obligation also requires KCOM to account separately for internal and external sales which allows us and stakeholders to monitor the activities of KCOM to ensure that, where relevant, in the WLA and WBA markets in the Hull Area it does not discriminate unduly in favour of its own downstream business. In practice, this obligation requires KCOM to produce a financial statement that reflects the performance of the WLA and WBA markets in the Hull Area as though it was a separate business. This, combined with the cost accounting obligation, helps us to ensure that costs are not inappropriately loaded onto one set of regulated services to the benefit of KCOM, where KCOM uses primarily another set of regulated services
- 4.226 In light of the above reasoning, we have decided to impose an accounting separation obligation on KCOM in each of the WLA and WBA markets.
- 4.227 We will be consulting soon in respect of the specific form of accounting separation requirements we are imposing on KCOM in these markets.

Legal tests

- 4.228 For the reasons set out below, we are satisfied that the conditions on KCOM in the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act.
- 4.229 Under sections 87(7) and (8) of the Act the dominant provider may be required to maintain a separation for accounting purposes between such different matters relating to network access or the availability of relevant facilities.
- 4.230 We consider that our decision meets our duties under sections 3 and 4 of the Act.
- 4.231 We have considered our duties under section 3 of the Act. The imposition of accounting separation obligations will protect competition in relation to the provision of electronic communications networks and services, ensuring the provision of network access and

¹⁷² Ofcom, 2014. [Regulatory Financial Reporting – Statement](#), paragraph 2.28.

¹⁷³ Ofcom, 2014. [Regulatory Financial Reporting – Statement](#), paragraph 2.41.

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 obligations will ensure that other obligations designed to curb potentially damaging leverage of market power, in particular the fair and reasonable charging obligation (where it applies) and the requirements not to unduly discriminate, can be effectively monitored.

4.232 The conditions also meet the Community requirements set out in section 4 of the Act. Specifically, section 4(8) is met as the obligations have the purpose of securing efficient and sustainable competition in the markets for electronic communications networks and services, by helping to ensure that KCOM complies with other obligations, particularly to non-discrimination requirements.

4.233 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:

- objectively justifiable, given they relate to the need to ensure competition develops fairly to the benefit of consumers;
- not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area;
- proportionate, in that they are the least onerous obligations we could apply as a mechanism which enables us and third parties to monitor the effectiveness of pricing remedies; and
- transparent, in that they are clear the intention is to monitor the impact and effectiveness of the other remedies imposed.

4.234 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

Requirements for cost accounting

Our proposals

4.235 In the 2017 Hull WLA and WBA Consultation, we proposed a cost accounting obligation on KCOM in each of the WLA and WBA markets.

Stakeholder responses

4.236 Stakeholders did not comment specifically on our proposal to impose a cost accounting obligation on KCOM in each of the WLA and WBA markets.

Our reasoning and decisions

4.237 Recital 2 of the 2005 EC Recommendation states 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 states 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.”

4.238 The imposition of cost accounting obligations ensures that KCOM has in place a system of rules that supports the attribution of revenues and costs to individual markets and services. It therefore supports the accounting separation obligation, which requires KCOM 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. The cost accounting obligation (together with the accounting separation obligation) is an important means of ensuring that:

- we have the necessary information to support the monitoring of the effectiveness of remedies, in particular to ensure that the pricing remedies we impose continue to address the competition problems identified and to enable our timely intervention should such intervention ultimately be needed;
- wholesale costs are attributed across the wholesale markets (and the individual services within them) in a consistent manner, mitigating in particular the risk of over-recovery of costs or that costs might be loaded onto particular services or markets;
- publication of cost accounting information aids transparency, providing stakeholders with confidence about KCOM’s compliance with SMP conditions and the ability to monitor it, and more generally enabling stakeholders to make better informed contributions to the development of the regulatory framework; and
- KCOM 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.

4.239 We have decided to impose a cost accounting obligation on KCOM in each of the WLA and WBA markets. We consider that the obligations are necessary to ensure that the processes and rules used by KCOM to attribute revenues and costs to individual markets and services are fair, objective and transparent.

4.240 We will be consulting soon in respect of the specific form of cost accounting requirements we are proposing for KCOM in these markets.

Legal tests

4.241 For the reasons set out below, we are satisfied that the cost accounting requirements for KCOM in respect of the WLA and WBA markets in the Hull Area meet the relevant tests set out in the Act. As explained below, sections 87(9), (10) and (11) authorise the SMP conditions we impose.

4.242 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 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 also 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 (i) the main categories under which costs are brought into account for the purposes of that system and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

4.243 We consider that the conditions fulfil 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.

4.244 In setting such conditions, we must also ensure that the network access pricing conditions set out in section 88 are also satisfied.

4.245 We consider that imposing a cost accounting obligation is consistent with section 88. We also consider that imposing a cost accounting obligation is necessary for our price regulation obligations to be effective.

4.246 We have considered our statutory obligations and the Community requirements set out in sections 3 and 4 of the Act. In particular, we consider that imposing cost accounting obligations is justifiable and proportionate to promote competition in relation to the provision of electronic communications networks and 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 imposing the obligations ensures that other obligations designed to curb the potentially damaging exercise of market power – including the setting of prices at excessive levels – can be effectively monitored and enforced.

4.247 Section 47(2) of the Act requires SMP conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The SMP conditions are:

- Objectively justifiable, in that they are necessary to ensure the appropriate maintenance and provision of accounts in order to monitor KCOM's activities with regard to the pricing remedies we impose. They also relate to the need to ensure competition develops fairly, to the benefit of consumers, by providing transparency of KCOM's compliance with rules set to address the risk of exploitative or anti-competitive pricing.
- Not unduly discriminatory, in that they apply to KCOM, which is the only telecoms provider that we find to have SMP in the WLA and WBA markets in the Hull Area.
- Proportionate, in that they are the least onerous obligation we could apply as a mechanism which enables us and third parties to monitor the effectiveness of pricing remedies, and require only the minimum information necessary.

- Transparent, in that they are clear in their intention to ensure the appropriate maintenance and provision of accounts for the purposes set out above and the particular accounting separation requirements of KCOM are clearly documented.

4.248 For the reasons set out above, we consider that the conditions are appropriate to address the competition concerns identified, in line with section 87(1) of the Act.

A1. Regulatory framework

- A1.1 This annex provides an overview of the market review process to give some additional context to the matters discussed in this statement, including the legal instruments published in Annex 6.
- A1.2 Market review regulation is technical and complex, and requires us to apply legislation and take into account a number of relevant recommendations and guidelines. 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 reaching our decisions on these markets.

Market review concept

- A1.3 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.
- A1.4 In carrying out this work, we act in our capacity as the sector-specific regulator for the UK communications industries, including telecommunications. Our functions in this regard are to be found in Part 2 of the Act.¹⁷⁴ 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 CRF), as transposed by the Act. The applicable rules are contained in a package of five EC Directives, of which two Directives are particularly relevant for present purposes, namely¹⁷⁵:
- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (the Framework Directive)¹⁷⁶; and
 - Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive).¹⁷⁷
- A1.5 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 light of changing market conditions.
- A1.6 Each market review normally involves three analytical stages, namely:
- the identification and definition of the relevant markets (the market definition procedure);

¹⁷⁴ <http://www.legislation.gov.uk/ukpga/2003/21/contents>.

¹⁷⁵ 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 document to the Act should be read accordingly.

¹⁷⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0021&from=en>.

¹⁷⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0019&from=EN>.

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

A1.7 These stages are normally carried out together.

Market definition procedure

A1.8 The Act provides that, before making a market power determination¹⁷⁸, 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.

A1.9 The Framework Directive requires that NRAs shall, taking the utmost account of the 2014 EC Recommendation¹⁷⁹ and EC SMP Guidelines¹⁸⁰ published by the EC, define the relevant markets appropriate to national circumstances, in particular relevant geographic markets within their territory, in accordance with the principles of competition law.

A1.10 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, it seeks 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.

A1.11 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.

A1.12 The three criteria, which are cumulative, are:

- 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).

A1.13 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-

¹⁷⁸ The market power determination concept is used in the Act to refer to a determination that a person has SMP in an identified services market.

¹⁷⁹ [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) (2014 EC Recommendation).

¹⁸⁰ [Commission guidelines on market analysis and the assessment of significant market power](#) under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (EC SMP Guidelines), 7 May 2018. Together with these Guidelines, the Commission has adopted a [Staff Working Paper](#).

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.

- A1.14 The relationship between the market definitions identified in this review and those listed in the 2014 EC Recommendation is discussed in relevant parts of this Statement. The EC 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. To undertake the forward-looking, structural evaluation of the relevant market, the EC SMP Guidelines state that NRAs should determine whether the underlying retail 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 the review period in the absence of regulation based on significant market power (known as a 'Modified Greenfield Approach').
- A1.15 The EC SMP Guidelines also describe how competition law methodologies should 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 European Commission and applicable jurisprudence of the Court of Justice of the European Union.
- A1.16 While competition law methodologies are used in identifying the relevant markets *ex ante*, the EC SMP Guidelines note that, given the differences in scope and objectives in intervention, markets defined for the purposes of EU competition law and those defined for the purposes of sector-specific regulation may not always be identical.¹⁸¹ Similarly, the designation of an undertaking as having significant market power in a market identified for the purposes of *ex ante* regulation does not automatically imply that it will also be dominant for the purposes of *ex post* competition law.¹⁸² This may be the case, especially as the former are 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 have identified, is without prejudice to any analysis that may be carried out in relation to any investigation pursuant to the Competition Act 1998¹⁸³ (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 Union¹⁸⁴) or the Enterprise Act 2002.¹⁸⁵

¹⁸¹ [EC SMP Guidelines](#), paragraph 10.

¹⁸² [EC SMP Guidelines](#), paragraph 11.

¹⁸³ <http://www.legislation.gov.uk/ukpga/1998/41/contents>.

¹⁸⁴ Previously Article 81 and Article 82 of the [EC Treaty](#).

¹⁸⁵ <http://www.legislation.gov.uk/ukpga/2002/40/contents>.

Market analysis procedure

Effective competition

A1.17 The 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.¹⁸⁶ 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.

A1.18 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”.

A1.19 An undertaking is deemed to have SMP if it enjoys a position equivalent to dominance.¹⁸⁷ 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 their market analysis taking the utmost account of the EC 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.

A1.20 In that regard, the EC SMP Guidelines set out, additionally to market shares, 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:

- barriers to entry;
- barriers to expansion;
- absolute and relative size of the undertaking;
- control of infrastructure not easily duplicated;
- technological and commercial advantages or superiority;
- absence of or low countervailing buying power;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;

¹⁸⁶ Section 84A of [the Act](#).

¹⁸⁷ Article 14 of the [Framework Directive](#), implemented by section 78 of [the Act](#).

