
Hull Area Wholesale Fixed Telecoms Market Review

Volume 3: Remedies

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STATEMENT:

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1. Approach to remedies

- 1.1 This section sets out our approach to remedies. We are imposing these remedies to address our significant market power (SMP) determinations, set out in Volume 2, which identify KCOM as having SMP in the Hull Area in the wholesale local access (WLA) market and the wholesale leased lines access (LL Access) services market.
- 1.2 The detail of our remedies is set out in Sections 2 to 4 of this volume; the transitional arrangements for the fixed voice markets we are deregulating are set out in Section 5 and the legal tests that apply to the remedies are covered in Section 6. The SMP conditions and other legal requirements we have decided to impose on KCOM are set out in Volume 4.

Competition concerns

- 1.3 KCOM's SMP in the WLA and the LL Access markets gives rise to a number of competition concerns. We consider that, absent regulation, KCOM has the ability and incentive to engage in various forms of conduct that could distort competition and/or harm consumers. For example, KCOM could:
- a) refuse to supply access and thus restrict competition in the provision of products and services in the relevant downstream markets;
 - b) set excessive wholesale charges or, in combination with downstream prices, engage in price squeeze behaviour (also referred to as margin squeeze);
 - c) favour its downstream retail businesses to the detriment of its competitors in the relevant retail markets, by price or non-price discrimination; and
 - d) not maintain an adequate level of service quality in the provision and repair of wholesale services or to discriminate in the quality of provision.

Approach to remedies

- 1.4 In the 2020 Hull Area WFTMR Consultation¹, we set out our proposed approach to remedies and invited comments from stakeholders.

Our proposals

- 1.5 KCOM has already deployed a full-fibre network in the Hull Area. Consumers in the Hull Area therefore benefit from some of the fastest broadband speeds in the UK, but also pay higher retail prices and have barely any choice of retail provider.

¹ Ofcom, 2020. [Consultation: Promoting competition in fibre networks – Hull Area Wholesale Fixed Telecoms Market Review 2021-26 - Ofcom](#) (2020 Hull Area WFTMR Consultation).

- 1.6 We therefore proposed an approach to remedies aimed at supporting the growth of competition downstream of the WLA and LL Access markets, based on wholesale access to KCOM's full-fibre network on fair and reasonable terms, conditions and charges. We believed that this was the best way of addressing the competition concerns we had identified in our provisional review findings. We considered that an approach aimed at promoting network competition, as we have taken in other parts of the UK, was unlikely to address KCOM's market power in the Hull Area.²
- 1.7 In relation to WLA, where KCOM wholesale services have not been taken-up so far, we provisionally concluded that the prospects for this approach were better than in the past. We noted the increased willingness of internet service providers (ISPs), who have previously relied on regulated wholesale services from Openreach, to use alternative networks as fibre roll-out and network competition gathers pace in the rest of the UK.

Stakeholder responses

- 1.8 Stakeholders generally agreed that remedies were needed to address competition concerns in the Hull Area.³
- 1.9 Hull City Council welcomed any measures targeting those most impacted by lack of price competition, such as households on low incomes and businesses new to the city.⁴
- 1.10 KCOM recognised the importance we attach to developing retail competition in the Hull Area. It agreed that there is scope to increase the presence of telecoms providers using its network to compete in the Hull Area.⁵ KCOM believed that its own wholesale strategy could play a key role in delivering this, given time. It maintained that its own plans to shift towards a wholesale fibre business have the potential to deliver a material increase in retail competition and that the impact of its strategy would start to be seen over this review period. It argued that our proposals to require it to provide dark fibre and a new WLA interconnect product would hinder the delivery of its wholesale strategy and the benefits this will bring to the market. KCOM set out detailed concerns about our proposed remedies which we summarise and consider in later sections.

² In the rest of the UK (excluding the Hull Area) our approach to regulation is aimed at promoting investment in gigabit-capable networks by Openreach and other telecoms providers to promote network-based competition where viable. We want to encourage BT's competitors to build their own networks, rather than relying on continued access to Openreach's hybrid copper fibre network. In areas of the UK where there is unlikely to be material and sustainable competition to BT in the commercial deployment of competing networks, we want to promote investment by Openreach in upgrading its network. See [2021 WFTMR Statement](#).

³ [Vodafone](#) response to the 2020 Hull Area WFTMR Consultation, paragraph 2.17; [Purebroadband](#) response to the 2020 Hull Area WFTMR Consultation, page 3; [Hull City Council](#) response to the 2020 Hull Area WFTMR Consultation, page 1; [Name withheld](#) response to the 2020 Hull Area WFTMR Consultation, page 1. We also received two emails from private individuals [redacted] and [redacted] after the consultation had closed in September 2020 about, among other things, bringing KCOM's retail pricing packages into line with the rest of the UK.

⁴ Hull City Council response to the 2020 Hull Area WFTMR Consultation, page 1.