- direct and indirect network effects;
- vertical integration;
- a highly developed distribution and sales network;
- conclusion of long-term and sustainable access agreements;
- engagement in contractual relations with other market players that could lead to market foreclosure; and
- absence of potential competition.

A1.21 SMP can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

Sufficiency of competition law

A1.22 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.

A1.23 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 effective 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 such 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.

A1.24 *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.

A1.25 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, or that the specific clarity and detail of the obligation is required to achieve a particular result.

Remedies procedure

Powers and legal tests

A1.26 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.¹⁸⁸

A1.27 NRAs have a suite of regulatory tools at their disposal, as reflected in the Act and the Access Directive. 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 light of the policy objectives as set out in Article 8 of the Framework Directive.¹⁸⁹

A1.28 Specifically, for each and every SMP obligation, we explain why it satisfies the requirement in section 47(2) of the Act that the obligation is:

- objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
- not such so 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.¹⁹⁰

A1.29 Additional legal requirements may also need to be satisfied depending on the SMP obligation in question.¹⁹¹ 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

¹⁸⁸ Article 16(3) and (4) of the [Framework Directive](#); sections 84 and 87(1) of [the Act](#).

¹⁸⁹ Article 8(4) of the [Access Directive](#).

¹⁹⁰ Section 47 of [the Act](#); Article 8(5) of the [Framework Directive](#) and Article 5(2) of the [Access Directive](#).

¹⁹¹ As set out in sections 87-91 of [the Act](#).

ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits.¹⁹²

- A1.30 Where an obligation to provide third parties with network access is considered appropriate, NRAs must take into account factors including the feasibility of the network access, the technical and economic viability of creating networks¹⁹³ that would make the network access unnecessary, the investment of the network operator who is required to provide access¹⁹⁴, and the need to secure effective competition¹⁹⁵ in the long term.¹⁹⁶
- A1.31 To the extent relevant to this review, we demonstrate the application of these requirements to the SMP obligations in question in the relevant parts of this document. In doing so, we also set out our assessment of how, in our opinion, the performance of our general duties under section 3 of the 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 Act. This is also relevant to our assessment of the likely impact of implementing our conclusions.

Ofcom's general duties – section 3 of the Act

- A1.32 Under the Act, our principal duty in carrying out 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.
- A1.33 In doing so, 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.
- A1.34 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. For the purpose of this review, we consider that a number of such considerations are relevant, in particular:
- the desirability of promoting competition in relevant markets; and
 - the desirability of encouraging investment and innovation in relevant markets.
- A1.35 We have also had regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, as well as in the interest of consumers in respect of choice, price, quality of service and value for money.
- A1.36 Ofcom has however, a wide measure of discretion in balancing its statutory duties and objectives. In doing so, we take account of all relevant considerations, including responses received during our consultation process, in reaching our conclusions.

¹⁹² Section 88 of [the Act](#), which implements Article 13 of the Access Directive.

¹⁹³ Including the viability of other network access products, whether provided by the dominant provider or another person.

¹⁹⁴ Taking account of any public investment made.

¹⁹⁵ Including, where it appears to us to be appropriate, economically efficient infrastructure-based competition.

¹⁹⁶ Section 87 of [the Act](#).

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

A1.37 As noted above, our functions exercised in this review fall under the CRF. As such, section 4 of the Act requires us to act in accordance with the six European Community requirements for regulation. 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.

A1.38 We consider 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 Act that we consider are particularly relevant in this context.

A1.39 Section 4A of the 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.

A1.40 Further, Article 3(3) of the Regulation establishing BEREC requires NRAs to take utmost account of any opinion, recommendation, guidelines, advice or regulatory best practice adopted by BEREC.¹⁹⁷

A1.41 Accordingly, we have taken due account of the applicable EC recommendations 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.

¹⁹⁷ [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).

Impact assessment – section 7 of the Act

- A1.42 The analysis presented in the whole of the consultation represents an impact assessment, as defined in section 7 of the Act.
- A1.43 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that generally Ofcom has to carry out impact assessments where there is likely to be a significant effect on businesses or the general public, or when there is a major change in Ofcom’s activities. However, as a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of its policy decisions.¹⁹⁸
- A1.44 Specifically, pursuant to section 7, an impact assessment must set out how, in our opinion, the performance of our general duties (within the meaning of section 3 of the Act) is secured or furthered by or in relation to the regulation we impose.
- A1.45 Ofcom is separately required by statute to assess the potential impact of all our functions, policies, projects and practices on race, disability and gender equality. This assessment is set out in Annex 3.

Regulated entity

- A1.46 The power in the 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 communications networks, electronic communications services or associated facilities (i.e. the ‘services market’).
- A1.47 The Framework Directive requires that, where an NRA determines that a relevant market is not effectively competitive, it shall identify ‘undertakings’ with SMP in 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).¹⁹⁹
- A1.48 We consider it appropriate to prevent a dominant provider to whom an SMP services 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.
- A1.49 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

¹⁹⁸ For further information about Ofcom’s approach to impact assessments, see the guidelines, [Better policy-making: Ofcom’s approach to impact assessment](#) (2005).

¹⁹⁹ [Case C-73/95 P, Viho v Commission](#), [1996] ECR I-5447.

[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”.

A2. General analytical approach to market definition and SMP assessment

A2.1 This annex sets out in general terms the processes that we have followed in defining the markets within this review, and how and on what basis we assess whether any operator has SMP in a given market. Section 3 sets out in more detail how we have applied our analytical approach in each of the markets we are considering.

Overview of approach

A2.2 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.

A2.3 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 a sufficiently strong 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.

A2.4 It is often practical to define the relevant product market before exploring the geographic dimension of the market.

A2.5 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

A2.6 As explained in Annex 1, in defining markets 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.

A2.7 As explained in Annex 1, 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.

A2.8 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.²⁰⁰

The time period under review

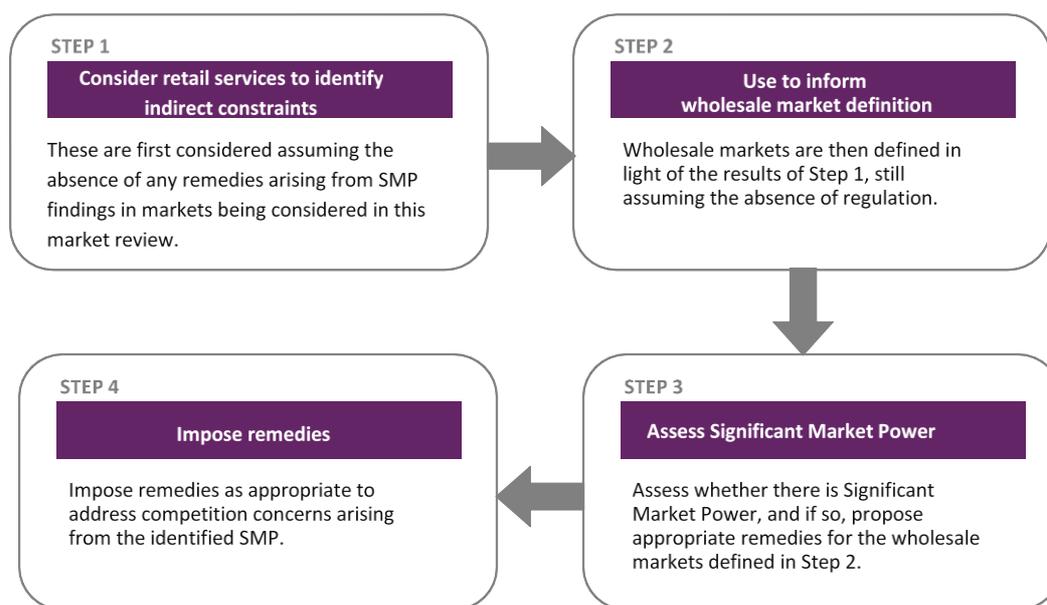
A2.9 Rather than just looking at the current position, market reviews look ahead to how competitive conditions may change in future. Our evaluation of the current market takes into account past developments and evidence, before then considering the foreseeable market changes that we expect to affect its development over the period up to 2021. This forward looking period reflects the period covered by this market review.²⁰¹

A2.10 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

A2.11 The market review process can be characterised as having four stages, which are shown in Figure A2.1 below.

Figure A2.1 Sequencing of market definition, SMP and remedies analysis



Source: Ofcom

A2.12 These steps are explained further in the following sub-sections.

²⁰⁰ See the Commission [Explanatory Note](#) accompanying the 2014 EC Recommendation.

²⁰¹ We will carry out and notify the next review in line with our obligation under the EU Framework and the Act.

Market definition

- A2.13 The starting point for identifying markets which may be susceptible to *ex ante* regulation is the consideration of retail markets from a forward-looking perspective.²⁰² 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).²⁰³
- A2.14 Consideration of retail markets 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.
- A2.15 This link between the retail and wholesale level means that the range of available substitutes at the downstream (retail) level will inform the likely range of competitive constraints acting at the upstream (wholesale) level. This is because a rise in the price of a wholesale service which is passed through to the price of retail services may cause retail customers to switch to substitute retail products, reducing demand for the wholesale input. We refer to this as an indirect constraint.
- A2.16 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.

Demand-side and supply-side substitution

- A2.17 The boundaries between markets are determined by identifying competitive constraints on the price setting behaviour of firms. There are two main constraints to consider²⁰⁴:
- 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).
- A2.18 The hypothetical monopolist test (HMT) is a tool which can be used to identify close demand-side and supply-side substitutes.²⁰⁵ In this test, a product is considered to 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

²⁰² 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 33 of the [EC SMP Guidelines](#).

²⁰³ See recital 5 and point 2 of the [2014 EC Recommendation](#).

²⁰⁴ See paragraph 27 of the [EC 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.

²⁰⁵ See paragraph 29 of the [EC SMP Guidelines](#).

suppliers of other products would begin to compete with the hypothetical monopolist, then the market definition should be expanded to include the substitute products.

- A2.19 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’²⁰⁶, and typically starts from the narrowest potential market definition.²⁰⁷
- A2.20 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).
- A2.21 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.
- A2.22 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

- A2.23 When we conduct our analysis, we use the modified Greenfield approach.²⁰⁸ 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.
- A2.24 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.

²⁰⁶ This reflects the terminology used by the Office of Fair Trading (OFT, 2004. [Market definition: Understanding competition law, OFT403](#)).

²⁰⁷ 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’.

²⁰⁸ See also Section 2.5 of the [Explanatory Note](#) to the 2014 EC Recommendation and paragraph 17 of the [EC SMP Guidelines](#).

Bundling

- A2.25 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.²⁰⁹
- A2.26 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”.²¹⁰

Aggregating markets

- A2.27 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

- A2.28 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.
- A2.29 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).
- A2.30 Our approach also takes into account the EC SMP Guidelines. In particular, in the context of geographic market analysis, paragraph 48 states 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 the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are significantly different”.²¹¹
- A2.31 Hence, subject to the relevant caveats above, where there are products (or geographic areas) where competitive conditions are sufficiently homogeneous, the definition of the relevant market will include all of those products (or geographic areas) within one market.

²⁰⁹ See Section 3.2 of the [Explanatory Note](#) to the 2014 EC Recommendation.

²¹⁰ See Section 3.2 of the [Explanatory Note](#) to the 2014 EC Recommendation.

²¹¹ [EC SMP Guidelines](#), paragraph 48.

Common pricing constraints

A2.32 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

A2.33 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.

A2.34 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.

A2.35 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.

A2.36 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

A2.37 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.”

A2.38 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.”

A2.39 Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking or undertakings enjoy(s) 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.

A2.40 In assessing whether an undertaking has SMP, we take due account of the EC SMP Guidelines as we are required to do under section 79 of the Act.

The criteria for assessing SMP

A2.41 The EC 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.²¹²

A2.42 Our assessments of SMP are concerned with the prospects for competition over the review period, namely the period between the end of the present review and the end of the market review²¹³. 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.²¹⁴

A2.43 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.

²¹² See, for example, paragraphs 13-21 and paragraphs 52-58 of the [EC SMP Guidelines](#).

²¹³ Article 16(6) of the Framework Directive, implemented in UK law by section 80A of the Act, currently states that NRAs shall notify the Commission of new draft measures within three years of the adoption of a previous measure relating to that market. See also paragraph 14 of the [EC SMP Guidelines](#).

²¹⁴ The factors listed in this annex are not intended to be exhaustive and other evidence may be relevant.

Market shares

A2.44 In the EC SMP Guidelines, the EC discusses market shares as being an indicator of (although not sufficient to establish) market power:

“...When considering the market power of an undertaking it is important to consider the market share of the undertaking and its competitors as well as constraints exercised by potential competitors in the medium term. Market shares can provide a useful first indication for the NRAs of the market structure and of the relevant importance of the various operators active on the market...

According to established case-law, very large market share held by an undertaking for some time — in excess of 50 % — is in itself, save in exceptional circumstances, evidence of the existence of a dominant position. Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP.

However, even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers with sufficient bargaining strength.”²¹⁵

A2.45 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 is evidence 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.²¹⁶

A2.46 In addition, if the market share is high, but below the 50% threshold, it is necessary to consider other key structural market features to assess SMP.²¹⁷ The EC SMP Guidelines and Explanatory Note to the EC SMP Guidelines note that dominance is not likely if the undertaking’s market share is below 40% in the relevant market²¹⁸, and the Explanatory Note to the EC SMP Guidelines also notes that an undertaking with a market share that does not exceed 25% is not likely to enjoy a (single) dominant position.²¹⁹

Other factors affecting competitive constraints

A2.47 In addition to market shares, the EC 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, including²²⁰:

²¹⁵ [EC SMP Guidelines](#), paragraphs 54-56.

²¹⁶ [EC SMP Guidelines](#), paragraph 56.

²¹⁷ [EC SMP Guidelines](#), paragraph 57.

²¹⁸ [EC SMP Guidelines](#), footnote 55 and [Explanatory Note to the EC SMP Guidelines](#), page 23.

²¹⁹ [Explanatory Note to the EC SMP Guidelines](#), footnote 78.

²²⁰ [EC SMP Guidelines](#), paragraph 58.

- barriers to entry;
- barriers to expansion;
- absolute and relative size of the undertaking;
- control of infrastructure not easily duplicated;
- technological and commercial advantages or superiority;
- absence of or low countervailing buying power;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;
- direct and indirect network effects;
- vertical integration;
- a highly developed distribution and sales network;
- conclusion of long-term and sustainable access agreements;
- engagement in contractual relations with other market players that could lead to market foreclosure; and
- absence of potential competition.

A2.48 SMP can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

A2.49 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.

Excess pricing and profitability

A2.50 In a competitive market, individual firms should not be able to persistently raise prices above costs and sustain excess profits.

A2.51 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. 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.

A2.52 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. 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

- A2.53 Entry barriers are important in the assessment of potential competition.²²¹ 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. However, the EC SMP Guidelines also note that “high barriers to entry may become less relevant in markets characterised by ongoing technological progress, in particular, due to the emergence of new technologies permitting new entrants to provide qualitatively different services that can challenge the SMP operator”.²²²
- A2.54 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.
- A2.55 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.

Countervailing buyer power

- A2.56 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.

External constraints

- A2.57 The SMP assessment should take account of all relevant competitive constraints, whether from inside or outside the relevant market as defined.²²³ External constraints arise from products outside the relevant market which some customers might regard as substitutes to products which are in the market. External constraints by their nature tend to be relatively

²²¹ [EC SMP Guidelines](#), see paragraphs 59-62.

²²² [EC SMP Guidelines](#), see paragraph 60.

²²³ [EC SMP Guidelines](#), paragraph 64.

weak, but they can, when taken together and in combination with competition within the market, constrain a firm's ability to exercise market power.

A3. Equality impact assessment

- A3.1 Ofcom²²⁴ is required by statute to assess the potential impact of all our functions, policies, projects and practices on equality.²²⁵ 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.
- A3.2 We have considered whether the remedies are likely to have an adverse impact on promoting equality. In particular, we have considered whether the remedies are likely to 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 dependents.
- A3.3 The intention behind our approach to regulating the WLA and WBA markets is to promote competition to the ultimate benefit of end consumers by, for example, requiring any telecoms provider with SMP to provide access to its network on regulated terms (including charging).
- A3.4 Unless we state otherwise in this document, it is not apparent to us that our remedies will have a differential impact on any equality group.
- A3.5 Further, we have not considered it necessary to carry out separate EIAs in relation to race or sex equality or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our regulatory intervention will not have a differential impact on people of different sexes or ethnicities, consumers with protected characteristics in Northern Ireland or disabled consumers compared to consumers in general.²²⁶

²²⁴ We explain why we undertake an Equality Impact Assessment (EIA) and how we have done it in Section 2 of this statement.

²²⁵ Ofcom has a general duty under the 2010 Equality Act to advance equality of opportunity in relation to age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation.

²²⁶ In addition to the characteristics outlined in the 2010 Equality Act, in Northern Ireland consumers who have dependants or hold a particular political opinion are also protected.

A4. Glossary

4G: Fourth generation of mobile telephony systems, including the LTE technology standard.

5G: The term used to describe the next generation of wireless networks beyond 4G LTE mobile networks. 5G is expected to deliver faster data rates and better user experience.

Access Charge Change Notice (ACCN): A contractual notification, issued by KCOM, of a change to the price of a regulated network access service.

Access Network: The part of the network that connects directly to customers from the local exchange.

Ancillary services: Services that facilitate the use of network access services.

Asymmetric Digital Subscriber Line (ADSL): A technology that enables data transmission over copper telephone lines at download speeds of up to 24 Mbit/s.

Backhaul: Connection from the first access node (for example the local exchange or street cabinet) to the core network.

Bandwidth: The rate at which data can be transmitted. Usually expressed in bits per second (bit/s).

BCMR: Business Connectivity Market Review.

BEREC: Body of European Regulators for Electronic Communications.

Broadband Remote Access Server (BRAS): A network element that aggregates end customer access sessions on a broadband network. The BRAS provides a point where policy management and quality of service can be administered.

BT: British Telecommunications plc.

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.

Common costs: Costs which are shared by multiple services supplied by a firm.

Competition and Markets Authority (CMA): An independent public body that has competition law powers which apply across the whole of the economy.²²⁷

Connected Nations Report: An annual report published by Ofcom showing the availability and quality of broadband across the UK.

Core network: The backbone of a communications network, which carries different services such as voice or data around the country.

Cost orientation: The principle that the price charged for the provision of a service should reflect the underlying costs incurred in providing that service.

²²⁷ <https://www.gov.uk/government/organisations/competition-and-markets-authority>.

D-side: Distribution side. The segment of KCOM's access network between the Primary Cross Connection Points (street cabinets) and Distribution Points.

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.

Ducts: Underground pipes which hold copper and fibre lines.

E-side: Exchange side. The segment of KCOM'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 BT 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.

Exchange: The KCOM telephone exchange, to which customers are directly connected.

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 cabinet housing broadband equipment such as a DSLAM, located close to a PCP. 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 access (FWA): An access service where the connection between the network and the equipment located at the customer premises is provided over the radio access medium.

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.

Gbit/s: Gigabits per second (1 Gigabit = 1,000,000,000 bits) A measure of bandwidth in a digital system.

Generic Ethernet Access (GEA): Openreach'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.

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).

Interconnection: The linking (whether directly or indirectly by physical or logical means) of one network and another, enabling end-users of different networks to communicate with one another and to access services provided on a different network.

ISDN2: A type of digital telephone line service that provides two lines over a common digital bearer circuit. These lines provide digital voice telephony, data services and a wide range of ancillary services. It is primarily used by smaller businesses.

ISDN30: A type of digital telephone line service that provides up to 30 lines over a common digital bearer circuit. These lines provide digital voice telephony, data services and a wide range of ancillary services. It is primarily used by larger businesses.

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-Run Incremental Cost (LRIC): A measure of the change in the long-run total costs of the firm that arises from the provision of a discrete increment of output.

LRIC+: Long-run incremental costs plus a share of common costs.

Mbit/s: Megabits per second (1 Megabit = 1 million bits). A measure of bandwidth in a digital system.

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.

Multiple Service Access Node (MSAN): A network device which provides telephony and broadband services over copper and/or fibre access networks.

NMR: Narrowband Market Review.

NRA: National Regulatory Authority.

Ofcom: The Office of Communications.

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 networks in the physical infrastructure of its access network.

Regulatory Financial Statements (RFS): The financial statements that KCOM is required to prepare by Ofcom.

Retail-minus service: A wholesale service which has a price derived from the retail price, rather than from the wholesale cost.

Return on Capital Employed (ROCE): The ratio of accounting profit to capital employed.

Service Level Agreement (SLA): A contractual commitment provided by KCOM to telecoms providers about service standards.

Service Level Guarantee (SLG): A contractual commitment by KCOM to telecoms providers specifying the amount of compensation payable to a telecoms provider for a failure to adhere to an SLA.

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.

Standard broadband (SBB): A broadband connection that can support a maximum download speed of less than 30 Mbit/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: 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 30 Mbit/s and 300 Mbit/s.

Telecoms provider: A person who provides an electronic communications network or provides an electronic communications service.

The Act: The Communications Act 2003.

Ultrafast Broadband (UFBB): We currently take ultrafast broadband services to be those that offer a minimum download speed of 300 Mbit/s or more. Over time we expect ultrafast technologies to evolve towards providing gigabit speeds and above – 1000 Mbit/s or more.