⁵ [KCOM](#) first response to the 2020 Hull Area WFTMR Consultation, paragraph 1.5.

- 1.11 Vodafone assessed the prospects for alternative fibre deployment in the Hull Area to be low. It noted the small addressable market, KCOM's investment in a full-fibre access network, its near 100% market share of residential broadband connections and ability to respond to any entry with a competitive pricing response.⁶
- 1.12 Vodafone considered that a full set of sensibly priced wholesale product remedies should be introduced without delay to encourage retail competition. It also highlighted that retailers need to be able to consume these wholesale products with minimal additional investment. Vodafone sought clarification about the application of regulation to some legacy circuits which it leases from KCOM which extend beyond the Hull Area.⁷
- 1.13 Connexin considered that our remedies should go further to also require KCOM to grant access to its physical infrastructure. [redacted].⁸ Without access to infrastructure, and in their current form, Connexin believed the remedies would further secure KCOM's market position in the Hull Area.⁹ Like Vodafone, Connexin argued that KCOM's current wholesale products are not effective due to pricing and difficulties accessing the market.¹⁰
- 1.14 Connexin was also concerned about the impact of its wholesale orders being fulfilled by KCOM-branded engineers. It noted that BT and Openreach have separate branding in the rest of the UK, which it felt is clearer for customers.¹¹ [redacted].¹²
- 1.15 Purebroadband also listed a number of concerns about dealing with KCOM Wholesale including inadequate ordering and lifecycle systems and processes, inequality of systems access and KCOM branding of wholesale services.¹³ It called for further investigation into the separation of KCOM's wholesale and retail arms, which it considered should mirror more closely the relationship between BT and Openreach.

Our reasoning and decisions

- 1.16 We have decided that our proposed approach to WLA and LL Access remedies based on wholesale access to KCOM's fibre network is appropriate for the forward-looking period of this review. We consider this approach has the best prospects of providing a long-term resolution to KCOM's market power downstream of these wholesale markets by injecting competition into the retail broadband and business connectivity markets in the Hull Area.
- 1.17 However, assuming our approach is successful, it is likely to be some years before new competition emerges at scale and provides consumers in the Hull Area with benefits such as more choice and lower prices. In the interim, we recognise that we will need to continue to monitor KCOM's retail pricing behaviour and be prepared to intervene to protect

⁶ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 2.1 to 2.12.

⁷ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.1.

⁸ [redacted].

⁹ Connexin response to the 2020 Hull Area WFTMR Consultation, page 4.

¹⁰ Connexin response to the 2020 Hull Area WFTMR Consultation, page 2.

¹¹ Connexin response to the 2020 Hull Area WFTMR Consultation, page 2.

¹² [redacted].

¹³ Purebroadband response to the 2020 Hull Area WFTMR Consultation, pages 1-2.

consumers, if necessary, by opening a review of competition in retail markets in the Hull Area.

- 1.18 We note KCOM’s current senior leadership’s strategy to pivot its business toward a wholesale fibre focus. But, given the findings of this review, we do not consider it appropriate to rely on KCOM’s own plans to address the competition concerns we have identified arising from its persistent SMP in fixed telecoms markets in the Hull Area.
- 1.19 We agree with Vodafone that the investment case for overbuilding KCOM’s new full-fibre network in the Hull Area is likely to be very challenging given KCOM’s dominant position in this small geographic market. Unlike many investments in network build in the rest of the UK, a new fibre network in the Hull Area could not differentiate itself as offering fibre ‘first’, as KCOM already supplies this, and there are no retail ISPs like Sky and TalkTalk with a significant share of the retail broadband market in the Hull Area who might move their customer base to a new entrant network. We therefore do not consider that the availability of PIA in the Hull Area would be decisive in remedying KCOM’s SMP in WLA or LL Access at this time.
- 1.20 Our approach in the Hull Area has long been to target increased take-up of wholesale services based on access to KCOM’s network. This was the primary aim of our last review of the WLA market in 2018.¹⁴ We considered then that competitive entry might emerge based on take-up of new fibre access products requiring less investment than unbundling copper access at KCOM exchanges. However, this review shows that the measures we put in place in 2018 have not been successful in encouraging providers to enter and provide services in the Hull Area. In particular, large national ISPs are still not present in the Hull Area. As a result, increased retail competition has not yet materialised.
- 1.21 Having considered the evidence gathered from our engagement with stakeholders, we have concluded that despite the lack of entry to date, there is now a better prospect for competition in the Hull Area based on wholesale access to KCOM’s fibre network during the forward-looking review period. The reasons for this are summarised below.
- a) There are significantly increasing levels of gigabit-capable network roll-out by providers in many areas of the UK. In our latest Connected Nations update¹⁵, we found that nearly a quarter (24%) of homes have access to full-fibre services. This is driven predominantly through deployments by larger operators such as Openreach and CityFibre but supported by an increasing number of smaller providers across the UK serving individual communities and regions. As roll-out of gigabit-capable networks¹⁶

¹⁴ 2018 WLA/WBA Statement, paragraph 1.9.

¹⁵ Ofcom, 2021. [Connected Nations Update: Summer 2021 \(ofcom.org.uk\)](https://www.ofcom.gov.uk/consult/condocs/connectednationsupdate/connectednationsupdate-summer2021/).

¹⁶ Gigabit capable networks include full-fibre networks as well as any network that is able to offer at least 1Gbit/s download speeds (such as the latest version of cable network technology – DOCSIS 3.1). We note that Virgin Media O2 has recently announced its intention to upgrade its fixed network to full-fibre to the premises by 2028. See [Virgin Media O2 announces 2028 full fibre upgrade plan \(libertyglobal.com\)](https://www.libertyglobal.com/news/virgin-media-o2-announces-2028-full-fibre-upgrade-plan) [accessed 15 October 2021].

progresses in many areas of the UK, some ISPs now report an increased willingness to work with alternative networks.

- i) TalkTalk, which supplies its services to customers over Openreach's network, now also has a wholesale agreement with CityFibre.¹⁷
 - ii) Vodafone, which also has a wholesale agreement with CityFibre¹⁸ as well as using Openreach, has told us that it would be likely to seek to work with multiple fibre providers across the UK to provide low price residential broadband services.¹⁹ [redacted].²⁰
 - iii) [redacted] is actively engaging with alternative fibre providers, [redacted], about providing consumer broadband services via wholesale fibre services.²¹
 - iv) BT has indicated it is open to working with alternative suppliers but is not currently actively considering the Hull Area.²²
- b) Providers have expressed a greater interest in using KCOM's fibre wholesale products.
- i) In response to a statutory information request, KCOM provided us with detailed correspondence with two providers about their interest in fibre WLA services ([redacted] and [redacted]).²³ Purebroadband has also enquired about KCOM's WLA services, indicating it may be interested to pursue this option further if existing barriers to take-up can be addressed.²⁴
 - ii) KCOM further indicated that a number of providers have enquired into the use of fibre-based WBA.²⁵
- c) As gigabit-capable network coverage increases across the UK, an environment is emerging in which telecoms providers are working to overcome barriers to dealing with multiple wholesale fibre providers. We understand that one of these barriers is the lack of standardisation of the order and provisioning process ([redacted]²⁶, Vodafone²⁷, and Purebroadband²⁸), and there are indications that some providers are now actively working to overcome this multi-sourcing barrier.²⁹ KCOM has been gathering requirements from wholesale customers to inform the direction of its development of

¹⁷ [CityFibre acquires FibreNation and adds TalkTalk as strategic customer, increasing its rollout plans to pass up to 8 million premises - CityFibre](#) [accessed 15 October 2021].

¹⁸ [Vodafone and CityFibre bring gigabit-speed fibre to the UK - CityFibre](#) [accessed 15 October 2021].

¹⁹ Meeting between Ofcom and Vodafone, 24 February 2020.

²⁰ [redacted].

²¹ [redacted].

²² Call between Ofcom and BT, 27 February 2020.

²³ KCOM response dated 3 February 2020 to the s.135 notice dated 8 January 2020, question 13.

²⁴ Call between Ofcom and Purebroadband, 18 June 2020.

²⁵ Enquiries about WBA were received from [redacted], [redacted], [redacted], [redacted], [redacted], and [redacted].

²⁶ [redacted].

²⁷ Meeting between Ofcom and Vodafone, 24 February 2020.

²⁸ Call between Ofcom and Purebroadband, 12 December 2019.

²⁹ For example, see [CWP Stakeholder Overview | INCA](#) [accessed 15 October 2021].

a wholesale provisioning and fault management platform,³⁰ and a telecoms provider ([redacted]) has indicated that it is taking measures to reduce the incremental cost of entry ([redacted]).³¹

- 1.22 We believe that the above evidence indicates that during this review period, there is a better prospect for competitive entry in the Hull Area than has previously been the case. We therefore consider that the correct approach, despite the absence of entry to date, is to continue our approach of encouraging wholesale network access-based competition through the regulation of the WLA market.
- 1.23 KCOM does face some competition in the supply of business connectivity services based on providers using regulated wholesale services provided by KCOM³² and from CityFibre and MS3 who both have some network infrastructure in the Hull Area which they use to supply business connectivity services. We consider it appropriate to continue to focus on wholesale access remedies to address KCOM's market power in the LL Access market in the Hull Area and discuss why we believe requiring KCOM to provide dark fibre access, as well as managed Ethernet leased lines, will further this in Section 3.
- 1.24 We do not agree with Purebroadband's view that we should be considering the separation of KCOM similar to that of BT and Openreach in order to address its concerns about doing business with KCOM Wholesale.³³ Separation is intrusive and we consider other remedies can deliver better outcomes in this review period. We note too that unduly discriminatory conduct carried out by KCOM would be a breach of our SMP regulation. Telecoms providers that have concerns about KCOM's conduct and compliance with our regulations should refer to our enforcement guidelines.³⁴
- 1.25 With regard to Vodafone's comments about some legacy circuits it rents from KCOM, we would also refer it to our enforcement guidelines if it believes that KCOM's pricing of these circuits is non-compliant.
- 1.26 Stakeholders' detailed comments on the remedies we proposed last year and, taking account of these comments, our detailed reasoning and decisions on WLA and LL Access remedies are set out in the following sections.