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.

Wholesale Broadband Access (WBA): WBA services allow telecoms providers to provide retail broadband services without investing in a local access network and require only a limited number of interconnection points to provide nationwide coverage. WBA sits between the retail market and the WLA market.

Wholesale Local Access (WLA): The market that covers fixed telecommunications infrastructure, specifically the physical connection between customers' premises and a local exchange.

A5. Sources of evidence

- A5.1 We have noted throughout this statement the evidence we have relied upon in relation to our findings and how we have relied upon that evidence. This annex lists the main sources of evidence used, including all responses to our consultations and to our formal information notices.
- A5.2 While this annex lists the main evidence we have relied upon, the list is for convenience only and is not intended to be exhaustive.

Responses to the 2017 Hull WLA and WBA Consultation

- A5.3 On 22 June 2017, we published our WLA and WBA market review consultation for the Hull Area (2017 Hull WLA and WBA Consultation), to gather stakeholders' views on the work we had undertaken in assessing the state of competition in the wholesale local access and wholesale broadband access markets in the Hull Area and our proposals for regulating these markets in the next review period.
- A5.4 Four stakeholders provided written responses to the consultation:
- [redacted]
 - Hull City Council
 - KCOM
 - MS3
- A5.5 We have published non-confidential versions of the responses from the stakeholders listed above. These can be found on our website.²²⁸

Information gathering using statutory powers

- A5.6 During this market review, we have issued a series of notices under section 135 of the Communications Act 2003 requiring various telecoms providers to provide specified information as set out in the notice.

Notices addressed to and responses received from KCOM

- A5.7 Notice of 23 October 2015 regarding network rollout and wholesale broadband services. Response received on 16 November 2015.
- A5.8 Notice of 19 August 2016 regarding network rollout and wholesale broadband services. Response received on 13 September 2016.
- A5.9 Notice of 26 March 2018 regarding network rollout, wholesale broadband services and copper-based infrastructure. Response received on 11 April 2018.

²²⁸ <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-broadband-access-market-reviews-hull>.

Notices addressed to and responses received from CityFibre

- A5.10 Notice of 5 February 2016 regarding broadband services and network rollout. Responses received on 6 March and 30 June 2016.
- A5.11 Notice of 11 April 2018 regarding broadband services and network rollout. Response received on 27 April 2018.

Notices addressed to and responses received from Connexin

- A5.12 Notice of 1 September 2016 regarding customer information, broadband services and fixed wireless coverage. Response received on 5 September 2016.
- A5.13 Notice of 17 November 2017 regarding pricing information, customer figures, quality of service and switching. Response received on 28 November 2017.

Notices addressed to and responses received from MS3

- A5.14 Notice of 31 March 2016 regarding broadband services and network rollout. Response received on 29 April 2016.
- A5.15 Notice of 4 April 2018 regarding broadband services and network rollout. Response received on 17 April 2018.

Notices addressed to and responses received from Pure Broadband

- A5.16 Notice of 1 September 2016 regarding customer information, broadband services and fixed wireless coverage. Response received on 6 September 2016.
- A5.17 Notice of 17 November 2017 regarding pricing information, customer figures, quality of service and switching. Response received on 20 December 2017.

Notices addressed to and responses received from Quickline

- A5.18 Notice of 1 September 2017 regarding customer information, broadband services and fixed wireless coverage. Response received in two tranches on 5 September and 6 September 2016.

UK legislation

- A5.19 The Competition Act, 1998. <http://www.legislation.gov.uk/ukpga/1998/41/contents>.
- A5.20 The Enterprise Act, 2002. <https://www.legislation.gov.uk/ukpga/2002/40/contents>.
- A5.21 The Communications Act, 2003, as amended.
<https://www.legislation.gov.uk/ukpga/2003/21/contents>.
- A5.22 The Equality Act, 2010, as amended.
<https://www.legislation.gov.uk/ukpga/2010/15/contents>.

Ofcom documents

Consultations and statements

- A5.23 Ofcom, 2002. *Imposing access obligations under the new EU Directives*.
http://webarchive.nationalarchives.gov.uk/20090508120520/http://www.ofcom.org.uk/static/archive/oftel/publications/ind_guidelines/acce0902.htm.
- A5.24 Ofcom, 2004. *The Regulatory Financial Reporting Obligations on BT and Kingston Communications – Final Statement and Notification*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0034/55969/finance_report.pdf.
- A5.25 Ofcom, 2009. *Fixed Narrowband Retail Services Markets: Identification of markets and determination of market power – Statement (2009 Narrowband Statement)*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0023/51836/statement.pdf.
- A5.26 Ofcom, 2013. *Review of the fixed narrowband services markets – Statement (2013 Narrowband Statement)*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0014/50720/final_statement.pdf.
- A5.27 Ofcom, 2014. *Review of the Wholesale Broadband Access Markets – Statement (2014 WBA Statement)*. https://www.ofcom.org.uk/_data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf.
- A5.28 Ofcom, 2014. *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 – Statement (2014 FAMR Statement)*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0032/78863/volume1.pdf.
- A5.29 Ofcom, 2014. *Regulatory Financial Reporting – Statement*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0025/78460/financial-reporting-statement-may14.pdf.
- A5.30 Ofcom, 2016. *Making communications work for everyone: Initial conclusions from the Strategic Review of Digital Communications (Strategic Review)*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0016/50416/dcr-statement.pdf.
- A5.31 Ofcom, 2016. *Business Connectivity Market Review Statement – Review of competition in the provision of leased lines (2016 BCMR Statement)*.
<https://www.ofcom.org.uk/consultations-and-statements/category-1/business-connectivity-market-review-2016>.
- A5.32 Ofcom, 2017. *Wholesale Local Access and Wholesale Broadband Access Market Reviews: Review of competition in the Hull Area (2017 Hull WLA and WBA Consultation)*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0009/103203/wla-wba-hull-consultation.pdf.
- A5.33 Ofcom, 2018. *Wholesale Local Access Market Review – Statement (2018 WLA Statement)*.
<https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-local-access-market-review>.

- A5.34 Ofcom, 2018. *Wholesale Broadband Access Market Review – Statement (2018 WBA Statement)*. <https://www.ofcom.org.uk/consultations-and-statements/category-1/wholesale-broadband-access-market-review>.

Research and reports

- A5.35 Ofcom, *Connected Nations 2015*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0028/69634/connected_nations2015.pdf/.
- A5.36 Ofcom, *Connected Nations 2017*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0035/95876/CN-Report-2016.pdf.
- A5.37 Ofcom, *Technology Tracker – H2 2017*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0017/107360/Ofcom-Technology-Tracker-H2-2017-data-tables.pdf

Other sources

- A5.38 Ofcom, 2005. *Better Policy Making: Ofcom’s approach to Impact Assessment*.
https://www.ofcom.org.uk/_data/assets/pdf_file/0029/45596/condoc.pdf.

European Commission and BEREC publications

- A5.39 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 by Directive 2009/140/EC and Regulation 544/2009 (Framework Directive).
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0021&from=en>.
- A5.40 Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0019&from=EN>.
- A5.41 Commission Recommendation of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC) (2005 EC Recommendation). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005H0698&from=EN>.
- A5.42 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>.
- A5.43 Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (2010/572/EU) (2010 EC Recommendation). <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010H0572&from=EN>.
- A5.44 BEREC, 2012. Revised BEREC common position on best practice in remedies on the market for wholesale (physical) network infrastructure access (including shared or fully unbundled

- access) at a fixed location imposed as a consequence of a position of significant market power in the relevant market (BEREC Common Position on physical access).
http://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/1127-revised-berec-common-position-on-best-pr_0.pdf.
- A5.45 BEREC, 2012. 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 (BEREC Common Position on WBA).
https://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/1126-revised-berec-common-position-on-best-pr_0.pdf.
- A5.46 Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (C(2013) 5761) (2013 EC Recommendation).
http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=2735.
- A5.47 BEREC, 2014. Common Position on geographical aspects of market analysis (definition and remedies).
https://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/4439-berec-common-position-on-geographic-aspe_0.pdf.
- A5.48 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) (2014 EC Recommendation). <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014H0710&from=EN>.
- A5.49 Explanatory Note accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector, 9 October 2014 (SWD(2014) 298). <https://ec.europa.eu/digital-single-market/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets>.
- A5.50 Commission guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C 159/01) (EC SMP Guidelines), 7 May 2018. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2018:159:FULL&from=EN>.
- A5.51 Commission staff working document accompanying the EC SMP Guidelines (SWD(2018) 124 final). <https://ec.europa.eu/digital-single-market/en/news/staff-working-document-guidelines-market-analysis-and-assessment-smp-under-eu-regulatory>

Other sources

CityFibre

- A5.52 <https://www.cityfibre.com/gigabit-cities/hull/> [accessed 27 April 2018]

A5.53 <https://www.cityfibre.com/news/businesses-offered-choice-as-hull-becomes-a-gigabit-city/> [accessed 4 May 2018].

A5.54 <https://www.cityfibre.com/news/20141112cityfibre-signs-dark-fibre-deals-with-ee-and-three-to-enhance-mobile-networks/> [accessed 27 April 2018].

Competition Appeal Tribunal (CAT)

A5.55 *British Telecommunications plc v Office of Communications* [2017] CAT 25 (CAT BCMR Judgment).

Connexin

A5.56 <http://home.connexin.co.uk/> [accessed 2 May 2018].

EE

A5.57 <https://shop.ee.co.uk/dongles/pay-monthly-mobile-broadband/4gee-router/details> [accessed 8 May 2018].

ISP Review

A5.58 <https://www.ispreview.co.uk/index.php/2018/02/kcom-see-full-fibre-broadband-surpass-copper-hull-uk-network.html> [accessed 8 May 2018].

Government

A5.59 <https://www.gov.uk/government/publications/broadband-investment-fund/broadband-investment-fund-request-for-proposals>.

KCOM

A5.60 <https://www.kcomplc.com/business-insight/news-and-media/kcom-full-steam-ahead-for-fibre-broadband/> [accessed 8 December 2017].

A5.61 <https://www.kcomplc.com/business-insight/news-and-media/trading-update-and-management-change/> [accessed 29 May 2018].

A5.62 <https://www.kcomplc.com/regulatory/kcom-wholesale/broadband/> [accessed 4 May 2018]

A5.63 <https://www.kcomplc.com/regulatory/kcom-wholesale/service-information/new-services/> [accessed 23 July 2018].

A5.64 <https://www.kcomhome.com/discover/categories/kcom-news/hull-reaches-broadband-milestone-as-kcom-announces-growth-in-fibre-customers/> [accessed 5 June 2018].

A5.65 <http://www.kcomplc.com/regulatory/regulatory-accounts/> [accessed 4 May 2018].