Insufficiency of competition law

- 1.27 Under Section 87(1) of the Act, where we have made a determination that an operator has SMP in an identified services market, we must impose such requirements as we consider appropriate. However, in considering the imposition of remedies, we take into account the

³⁰ KCOM, [New services and Strategic IT Developments](#) [accessed 15 October 2021]. KCOM, [Previous strategic IT development notices](#) [accessed 15 October 2021].

³¹ [redacted].

³² [redacted].

³³ We note with specific regard to certain comments made in Purebroadband's response to our consultation that KCOM is in any event prohibited from conduct which amounts to undue discrimination relating to the provision of network access.

³⁴ Ofcom, 2017. [Enforcement guidelines for regulatory investigations \(ofcom.org.uk\)](#).

potential application of competition law. To do this we have considered whether competition law, in particular the rules prohibiting the abuse of a dominant position, would be effective in responding to the competition concerns identified above.

- 1.28 First, we have taken account of the fact that the products in the wholesale markets we have identified are inputs into other downstream markets. Appropriate *ex ante* intervention at the upstream level can promote effective competition in downstream markets. It can also facilitate the emergence of effective competition at the upstream level itself. Competition law, insofar as is relevant, prohibits the abuse of a dominant position – it does not seek to promote competition. The key aim of our regulatory strategy is to address KCOM’s market power by promoting competition.
- 1.29 Second, the requirement to address the competition problems in each of the markets in which we find SMP means imposing an interconnected and complex package of remedies, including provisions to ensure that they remain effective for the duration of the review period.
- 1.30 Third, we consider it is important to provide sufficient certainty about the rules applying to the dominant provider in the wholesale markets. We consider this certainty is best achieved through *ex ante* regulation. *Ex ante* regulation will also allow for timely intervention by us proactively enforcing the conditions and, if necessary, by parties bringing regulatory disputes to us for swift resolution.
- 1.31 We therefore consider that, in the current and expected circumstances of the relevant markets over the review period, competition law alone would be insufficient to address the competition problems we have identified. We explain in our assessment of our individual remedy proposals where we consider there are particular additional relevant points relating to the sufficiency of competition law.

2. General remedies: WLA and LL Access markets

- 2.1 In this section, we set out the general remedies that we have decided to impose on KCOM over the forward-looking period of this market review. Combined with the specific network access remedies discussed in Section 3, these are intended to address the competition concerns which we have identified as arising from our determinations that KCOM has SMP in the WLA and LL Access markets in the Hull Area.³⁵
- 2.2 The general remedies we have decided to impose on KCOM are summarised in Figure 2.1 below.

Figure 2.1: Summary of the general remedies we are imposing on KCOM

General remedies in the WLA and LL Access markets
Requirement to provide network access on reasonable request, and on fair and reasonable terms, conditions and charges (WLA excluding copper-based services)
Requirements relating to requests for new forms of network access (WLA only)
Requirement for no undue discrimination
Requirement to publish a reference offer
Direction requiring KCOM to amend its RO (WLA only)
Requirement to notify changes to charges, terms and conditions
Requirement to notify technical information
Requirement to publish quality of service information
Regulatory financial reporting
Requirement to produce a wholesale pricing transparency report (LL Access only)

- 2.3 We set out below our reasoning and decisions for imposing each remedy taking account of any comments we received from stakeholders in response to our consultation proposals.

³⁵ These competition concerns are set out in Section 1 of Volume 3. Our decisions regarding market definitions and SMP determinations are set out in Volume 2.

Requirement to provide network access on reasonable request and on fair and reasonable terms, conditions and charges (LL Access and WLA excluding copper)

Our proposals

- 2.4 We proposed that KCOM must offer network access in the WLA and LL Access markets where a third party reasonably requests it. Access must be granted on fair and reasonable terms and conditions as soon as is reasonably practicable.
- 2.5 We also proposed a fair and reasonable charges obligation and proposed that Ofcom have powers to make directions to secure supply of service and fairness and reasonableness of terms, conditions and charges of network access. These proposals are discussed in the 'pricing requirements' subsection below.
- 2.6 Following KCOM's roll-out of FTTP services in the Hull Area, we proposed to exclude all copper-based services from the WLA network access requirement. Looking forward we expect any competition in the Hull Area to be based on access to KCOM's fibre network.

Stakeholder comments

- 2.7 Connexin argued that we should expand our remedies to require KCOM to productise access to its passive infrastructure i.e. KCOM's network of underground ducts and chambers and overhead poles used to host its fixed network in the Hull Area.³⁶ It considered that Hull is disadvantaged compared to the rest of the UK because KCOM is not obligated to share access to its infrastructure, which it believes would enable competitors to build rival networks.³⁷ [redacted]³⁸, [redacted].³⁹ [redacted]⁴⁰ [redacted].⁴¹ We note that Connexin has recently announced its plan to build a full-fibre network in Hull.⁴²

Our reasoning and decisions

- 2.8 We remain of the view that our network access obligations are appropriate and proportionate to address KCOM's market power in the WLA and LL Access markets.
- 2.9 The level of investment required by a third party to replicate KCOM's WLA and LL Access networks, and the time it would take to do this are significant barriers to entry. An obligation requiring KCOM to provide network access where a third party reasonably requests it is therefore vital to promoting and protecting competition in downstream

³⁶ Connexin response to 2020 Hull Area WFTMR Consultation, page 4.

³⁷ Connexin response to 2020 Hull Area WFTMR Consultation, page 2.

³⁸ [redacted].

³⁹ [redacted].

⁴⁰ [redacted].

⁴¹ [redacted].

⁴² [We're ending the broadband monopoly. - Connexin](#) [accessed 18 October 2021].

markets. Without such a requirement KCOM would have the incentive and ability to refuse access to the WLA and LL Access markets or provide access on less favourable terms, thereby benefiting its own retail divisions and hindering downstream competition, ultimately against the interests of consumers.

- 2.10 In Section 1 we have explained why, having considered stakeholder responses including Connexin's call for regulated access to KCOM's physical infrastructure, we have taken an approach to remedies which focuses on requiring access to KCOM's fibre network rather than access to its physical infrastructure.⁴³
- 2.11 Nevertheless, we recognise that operators like MS3 and a concentration of WISPs including Connexin do have some network presence and broadband customers in the Hull Area. Over the course of this review period they, or other entrants, may seek space in KCOM's network of underground ducts and chambers and, aerially, space on its poles to deploy a fixed access network in the Hull Area to compete with KCOM in the market for WLA. [§<].⁴⁴
- 2.12 We consider that such requests to KCOM for a form of physical infrastructure access are consistent with our approach to *ex ante* SMP regulation in this review of wholesale fixed telecoms markets in the Hull Area. We consider that such a request could be reasonable under the WLA general network access condition we are imposing, in which case KCOM would effectively be required to provide the relevant form of physical infrastructure access as soon as reasonably practicable and on fair and reasonable terms, conditions and charges.
- 2.13 Access to physical infrastructure supplied under the WLA general network access condition would be restricted to the deployment of fixed network technologies (most likely fibre) to fixed locations in the Hull Area to provide services to homes and businesses such as broadband. Wireless services and leased lines are not in the WLA market.⁴⁵
- 2.14 We note that KCOM is already required to provide access to its physical infrastructure under the ATI Regulations.⁴⁶ This is a separate regime which the DCMS is reviewing.⁴⁷ However, we do not consider the ATI Regulations to be a substitute for network access obligations. The ATI Regulations are conceived as a means of facilitating commercial agreements for access on fair and reasonable terms, with Ofcom providing dispute resolution in the event no agreement can be reached. A general network access obligation provides greater certainty in that it forms a basis for the specification of the nature and terms of access to KCOM's physical infrastructure up front where such a request is

⁴³ See Section 1, paragraph 1.19.

⁴⁴ [§<].

⁴⁵ See Section 3 of Volume 2.

⁴⁶ The Communications (Access to Infrastructure) Regulations 2016 (the ATI Regulations) implement the Broadband Cost Reduction Directive (see Annex 4). They are a set of measures intended to reduce the cost of deploying high-speed electronic communications networks, including sharing the physical infrastructure of telecoms network providers as well as infrastructure operators in other sectors (e.g. gas, electricity). The ATI Regulations can be found at <http://www.legislation.gov.uk/uksi/2016/700/made> [accessed 19 October 2021].

⁴⁷ DCMS is the Department for Digital, Culture, Media and Sport.

reasonable. Given the competition concerns with respect to KCOM's position in the market in the Hull Area we consider such certainty is, in this case, necessary to ensure a network access remedy is effective and is not provided by the ATI Regulations.

- 2.15 Our network access obligation includes a requirement on KCOM to provide any ancillary services that are necessary to make that network access effective. Necessary ancillary services should also be provided on fair and reasonable charges, terms and conditions. We consider this the minimum necessary to secure that the remedy achieves its purpose.
- 2.16 In this review we have explored the reasons why KCOM's fibre WLA product⁴⁸ is not currently purchased by any provider. This has included considering the obligations we currently impose in relation to ancillary services. We consider that certain changes to KCOM's reference offer are necessary in order to address KCOM's SMP in WLA, which arise out of KCOM's obligation in SMP Condition 1 to provide access on fair and reasonable terms and conditions. We consider this point further below in relation to our condition requiring KCOM to publish a reference offer.