A5.66 <https://www.kcomhome.com/products/broadband/lightstream/#lightstream> [accessed 23 May 2018].

- A5.67 <https://www.kcomhome.com/products/broadband/> [accessed 23 May 2018].
- A5.68 <https://www.kcomplc.com/media/1658/description-of-cost-accounting-system-2017-pdf.pdf>.
- A5.69 http://pricing.kcomhome.com/media/1501/p05-s21_consumerbroadbandpackages.pdf.
- A5.70 http://pricing.kcomhome.com/media/1484/p07-s21_kcom-leased-line-retail-reference-offer.pdf.
- A5.71 https://www.kcomplc.com/media/1615/kcom_request-for-new-wholesale-services-statement-of-requirements_updated_231117.pdf.

MS3

- A5.72 <http://www.connecthull.co.uk/#two> [accessed 25 April 2018].

Office of Fair Trading (OFT)

- A5.73 OFT, 2004. *Market definition: Understanding competition law*.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284423/oft403.pdf.
- A5.74 OFT, 2004. *Assessment of market power*.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/284400/oft415.pdf.

Purebroadband

- A5.75 <http://www.purebroadband.net/coverage> [accessed 2 May 2018].

Quickline

- A5.76 <http://www.quickline.co.uk/home-connect-internet-only/> [accessed 2 May 2018].

A6. SMP service conditions

Notification of conditions and determinations under sections 48(1) and 79(4) of the Communications Act 2003

Identifying markets, making market power determinations and setting SMP conditions to be imposed on KCOM under sections 45 and 79 of the Communications Act 2003

Background

1. On 26 June 2014, OFCOM published a regulatory statement entitled “*Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Statement on the markets, market power determinations and remedies*”²²⁹ (the “**2014 FAMR Statement**”). The 2014 FAMR Statement identified among others a market for wholesale local access services²³⁰ in the Hull Area, made a determination that KCOM had significant market power (SMP) in that market, and determined that appropriate SMP conditions should be imposed on KCOM. The relevant SMP conditions, together with provisions modifying and revoking certain SMP conditions previously imposed, were contained in a notification dated 26 June 2014 (Annex 29 to the 2014 FAMR Statement) (the “**2014 FAMR Notification**”).
2. 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*”²³¹ (the “**2014 WBA Statement**”). OFCOM identified among others a market for wholesale broadband access provided in the Hull Area²³², made a determination that KCOM had significant market power in that market, and determined that appropriate SMP conditions should be imposed on KCOM. The relevant SMP conditions, together with provisions modifying and revoking certain SMP conditions previously imposed, were contained in a notification dated

²²⁹ <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/narrowband-broadband-fixed/fixed-access-market-reviews-2014/statement>.

²³⁰ The supply of copper loop-based, cable-based and fibre-based wholesale local access at a fixed location.

²³¹ https://www.ofcom.org.uk/data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf.

²³² The three geographic markets were: 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; 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 the Hull Area.

26 June 2014 (Schedule 2 to Annex 2 of the 2014 WBA Statement) (the “**2014 WBA Notification**”).

3. On 22 July 2004, OFCOM published a statement entitled “*The Regulatory Financial Reporting Obligations on BT and Kingston Communications – Final Statement and Notification*”²³³ (the “**July 2004 Statement**”), which imposed various regulatory financial reporting obligations on BT and KCOM (for KCOM, in the notification at Annex 3 of the July 2004 Statement (“**July 2004 (KCOM) Notification**”), and which has subsequently been amended on various occasions.
4. On 22 June 2017 OFCOM published a consultation document entitled *Wholesale Local Access and Wholesale Broadband Access Market Reviews: Review of competition in the Hull Area* (the “**2017 Consultation**”). The 2017 Consultation presented OFCOM’s provisional conclusion that KCOM continues to have significant market power in each of the markets for wholesale local access and wholesale broadband access in the Hull Area. OFCOM proposed to set on KCOM SMP conditions under section 45 of the Act designed to encourage greater competition in the provision of fixed telecoms services for consumers in the Hull Area. OFCOM received several responses to the proposals set out in the 2017 Consultation; it has considered every such representation.
5. Copies of the 2017 Consultation were sent to the Secretary of State in accordance with sections 48C(1) and 81(1) of the Act. The Secretary of State has not notified OFCOM of any international obligation of the United Kingdom for the purposes of the proposals set out in the 2017 Consultation.
6. The 2017 Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making such modifications to the proposals that appeared to OFCOM to be appropriate following domestic consultation, OFCOM sent on 21 June 2018 a copy of its proposals, and a draft of the Statement accompanying the notification 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 sections 48B(2) and 80B(2) of the Act. On 19 July 2018 the European Commission informed OFCOM that it had no comments on its proposals.

²³³ https://www.ofcom.org.uk/_data/assets/pdf_file/0034/55969/finance_report.pdf.

Proposals for service market identifications and market power determinations

7. OFCOM has identified the following service markets for the purpose of making market power determinations:
 - a) the supply of wholesale local access at a fixed location in the Hull Area; and
 - b) the supply of wholesale broadband access provided in the Hull Area.
8. OFCOM has made market power determinations that KCOM has significant market power in relation to the markets set out in paragraph 7 above.
9. The effect of, and OFCOM's reasons for, identifying the markets and making the market power determinations set out in paragraphs 7 and 8 above are set out in the Statement accompanying this Notification.

Determinations to set and apply, and revoke SMP services conditions

10. OFCOM is setting, in relation to each of the services markets referred to in paragraph 7 above, the SMP conditions set out in Schedule 1 to this Notification to be applied to KCOM to the extent specified in that Schedule.
11. The SMP conditions referred to in paragraph 10 above shall, unless otherwise stated in that Schedule, take effect from the date of publication of this notification and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.
12. OFCOM is (to the extent still extant) revoking the SMP conditions in relation to each of the services markets referred to in paragraph 7 (and any subsequent modifications to those SMP conditions) set out in:
 - a) the 2014 FAMR Notification;
 - b) the 2014 WBA Notification; and
 - c) the July 2004 (KCOM) Notification,in accordance with paragraph 13 below.
13. The revocations in paragraph 12 above will take effect on the date of publication of this notification except for Condition 2 set out in the 2014 FAMR Notification which shall be revoked

56 days following such date. We propose 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.

14. The effect of, and OFCOM's reasons for making, the determinations in relation to the SMP conditions referred to in paragraphs 10 and 12 above are set out in the Statement accompanying this Notification.

OFCOM's duties and legal tests

15. In identifying and analysing the markets referred to this Notification, and in considering whether to make the determinations 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.
16. OFCOM considers that the 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 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.
17. In making all of the determinations 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).

Interpretation

18. For the purpose of interpreting this notification (which for the avoidance of doubt includes the Schedule)—
 - a) except in so far as the context otherwise requires, words or expressions have the meaning assigned to them in paragraph 19 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.

19. In this notification:

- a) **“2014 WBA Statement”** means the statement described in paragraph 2 above;
- b) **“2014 WBA Notification”** means the notification described in paragraph 2 above;
- c) **“2014 FAMR Statement”** means the statement described in paragraph 1 above;
- d) **“2014 FAMR Notification”** means the notification described in paragraph 1 above;
- e) **“the Act”** means the Communications Act 2003 (c. 21);
- f) **“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);
- g) **“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;
- h) **“July 2004 (KCOM) Notification”** means the notification described in paragraph 3 above;
- i) **“July 2004 Statement”** means the statement described in paragraph 3 above;
- j) **“KCOM”** means KCOM Group plc, whose registered company number is 02150618, 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 (c.46);
- k) **“OFCOM”** means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002 (c.11);
- l) **“United Kingdom”** has the meaning given to it in the Interpretation Act 1978 (c.30).
- m) **“Wholesale broadband access”** means asymmetric broadband access and any backhaul as necessary to allow an interconnection with other telecoms providers, which provides an always-on capability and allows both voice and data services to be used simultaneously.

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

Signed

A handwritten signature in blue ink, consisting of a stylized 'D' followed by the name '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

31 July 2018

SCHEDULE 1: SMP conditions

Part 1: Application

1. The SMP conditions in Part 3 of this Schedule 1 shall, except where specified otherwise, apply to the Dominant Provider in each of the relevant markets listed in Column 1 of Table A6.1 below to the extent specified in Column 2 of Table A6.1. Save as otherwise specified in any condition, each condition will enter into force on the date of publication of this notification and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.

Table A6.1: Relevant markets for the purposes of this Schedule

Column 1: Relevant market	Column 2: Applicable SMP conditions as set out in Part 3 of this Schedule 1
The supply of wholesale local access at a fixed location in the Hull Area	Conditions 1 (except 1.1B); 2; 3; 4 (except 4.2B; 4.3B; 4.4B); 5; 6; 7; 8 (except 8.31)
The supply of wholesale broadband access provided in the Hull Area	Conditions 1 (except 1.1A); 2; 3; 4 (except 4.2A; 4.3A; 4.4A); 5; 6; 7; 8 (except 8.30)

2. The conditions referred to in paragraph 1 above are entitled as follows—

Condition 1	Network access on reasonable request
Condition 2	Requests for new forms of network access
Condition 3	No undue discrimination
Condition 4	Publication of a Reference Offer
Condition 5	Notification of charges and terms and conditions
Condition 6	Notification of technical information
Condition 7	Quality of service
Condition 8	Regulatory Financial Reporting

Part 2: Definitions and Interpretation

1. In addition to the definitions set out above in this Notification and in each condition below (where relevant), 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) **“Access Charge Change”** means any amendment to the charges, terms and conditions on which the Dominant Provider provides network access or in relation to any charges for new network access;
 - c) **“Access Charge Change Notice”** means a notice given by the Dominant Provider of an Access Charge Change;
 - d) **“Access Request”** means a request from a Third Party to the Dominant Provider for new forms of network access;
 - e) **“Dominant Provider”** means KCOM;
 - f) **“Reference Offer”** means the terms and conditions on which the Dominant Provider is willing to enter into an Access Agreement;
 - g) **“Special Offer”** means a temporary price reduction for a particular product or service, applicable to all customers on a non-discriminatory basis, which is stated to apply for a limited and predefined period and where the price immediately on expiry of that period is no higher than the price immediately before the start of that period; and
 - h) **“Third Party”** means a person providing or seeking to provide 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

- 1.1A Except in so far as Ofcom may from time to time otherwise consent in writing, the (WLA) Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it except in relation to a request for network access comprising Local Loop Unbundling, in which case the Dominant Provider may reject such a request.
- 1.1B Except in so far as Ofcom may from time to time otherwise consent in writing, the (WBA) 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 must:
- a) take place as soon as reasonably practicable after receiving the request from the Third Party;
 - b) be on:
 - i) fair and reasonable terms, conditions and charges; and
 - ii) 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 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.
- 1.5 In this Condition 1, “**Local Loop Unbundling**” means the provision of a form of network access involving the Dominant Provider’s local loops to the exchange being physically disconnected from its network and connected to a competing provider’s network.