Pricing requirements

- 2.17 This subsection first considers the general principles we apply to pricing remedies in the Hull Area, which apply to both the WLA and LL Access markets, and then considers the pricing requirements for WLA. Pricing requirements for LL Access, including dark fibre, are discussed in Section 3 below.

Our proposals

- 2.18 In our 2020 Hull Area WFTMR Consultation, we proposed an obligation for charges for network access to be fair and reasonable in the WLA and LL Access markets.
- 2.19 We said that, in general, we would consider KCOM's charges to be fair and reasonable if they are consistent with making a reasonable return over costs including a reasonable contribution to common cost recovery, and if they do not equate to a margin squeeze.
- 2.20 For KCOM's WLA services at or around 40Mbit/s, we proposed to set a specific benchmark rate, equal to the existing benchmark rate held constant in real terms during the review period.⁴⁹ We said that we would publish the rates concerned in this statement.
- 2.21 For WLA services at higher bandwidths, we did not propose to set specific benchmark rates in advance. We proposed instead to take into account the available evidence which might include reference to equivalent products offered by Openreach in the rest of the UK.

⁴⁸ [Wholesale FibreLine Local Access services \(WFLLA\) | KCOM](#) [accessed 18 October 2021].

⁴⁹ This existing benchmark rate was the published price of Openreach's VULA 40/10 rate applied to BT's GEA-FTTP connections where GEA-FTTC is not available.

Stakeholder responses

- 2.22 Most stakeholders who commented on our WLA fair and reasonable pricing proposals considered that the proposals could go further.
- 2.23 Connexin said that the wholesale products available to potential new entrants under the regulated portfolio do not offer suitable ease of access and the reasonable margins needed to operate without significant scale.⁵⁰
- 2.24 Similarly, Vodafone argued that more needs to be done to reduce both the price of KCOM's wholesale offerings and the burden (including costs) to consume them.⁵¹ [X].⁵² Vodafone said that we should set the price of all KCOM wholesale services up to 100Mbit/s, using Openreach's SOGEA⁵³ 40/10 price as a benchmark with modest uplifts for bandwidths above this. It said this would allow retailers to emulate existing 40/10 and 80/20 offerings available elsewhere in the UK.⁵⁴
- 2.25 [X] stated that our fair and reasonable pricing measures do not go far enough to create the financial opportunities necessary to generate competition. It said that KCOM's current wholesale prices are set at a level that creates a margin squeeze, noting that its retail costs may be higher than KCOM's and that KCOM's wholesale costs should reflect this.⁵⁵ [X] said that we should extend the benchmark to cover all FTTP bandwidths, which it believed would facilitate commercial opportunities for new retailers.⁵⁶
- 2.26 KCOM requested confirmation that the 'fair bet' principle, as set out in the 2018 Hull Area market review, remains relevant.⁵⁷

Our reasoning and decisions

- 2.27 Our main aim in setting wholesale price regulation is to promote effective competition at the retail level.
- 2.28 We consider that in the WLA and LL Access markets there is risk that KCOM might fix or maintain some or all of its prices for network access at an excessively high level, or impose a price squeeze in relation to such access so as to have adverse consequences for end-users of telecoms services.
- 2.29 We consider therefore that a regulatory constraint on KCOM's wholesale prices is appropriate in order to address this risk. We have a variety of options to address this concern, including charge controls. However, while in principle a charge control may be

⁵⁰ Connexin response to the 2020 Hull Area WFTMR Consultation, page 2.

⁵¹ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 2.8.

⁵² [X].

⁵³ SOGEA means single order generic Ethernet access. An Openreach product which allows its wholesale customers to order broadband without a telephone line.

⁵⁴ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 2.18.

⁵⁵ Name Withheld [X] response to the 2020 Hull Area WFTMR Consultation, page 1.

⁵⁶ Name Withheld [X] response to the 2020 Hull Area WFTMR Consultation, page 1.

⁵⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 4.4 and 4.5.

effective, our regulation must be proportionate, meaning we must impose the minimum necessary remedy to achieve our aim. Consistent with our long-standing practice, we consider that charge controls in the WLA or LL Access market in the Hull Area would be disproportionate to the aim of preventing excessive charges, due to the scale of the market and the significant costs and difficulties which would arise in formulating a charge control, and given the availability of charge-controlled Openreach products as suitable benchmarks.⁵⁸ We are instead imposing in the WLA and LL Access markets (including dark fibre access, considered below) an obligation for charges for network access to be fair and reasonable. We consider this is a proportionate approach and the minimum regulation necessary to address this risk.