Condition 2 – Requests for new forms of network access

This Condition 2 will enter into force 56 days following the date of publication of this notification and shall have effect until the publication of a notification under section 48(1) and 79(4) of the Act revoking such a condition.

2.1 The Dominant Provider must, for the purposes of transparency, publish guidelines, in relation to Access Requests made to it. Such guidelines must set out:

- a) the form in which Access Requests should be made;
- b) the information that the Dominant Provider requires in order to consider Access Requests;
- c) the timescales in which Access Requests will be handled by the Dominant Provider; and
- d) any provisions directed by OFCOM.

2.2 The guidelines must meet the following principles:

- a) the process for consideration of Access Requests shall be documented end-to-end;
- b) the timescales for each stage of the process shall be reasonable, including providing (where relevant) adequate time for interested persons other than the person making the Access Request to make representations;
- c) the criteria by which Access Requests will be assessed shall be clearly identified;
- d) the process for determining, with a Third Party that has made an Access Request, the information in that Access Request that is to be treated as confidential, shall be documented end-to-end;
- e) the reasons for rejecting any Access Request shall be clear and transparent;
- f) the avenues of redress for rejected Access Requests shall be clearly identified; and
- g) any changes to the guidelines shall be agreed between the Dominant Provider and other Third Parties in an appropriate manner.

2.3 The Dominant Provider must, upon reasonable request from a Third Party considering making an Access Request, provide that Third Party with such information as may be

reasonably required to enable that Third Party to make an Access Request. Such information must be provided within a reasonable period.

2.4 Except in so far as OFCOM may from time to time otherwise consent in writing, where the Dominant Provider receives an Access Request the Dominant Provider must:

- a) deal with the Access Request in accordance with the guidelines described in Condition 2.1 above;
- b) inform the party making the Access Request that the Access Request falls within the scope of the guidelines described in Condition 2.1 above; and
- c) publish the non-confidential elements of the Access Request no later than 5 days after receipt of the Access Request.

2.5 Publication pursuant to Condition 2.4(c) shall be effected by the Dominant Provider placing a copy of the non-confidential elements of the Access Request on any relevant publicly accessible website, which for the avoidance of doubt shall not require password access, operated or controlled by the Dominant Provider:

- a) prominently; and
- b) in such form and/or manner as OFCOM may from time to time direct.

2.6 A modification of an Access Request which has previously been submitted to the Dominant Provider, and rejected by the Dominant Provider, must be considered as a new request.

2.7 The Dominant Provider must in accordance with the requirements of Conditions 2.8 and 2.9 below publish in relation to Access Requests the information specified in KPIs (i) to (x) below, and any such additional information as OFCOM may from time to time direct.

KPI(i) – Total number of requests received

the total number of Access Requests that were received by the Dominant Provider during the corresponding Relevant Period;

KPI(ii) - Total number of 25-day Unanswered Requests

for the corresponding Relevant Period, the total number of Access Requests received by the Dominant Provider in respect of which the Dominant Provider has not provided a response within 24 calendar days of that Access Request having been received;

KPI(iii) - Total number of 75-day Unanswered Requests

for the corresponding Relevant Period, the total number of Access Requests received by the Dominant Provider in respect of which the Dominant Provider has not provided a response within 74 calendar days of that Access Request having been received;

KPI(iv) – Total number of Accepted Requests

the total number of Access Requests that were accepted by the Dominant Provider during the corresponding Relevant Period;

KPI(v) – Total number of Rejected Requests

the total number of Access Requests that were rejected by the Dominant Provider during the corresponding Relevant Period;

KPI(vi) – Total number of 25-day Rejected Requests

the total number of Access Requests that were rejected by the Dominant Provider more than 25 calendar days after being received by the Dominant Provider during the corresponding Relevant Period;

KPI(vii) – Total number of 45-day Rejected Requests

the total number of Access Requests that were rejected by the Dominant Provider more than 45 calendar days after being received by the Dominant Provider during the corresponding Relevant Period;

KPI(viii) – Total number of Project Plans

the total number of Project Plans agreed between the Dominant Provider and the Third Party making the Access Request during the corresponding Relevant Period;

KPI(ix) – Total number of 80-day Project Plans

the total number of Project Plans agreed between the Dominant Provider and the Third Party making the Access Request more than 80 calendar days after being received by the Dominant Provider; and

KPI(x) – Total number of 95-day Project Plans

the total number of Project Plans agreed between the Dominant Provider and the Third Party making the Access Request more than 95 calendar days after being received by the Dominant Provider.

- 2.8 The information required to be published under Condition 2.7 above must be published by the Dominant Provider no later than one month after the end of each Relevant Period.
- 2.9 Publication referred to in Condition 2.7 shall be effected by the Dominant Provider:
- a) placing the information prominently (including in such form as OFCOM may from time to time direct) on any relevant publicly accessible website operated or controlled by the Dominant Provider, which for the avoidance of doubt shall not require password access; and
 - b) sending a copy of the information to OFCOM.
- 2.10 In this Condition 2:
- a) **“Project Plan”** means an agreed plan between the Dominant Provider and a Third Party on project execution and project control for the development for a new form of network access. For the avoidance of doubt, Project Plans are agreed between the Dominant Provider and a Third Party with a view to concluding an Access Agreement; and
 - b) **“Relevant Period”** means the following periods of six months beginning either (as applicable) on:
 - i) 1 August and ending on 31 January; and
 - ii) 1 February and ending on 31 July.

- 2.11 The Dominant Provider must comply with any direction OFCOM may make from time to time under this condition.

Condition 3 – No undue discrimination

- 3.1 Except insofar as Ofcom may from time to time otherwise consent in writing, 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.

- 3.2 In this condition, 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 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.
- 4.2A Subject to Condition 4.8, the Dominant Provider must ensure that a Reference Offer in (WLA) 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 traffic and network management;
 - i) 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, 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;

- j) details of measures to ensure compliance with requirements for network integrity;
- k) details of any relevant intellectual property rights;
- l) a dispute resolution procedure to be used between the parties;
- m) details of duration and renegotiation of agreements;
- n) provisions regarding confidentiality of the agreements
- o) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts); and
- p) the standard terms and conditions for the provision of network access.

4.2B (WBA) Conditions 4.2B(h) and 4.2B(j) shall enter in force 56 days following date of publication of this notification under sections 48(1) and 79(4) of the Act.

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 traffic and network management;
- i) 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, 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;
- j) details of measures to ensure compliance with requirements for network integrity;
- k) details of any relevant intellectual property rights;
- l) a dispute resolution procedure to be used between the parties;
- m) details of duration and renegotiation of agreements;
- n) provisions regarding confidentiality of the agreements
- o) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts); and
- p) the standard terms and conditions for the provision of network access.

4.3A To the extent that the Dominant Provider provides to itself network access that—
(WLA)

- 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 Conditions 4.2A(a) to (p).

4.3B To the extent that the Dominant Provider provides to itself network access that—
(WBA)

- 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 Conditions 4.2B(a) to (p).

4.4A The Dominant Provider must, on the date that this condition enters into force, publish a
(WLA) Reference Offer in relation to any network access that it is providing as at the date that this condition enters into force.

4.4B The Dominant Provider must publish a Reference Offer in relation to:
(WBA)

- a) any network access that it is providing as at the date that this condition enters into force, on the date that this condition enters into force; and
- b) any network access it is providing as at the date that Conditions 4.2B(h) and 4.2B(j) enter into force, on the date that those conditions enter into force.

4.5 The Dominant Provider must 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 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 publicly accessible website operated or controlled by the Dominant Provider, which for the avoidance of doubt shall not require password access, prominently and in such form as OFCOM may from time to time direct.

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.

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.
- 5.2 Where it proposes an Access Charge Change, the Dominant Provider must send to every person with whom it has entered into an Access Agreement pursuant to Condition 1, an Access Charge Change Notice.
- 5.3 The obligation in Condition 5.2 shall not apply where the Access Charge Change is directed or determined by OFCOM or is a consequence of such direction or determination (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 An Access Charge Change Notice must:
- a) in the case of an Access Change involving new network access, be sent not less than 28 days before any such amendment comes into effect;
 - b) in the case of an Access Change relating solely to a reduction in the price of existing network access (including, for the avoidance of doubt, a Special Offer), be sent not less than 28 days before any such amendment comes into effect;
 - c) in the case of an Access Change relating to the end of a temporary price reduction in accordance with the terms of the Special Offer, be sent not less than 28 days before any such amendment comes into effect; and
 - d) in the case of any other Access Change involving existing network access, be sent not less than 56 days before any such amendment comes into effect.
- 5.5 The Dominant Provider must ensure that an Access Charge 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 Access Charge Change will take effect (the “**effective date**”).

5.6 The Dominant Provider must not apply any Access Charge Change identified in an Access Charge 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 an Access Charge 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 (d) 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 an Access Charge Change Notice.

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 charges or terms and conditions are directed or determined by OFCOM or are a consequence of such direction or determination (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; and
- 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 Reference Offer on any relevant publicly accessible website operated or controlled by the Dominant Provider, which for the avoidance of doubt shall not require password access prominently and in such form as OFCOM may from time to time direct;
- b) sending a copy of the Notice to OFCOM;
- c) where the Notice identifies a modification to existing relevant terms and conditions, sending a copy of the Notice to every person with which the Dominant Provider has entered into an Access Agreement pursuant to Condition 1; and
- d) sending a copy of the Notice to any person at that person's written request. 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

- 8.1 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.
- 8.2 Ofcom may from time to time make such directions as they consider appropriate in relation to the Dominant Provider’s Cost Accounting System, Accounting Separation System and its obligations under this Condition 8.
- 8.3 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition 8.
- 8.4 For the purpose of this Condition 8, publication shall be effected by
- a) placing a copy of the relevant information on any relevant publicly accessible website, which for the avoidance of doubt shall not require password access, operated or controlled by the Dominant Provider; and
 - b) 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

- 8.5 The Dominant Provider shall in respect of the Market, Technical Areas and the Disaggregated Activities (as applicable) for each Financial Year:
- a) prepare such Regulatory Financial Statements as directed by Ofcom from time to time in accordance with the Accounting Documents (the relevant Accounting Documents to be identified in the Regulatory Financial Statements by reference to their date);
 - b) secure the expression of an audit opinion upon the Regulatory Financial Statements as directed by Ofcom from time to time;
 - c) deliver to Ofcom the Regulatory Financial Statements and corresponding audit opinion identified as directed by Ofcom from time to time and in accordance with Condition 8.6(a);
 - d) publish the Regulatory Financial Statements and corresponding audit opinion as directed by Ofcom from time to time and in accordance with Condition 8.6(b) and (c);

- e) ensure that any Regulatory Financial Statements 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
- in so far as it is reasonably practicable to monitor the effect of such changes, deliver to Ofcom a report detailing any changes in the Accounting Documents, any Process and any other methodology which caused any figure presented on any one of the Regulatory Financial Statements to change by more than 5% from the figure that would have been presented had such a change not been made. Any such report shall include details sufficient to render transparent such changes in accordance with any relevant direction Ofcom may make from time to time.