- 2.30 In general, we consider that KCOM's charges would be fair and reasonable if they are consistent with making a reasonable return over costs including a reasonable contribution to common cost recovery, and if they do not equate to a price squeeze.⁵⁹ In doing so, we will take into account the need to have offered KCOM a 'fair bet'.
- 2.31 In order to inform our enforcement priorities, we identify appropriate benchmark prices against which to compare KCOM's prices. If KCOM's prices are in excess of these benchmarks, we would be likely to give further scrutiny to those charges. As set out above, stakeholders raised concerns around which bandwidth services should have a specific benchmark placed on them and the level of those benchmarks.
- 2.32 We have decided to set a specific benchmark only for services at or around 40Mbit/s upload speed. We believe that these services will continue to be a reasonable substitute for higher speed services over the review period – i.e. that customers would be prepared to switch down to 40Mbit/s services if higher bandwidth services became too expensive. As such, we consider that the price of services at or around 40Mbit/s will constrain the prices which KCOM could charge for higher bandwidth products. We therefore do not consider there is a need to set an additional specific benchmark rate on higher bandwidth prices.
- 2.33 Instead of using a direct benchmark, to evaluate whether the prices for higher bandwidth services are fair and reasonable we will take into account all of the available evidence, which will include retail prices and margins, and the wholesale prices offered in the rest of the UK (including by Openreach). In all cases we would expect KCOM's retail margin over the wholesale prices to cover retail costs.

⁵⁸ For example, see the 2019 BCMR Statement, paragraphs 16.56-16.57. We have also adopted this approach historically in the WLA market in the Hull Area. For example, see the 2018 WLA/WBA Statement, paragraphs 4.68-4.70.

⁵⁹ In response to [3<], we note that while we would assess any dispute on the relevant facts, our starting point for evaluating cost and margins on individual services in this context would be to allow a long run incremental cost (LRIC) retail margin on each service, assessed by reference to an equally efficient operator (EEO) standard. For the avoidance of doubt, under our interpretation of this fair and reasonable requirement, KCOM is also required to cover its retail costs across a broader portfolio of broadband products, such that KCOM's rivals can supply a comparable range of products.

- 2.34 For services at or around 40Mbit/s, we have decided to use the existing benchmark rate held constant in real terms.⁶⁰ In practice, this means the benchmark is equal to the charge controlled MPF⁶¹ plus GEA-FTTC 40/10 rental price.⁶²
- 2.35 In the rest of the UK, we are now regulating Openreach's WLA prices in a way that reflects the level of competition and market circumstances in a given area, and these now differ from the Hull Area.⁶³ Unlike in the Hull Area, there is established retail competition in the rest of the UK; encouraging network build is a strategic priority, and Openreach is at a different stage of the investment cycle from KCOM, which has already completed its full-fibre roll-out. This had led us to include a fibre premium on GEA-FTTP prices. Given that these circumstances, and the aims of our regulation, differ from those in the Hull Area, we do not consider it would be appropriate to allow KCOM to charge a fibre premium – and therefore we do not consider that the price of Openreach's 40/10 GEA-FTTP services will be an appropriate benchmark going forward.
- 2.36 We do not consider that keeping the benchmark prices for services at or around 40Mbit/s constant in real terms would compromise KCOM's ability to recover its costs. Evidence from KCOM's RFS 2018/19 and 2019/20 suggests that KCOM's current returns are likely to be above the cost of capital in the Hull Area.

Conclusion

- 2.37 We consider that these requirements in the WLA and LL Access markets to provide network access on reasonable request are proportionate in that they are targeted at addressing the market power that we have found KCOM holds. We do not consider that different types of obligations or more limited network access requirements would be sufficient to address the competition concerns we have identified.⁶⁴
- 2.38 In order to implement these remedies, we are applying the SMP Condition 1 published in Volume 4.
- 2.39 Section 87(1) of the Act provides that, where we have made a determination that a person (here KCOM) has SMP in an identified services market, we shall set such SMP conditions

⁶⁰ Historically, the benchmark rate was the regulated price Openreach charged for 40/10 GEA-FTTP services where FTTC was not available. This price was lower than the price Openreach charged for 40/10 GEA-FTTP services where FTTC was available and was equal to the regulated price for 40/10 GEA-FTTC services. This price was £12.11 per month for 2020/21. The price of the equivalent regulated Openreach product has not been held constant in real terms.

⁶¹ MPF means metallic path facility. An Openreach product which allows its wholesale customers to deliver phone and broadband services over the copper connection running between end-user premises and the local exchange.

⁶² These prices are set out in SMP Condition 12B.4 (MPF) and 12C.2 (GEA-FTTC 40/10) of the 2021 WFTMR Statement, Volume 7. For 2020/21 this implies a charge of £146.38 per annum or c.£12.20 per month (£85.98 MPF + £60.40 FTTC 40/10) for a data only variant.