8.6 The Dominant Provider shall:

- a) deliver to Ofcom copies of the Regulatory Financial Statements 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;
- b) publish the Regulatory Financial Statements and any corresponding audit opinions within 4 months after the end of the period to which they relate; and
- c) publish with the Regulatory Financial Statements any written statement made by Ofcom and provided to the Dominant Provider commenting on the data in, the notes to or the presentation of any or all of the Regulatory Financial Statements and/or the Accounting Documents.

8.7 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.

8.8 The Dominant Provider shall prepare all Regulatory Financial Statements, explanations or other information required by virtue of this Condition 8 on a current cost basis and shall be capable of doing so in relation to any period. Such Financial Statements, explanations or other information shall be, in the opinion of Ofcom, meaningfully reconcilable to the Statutory Financial Statements.

- 8.9 The Dominant Provider shall ensure that Accounting Policies shall be applied consistently within the same Regulatory Financial Statements, between Regulatory Financial Statements for the same Financial Year and from one Financial Year to the next. 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 Accounting Standards and GAAP.
- 8.10 The Dominant Provider shall secure that sufficient checks, controls and meaningful reconciliations are performed between figures contained in the Regulatory Financial Statements and the accounting records (or between figures supplied by either the Cost Accounting System or the Accounting Separation System upon which the Regulatory Financial Statements rely and (i) other figures supplied by either the Cost Accounting System or the Accounting Separation System and/or (ii) the accounting records) to:
- a) enable the Regulatory Auditor to conclude that, in its opinion, both the Cost Accounting System and the Accounting Separation System complies with the Accounting Documents; and
 - b) enable the Regulatory Financial Statements to be audited and an audit opinion expressed upon them in accordance with any relevant direction of Ofcom under this Condition 8.
- 8.11 The Dominant Provider shall preserve records sufficient to provide an adequate explanation of each Regulatory Financial Statement for a period of six years from the date on which each Regulatory Financial Statement is delivered to Ofcom.

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 Auditor appointed to secure compliance with this Condition 8 before the 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:

- a) carries out such on-going duties as are required to secure compliance with this Condition 8;
- b) 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 this Condition 8 as are of concern to Ofcom and notified to the Dominant Provider in writing; and/or
- c) 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 cooperation 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 shall include such provisions acknowledging the acceptance by the 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 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

Requirements relating to the Primary and Secondary Accounting Documents

- 8.17 The Dominant Provider shall review the Primary Accounting Documents as they exist before the coming into force of this Condition 8, and to the extent these documents do not comply with this Condition 8, the Dominant Provider shall by four months after the date on which this Condition 8 comes into force make changes to the Primary Accounting Documents to render them compliant. Such changes shall be delivered to Ofcom on or before four months after the date on which this Condition 8 comes into force together with a copy of the Primary Accounting Documents marked up to show the effect of such changes. All such changes shall take effect on the date on which they are delivered to Ofcom.
- 8.18 Following the review of the Primary Accounting Documents in accordance with Condition 8.17, the Dominant Provider shall prepare the Secondary Accounting Documents in accordance with the Primary Accounting Documents and the requirements of this Condition 8. The Secondary Accounting Documents shall be delivered to Ofcom eight months after the date on which this Condition 8 comes into force.
- 8.19 The Dominant Provider shall,
- a) publish the Primary Accounting Documents on or by four months after the date on which this Condition 8 comes into force following their first review in accordance with Condition 8.17;
 - b) publish the Secondary Accounting Documents following their first review in accordance with Condition 8.18 on or prior to the date of publication of the Regulatory Financial Statements in accordance with Conditions 8.5 and 8.6; and
 - c) thereafter publish, and deliver to Ofcom, details of any amendment to the Accounting Documents as soon as practicable, and in any event within 28 days of the incorporation of such an amendment into the Accounting Documents. Such amendments shall take effect when delivered to Ofcom.
- 8.20 Insofar as there is any inconsistency between any or all of the Primary Accounting Documents, the Primary Accounting Documents shall have the following order of priority:

- a) the Regulatory Accounting Principles;
- b) the Attribution Methods;
- c) the Transfer Charge System Methodology;
- d) the Accounting Policies.

Requirements relating to the up-dating of systems, Accounting Documents and form and content

8.21 The Dominant Provider shall make such amendments as are from time to time required to:

- a) the Cost Accounting System and the Accounting Separation System; the Accounting Documents; and
- b) the form and content of the Financial Statements, in order to ensure that they are consistent with, and give effect fully to:
 - i) any modifications of any SMP conditions;
 - ii) any formal undertakings given by the Dominant Provider to Ofcom following investigations by them into possible contraventions by the Dominant Provider of any SMP conditions or any provisions of the Act and following any dispute considered by Ofcom under the Act; and
 - iii) any enforcement notifications, directions, consents and determinations given or made by Ofcom from time to time under any SMP condition or under the Act or in relation to any dispute considered by Ofcom under the Act, and the Dominant Provider shall make such amendments, and notify Ofcom in writing of such amendments, within three months of the modifications, formal undertakings, enforcement notifications, directions, consents and determinations having been made, provided that the requirements of this paragraph shall be suspended pending the final disposal of any proceedings seeking to have any such modifications, enforcement notifications, directions, consents, or determinations, quashed, set aside, modified or varied.

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

8.22 Where Ofcom have reasonable grounds to believe that any or all of the Regulatory Financial Statements and/or Accounting Documents are deficient, the Dominant Provider shall, where directed by Ofcom,

- a) amend the Accounting Documents in order to remedy the deficiencies identified by Ofcom;
- b) restate the Regulatory Financial Statements identified by Ofcom as requiring restatement in accordance with the Accounting Documents which have, where necessary, been amended pursuant to subparagraph (a);
- c) secure in accordance with any relevant direction of Ofcom under this Condition the expression of an audit opinion on the restated Regulatory Financial Statements;
- d) deliver to Ofcom the restated Regulatory Financial Statements and corresponding audit opinion; and
- e) publish the restated Regulatory Financial Statements and corresponding audit opinion.

Requirements relating to the maintenance of sufficient accounting records

8.23 The Dominant Provider shall maintain accounting records in a form which, on a historical cost basis and on a current cost basis:

- a) enables the Accounting Separation Market Activities and, insofar as these comprise or use Accounting Separation Activities, each of the Accounting Separation Activities, to be separately identified; and the revenues, costs, assets and liabilities of the Accounting Separation Market Activities and, insofar as these comprise or use Accounting Separation Activities, the revenues, costs, assets and liabilities of each of those Accounting Separation Activities, to be separately attributable; and
- b) shows and explains the transactions of the Accounting Separation Market Activities and, insofar as these comprise or use Accounting Separation Activities, the transactions of each of the Accounting Separation Activities.

8.24 The accounting records referred to in Condition 8.23 and all associated documentation shall be, as appropriate:

- a) maintained in accordance with the Accounting Documents;
- b) maintained in order to ensure compliance with this Condition 8;
- c) sufficient to enable the Regulatory Financial Statements to have expressed upon them any relevant audit opinion required under this Condition 8;

- d) sufficient to ensure that charges for Network Access can be shown to be fair and reasonable and not to be unduly discriminatory; and
- e) sufficient to provide a complete justification of the Dominant Provider's charges for Network Access; and
- f) sufficient, to provide a complete justification of the Dominant Provider's charges for the provision of services to End Users.

Requirements relating to the preparation and maintenance of a Wholesale Catalogue

8.25 The Dominant Provider shall ensure that by three months after the date on which this Condition 8 comes into force,

- a) all of its Wholesale Services as at the date on which this Condition 8 comes into force are identified as either External Wholesale Services and placed on the External Wholesale Services List or Internal Wholesale Services and placed on the Internal Wholesale Services List or, where appropriate, are identified as being both External Wholesale Services and Internal Wholesale Services and place on both the External Wholesale Services List and the Internal Wholesale Services List;
- b) an accurate description is prepared of all the Dominant Provider's Internal Wholesale Services, External Wholesale Services and Wholesale Activities as at the date this Condition 8 comes into force sufficient in the opinion of Ofcom to enable them to determine whether these activities have been appropriately identified and sufficiently described; and
- c) an accurate description is prepared of all of the Dominant Provider's Network Services and the extent to which these activities are used in the course of supplying Wholesale Services as at the date this Condition 8 comes into force sufficient in the opinion of Ofcom to enable them to determine whether these activities and their use have been appropriately identified and adequately described.

8.26 The Wholesale Catalogue shall be delivered to Ofcom as soon as practicable after the date on which this Condition 8 comes into force and in any event by four months after that date.

8.27 The Dominant Provider shall ensure that when from time to time Wholesale Activities and Network Activities used in the course of supplying Wholesale Services vary from those as at the date on which this Condition 8 comes into force

(including, amongst other changes, new activities and the cessation of former activities) it shall within 28 days of such variation:

- a) amend the Wholesale Catalogue to reflect such variation; and
- b) deliver to Ofcom the amended version of the Wholesale Catalogue marked up to show those amendments.

The revised version of the Wholesale Catalogue shall be sufficient to enable Ofcom to determine whether such activities have been identified appropriately and their use categorised correctly.

Further accounting separation requirements

8.28 The Dominant Provider shall maintain a separation for accounting purposes of the Accounting Separation Market Activities from other activities and of Accounting Separation Activities from other activities, so as to:

- a) identify all elements of revenue, cost, assets and liabilities, with the basis of their calculation and the detailed attribution methods used, related to the Accounting Separation Market Activities and Accounting Separation Activities including an itemised breakdown of fixed assets; and
- b) ensure that Accounting Separation Market Activities and Accounting Separation Activities are identified and are recorded at an appropriate amount in accordance with the Accounting Documents.

Requirements relating to the demonstration of non-discrimination

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

- a) 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 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;
- b) the same amount as applied and incorporated in the Transfer Charge for the Internal Wholesale Service in subparagraph (a) in respect of the use of the Network Services is applied to the Network Service or

- combination of Network Services whenever it is used by the Dominant Provider in providing an Internal Wholesale Service;
- c) the same amount as applied and incorporated in the Transfer Charge for the equivalent External Wholesale Service in subparagraph (a) in respect of the use of the Network Services is applied to the Network Service or combination of Network Services whenever it is used by the Dominant Provider in providing an External Wholesale Service; and
 - d) the amount applied and incorporated in the Transfer Charge for the Internal Wholesale Service in subparagraph (a) in respect of the use of the Network Services shall be the cost of those Network Services unless the Network Service concerned is one of the Accounting Separation Activities.

Savings

8.30 Each KCOM WLA Regulatory Financial Reporting Direction shall have force until such time as it is modified or withdrawn, as if it has been given under this Condition 8 from the date that this Condition enters into force and each KCOM WLA Regulatory Financial Reporting Direction must be read accordingly.

8.31 Each KCOM WBA Regulatory Financial Reporting Direction shall have force until such time as it is modified or withdrawn, as if it has been given under this Condition 8 from the date that this Condition enters into force and each KCOM WBA Regulatory Financial Reporting Direction must be read accordingly.

Definitions

For the purpose of interpreting this Condition 8 the following definitions shall apply:

'Accounting Documents' means together the Primary Accounting Documents, the Secondary Accounting Documents, and either the Wholesale Catalogue or the Retail Catalogue as appropriate, all as amended from time to time in accordance with this Condition 8;

'Accounting Policies' means the manner in which the requirements of the Companies Act 1985 as amended by the Companies Act 1989, the Accounting Standards and the accounting policies whenever not superseded by the Regulatory Accounting

Principles, are applied by the Dominant Provider in each of the Regulatory Financial Statements;

‘Accounting Separation Activities’ means Wholesale Services and those Wholesale Activities, Network Services and Network Activities used directly or indirectly in the course of supplying Wholesale Services;

‘Accounting Separation Attribution’ means the totality of all apparatus, data, procedures and activities which the Dominant Provider uses or holds for use to determine the costs, revenues, assets and liabilities to be attributed to an activity, either based upon data recorded by an Accounting Separation Measuring System or otherwise;

‘Accounting Separation Market Activities’ means all of the Wholesale Services supplied in the Market or Technical Area (as applicable) and all of the Wholesale Activities, Network Services and Network Activities used directly or indirectly in the course of supplying those Wholesale Services;

‘Accounting Separation Measuring System’ means the totality of all apparatus, systems, data, procedures and activities which the Dominant Provider uses or holds for use to determine the extent to which costs, revenues, assets and liabilities are to be attributed to activities related to Network Access;

‘Accounting Separation System’ means the Accounting Separation Attribution and Accounting Separation Measuring System taken together;

‘Accounting Standards’ means the accounting standards by reference to which the Dominant Provider are required to prepare the Statutory Financial Statements;

‘Alternative Regulatory Auditor’ means any Auditor not for the time being appointed as the Dominant Provider’s Regulatory Auditor;

‘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;

'Auditing Standards' means the standards required to be applied by the Statutory Auditor for the purpose of auditing the Statutory Financial Statements;

'Auditor' means any auditor which could be appointed as the Dominant Provider's auditor in accordance with the requirements of the Companies Act 1985 as amended by the Companies Act 1989;

'Cost Accounting Attribution' means the totality of all apparatus, data, procedures and activities which the Dominant Provider uses or holds for use to determine the costs, revenues, assets and liabilities to be attributed to an activity, either based upon data recorded by a Cost Accounting Measuring System or otherwise;

'Cost Accounting Measuring System' means the totality of all apparatus, systems, data, procedures and activities which the Dominant Provider uses or holds for use to determine the extent to which costs, revenues, assets and liabilities are to be attributed to an activity related to Network Access or the provision of services to End-Users (as appropriate);

'Cost Accounting System' means Cost Accounting Attribution and Cost Accounting Measuring System taken together;

'Current Year Figures' means, in relation to any set of Financial Statements, the amounts relating to the Financial Year to which the accounts relate;

'Disaggregated Activities' means, in respect of a Market or Technical Area, the Wholesale Segments, Wholesale Services, Wholesale Activities, Network Services, Network Activities, Retail Segments, Retail Products, Retail Activities and/or Retail Support Activities used or carried out in the Market or Technical Area, as appropriate;

'External Wholesale Services' means services supplied or offered to any Communications Provider other than the Dominant Provider;

'External Wholesale Services List' means the list of External Wholesale Services prepared under condition 8.25 as amended from time to time under condition 8.27;

‘Financial Year’ means a financial year of the Dominant Provider in respect of which annual statutory accounts are required to be (or to have been) prepared and audited in accordance with the requirements of the Companies Act 1985 as amended by the Companies Act 1989;

‘GAAP’ (Generally Accepted Accounting Practice(s)) means United Kingdom or international (as appropriate) conventions, rules and procedures that define currently accepted accounting practice (including, for the avoidance of doubt, not only broad guidelines of general application but also any detailed practices and procedures);

‘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;

‘Interconnection Services’ means In-Span Handover (“ISH”), Customer-Sited Handover (“CSH”), ISH extension circuits, Synchronous Transfer Mode-1/ISH handover, and Synchronous Transfer Mode-1/CSH handover;

‘Internal Wholesale Services’ means services equivalent to the External Wholesale Services which, in the absence of horizontal or vertical integration, could be supplied within the Dominant Provider;

‘Internal Wholesale Services List’ means the list of Internal Wholesale Services prepared under condition 8.25 as amended from time to time under condition 8.27;

‘KCOM WBA Regulatory Financial Reporting Directions’ means each of the following directions set out at Annex 5 to July 2004 Statement as amended which apply to the market for the supply of wholesale broadband access provided in the Hull Area:

- Direction 1 setting out a list of network components that KCOM must report on under the regulatory financial reporting obligation;
- Direction 2 imposing a transparency principle on KCOM in relation to the accounting documentation;

- Direction 3 setting out the regulatory financial statements that should be prepared delivered to OFCOM and published, and the level of audit opinion that should be secured for each statement;
- Direction 4 setting out the required form and content of the different types of regulatory financial statements required by Direction 3;
- Direction 5 setting out the detailed form of the Fairly Presents in Accordance with (FPIA) audit opinion required by Direction 3; and
- Direction 6 setting out the detailed form of the Properly Prepared in Accordance with (PPIA) audit opinion required by Direction 3.

‘KCOM WLA Regulatory Financial Reporting Directions’ means each of the following directions set out at Annex 5 to July 2004 Statement as amended which apply to the market for the supply of wholesale local access at a fixed location provided in the Hull Area:

- Direction 1 setting out a list of network components that KCOM must report on under the regulatory financial reporting obligation;
- Direction 2 imposing a transparency principle on KCOM in relation to the accounting documentation;
- Direction 3 setting out the regulatory financial statements that should be prepared delivered to OFCOM and published, and the level of audit opinion that should be secured for each statement;
- Direction 4 setting out the required form and content of the different types of regulatory financial statements required by Direction 3;
- Direction 5 setting out the detailed form of the Fairly Presents in Accordance with (FPIA) audit opinion required by Direction 3; and
- Direction 6 setting out the detailed form of the Properly Prepared in Accordance with (PPIA) audit opinion required by Direction 3.

‘Market’ means the market to which this Condition 8 applies in accordance with paragraph 4 of this notification;

‘Network Activities’ means any activities related to Network Access used directly or indirectly (or which in the absence of horizontal or vertical integration would be used directly or indirectly) in the course of supplying Wholesale Services and any activities

used in the course of such activities, excluding those activities which are Wholesale Activities;

‘Network Component’ means, to the extent they are used in the Market or Technical Area (as applicable), the network components specified in any direction given by Ofcom from time to time for the purposes of these conditions;

‘Network Services’ means those groups of Network Activities used directly (or which in the absence of horizontal or vertical integration would be used directly) in the course of supplying Wholesale Services;

‘Primary Accounting Documents’ means documentation setting out the Accounting Policies, the Attribution Methods, the Regulatory Accounting Principles, and the Transfer Charge System Methodology;

‘Prior Year Comparatives’ means, in relation to any set of Financial Statements, the amounts relating to the Financial Year immediately preceding the Financial Year to which the accounts relate, re-evaluated if necessary to ensure that such figures are comparable to the Current Year Figures;

‘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;

‘Regulatory Accounting Principles’ means the principles applied or used by the Dominant Provider in the preparation of the Regulatory Financial Statements;

‘Regulatory Auditor’ means the Auditor for the time being appointed by the Dominant Provider in accordance with these conditions;

‘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;

‘Relevant Financial Year’ means the Financial Year in relation to which any given set of Regulatory Financial Statements are required;

‘Retail Activities’ means any activities wholly and exclusively carried out (or which in the absence of horizontal or vertical integration would wholly and exclusively be carried out) in the course of supplying Retail Products and any activities wholly and exclusively carried out in the course of such activities, excluding those activities which are Wholesale Services;

‘Retail Products’ means services used by or offered to any End Users (including The Dominant Provider);

‘Retail Segments’ means groups of Retail Products;

‘Retail Support Activities’ means any activities carried out directly or indirectly (or which in the absence of horizontal or vertical integration would be carried out directly or indirectly) in the course of supplying Retail Products and any activities directly or indirectly carried out in the course of such activities, excluding those activities which are Retail Activities or Wholesale Services;

‘Secondary Accounting Documents’ means documentation setting out details of the policies, methodologies, systems, processes and procedures for deriving or calculating the costs, revenues, assets and liabilities (including detailed attribution methods and detailed valuation methodology) used by the Dominant Provider in addition to the Primary Accounting Documents, the Wholesale Catalogue and the Retail Catalogue to prepare the Regulatory Financial Statements;

‘Statutory Auditor’ means the Auditor for the time being appointed by the Dominant Provider in accordance with the requirements of the Companies Act 1985 as amended by the Companies Act 1989;

‘Statutory Financial Statements’ means any annual report required to be prepared by the Dominant Provider in accordance with the requirements of the Companies Act 1985 as amended by the Companies Act 1989;

‘Technical Areas’ means either in-span Interconnection links or Interconnection Services which are subject to SMP Conditions by virtue of a market power determination in an identified services market;

‘Transfer Charge’ means the charge or price that is applied, or deemed to be applied, by the Dominant Provider to itself 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 and services 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);

‘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);

‘Usage Factor’ means the average usage by any Communications Provider (including the Dominant Provider itself) of each Network Component in using or providing a particular product or service or carrying out a particular activity;

‘Wholesale Activities’ means any activities wholly and exclusively carried out (or which in the absence of horizontal or vertical integration would wholly and exclusively be carried out) in the course of supplying Wholesale Services and any activities wholly and exclusively carried out in the course of such activities;

‘Wholesale Catalogue’ means the documentation required to be produced by The Dominant Provider under condition 8.25 as amended from time to time in accordance with condition 8.27;

‘Wholesale Segments’ means groups of Wholesale Services;

‘Wholesale Services’ means services related to Network Access used by or offered to any Communications Provider (including the Dominant Provider).