⁶³ Openreach's regulated GEA-FTTP prices will be set at the GEA-FTTC charge controlled level plus a fibre premium of £1.70. 2021 WFTMR Statement, Volume 4 paragraph 2.74. We considered that this would support investment in competing networks, including those seeking to extend their networks from Area 2 to Area 3, and investment in FTTP by Openreach.

⁶⁴ As set out in Volume 2, paragraphs 6.21 and 6.53, we would expect KCOM to consider requests for a suitable WLA access product to support voice only services under this condition, should demand arise.

authorised by that section as we consider appropriate to apply to that dominant provider in respect of the relevant network or relevant facilities and apply those conditions to that person. Specifically, section 87(3) and 87(6)(c) to (e) of the Act authorises Ofcom to set SMP services conditions requiring the dominant provider to give such entitlements as Ofcom may from time to time direct as respects the provision of network access to the relevant network, the use of the relevant network and the availability of relevant facilities.

- 2.40 In determining which conditions are authorised by section 87(3) to set in a particular case, we must take into account, in particular, the factors set out in section 87(4). In this case:
- a) the economic viability of building alternative access networks in the Hull Area means that in the absence of regulatory intervention, it is unlikely that there will be effective competitive entry during the review period by rival telecoms providers;
 - b) we consider that it is feasible for KCOM to provide the access remedies we are imposing in the WLA and LL Access markets and we have designed the scope of our remedies with this in mind;
 - c) we do not consider that our remedies will risk undermining KCOM's investment in its fibre network deployment, as it has already invested and did so in circumstances where it was subject to a fair and reasonable pricing obligation; and
 - d) we consider that our network access requirement is an important element of securing effective competition in the long term at a level that is appropriate to the market conditions of the Hull Area.
- 2.41 In Section 6 below, we explain why the setting of these SMP conditions satisfies the tests set out in section 47 and 88 of the Act.

Requirements relating to requests for new forms of network access (WLA only)

Our proposals

- 2.42 We proposed to re-impose an SMP obligation in the WLA market requiring KCOM to publish guidelines that would set out a statement of requirements (SoR) 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, we proposed that KCOM must comply with any direction Ofcom might make under this condition.
- 2.43 We proposed that this SMP condition should continue to require KCOM to:
- a) publish information on each SoR request it receives, sufficient to enable other telecoms providers to consider whether they are interested in such access (redacted to protect the commercial confidentiality of the access seeker);
 - b) implement a process that enables an access seeker to identify to KCOM the information that is to be treated as confidential;

- c) publish prominently on its website non-confidential SoR data in the form of Key Performance Indicators (KPIs);
- d) include in any response rejecting a request for new network access, information about the avenues of redress; and
- e) be transparent where its SoR process applies to any particular request for new network access.

Publication of KPIs

2.44 The KPIs we proposed to require are:

- a) the number of SoR requests received by KCOM;
- b) the number of requests that are unanswered by KCOM 25 working days or more after receipt⁶⁵;
- c) the number of requests that are unanswered by KCOM 75 working days or more after receipt;
- d) the number of requests accepted;
- e) the number of requests rejected;
- f) the number of requests KCOM took longer than 25 working days to reject;
- g) the number of requests KCOM took longer than 45 working days to reject;
- h) the number of project plans agreed between KCOM and access seekers;
- i) the number of project plans agreed between KCOM and access seekers more than 80 days the SoR request was received; and
- j) the number of project plans agreed between KCOM and access seekers more than 95 days after the SoR request was received.

2.45 We proposed to require that KCOM publish this data no later than one month after the preceding six-month period (in respect of August to January, and February to July).

Options of redress for rejected SoRs

2.46 We proposed to continue to require KCOM to inform the provider responsible for submitting the SoR of the avenues of redress available. Such avenues would include any dispute resolution process that KCOM has, in addition to the dispute resolution process under the Act.

⁶⁵ This is a change from 'calendar' days in the currently applicable SMP condition, but in our view is appropriate to achieve the objective and less onerous for KCOM.

Transparency as to when SoRs relate to regulatory obligations

- 2.47 We proposed to continue to require KCOM to provide transparency on whether an SoR falls within the scope of the guidelines which apply to new requests for regulated access. This would add clarity as to the status, process and timings that apply to a telecoms provider's request.

Stakeholder responses

- 2.48 Save insofar as KCOM suggested that a SoR process could be a remedy in the LL Access market, stakeholders did not comment on our proposals in relation to requests for new forms of network access. We consider KCOM's comments in Section 3.

Our reasoning and decisions

- 2.49 We remain of the view that a requirement to have a SoR process in the WLA market, by which KCOM must address requests for new forms of network access is an appropriate and proportionate measure to complement the general network access requirement discussed above.
- 2.50 Vertically integrated telecoms providers have the ability and incentive to favour their own downstream business over third-party telecoms providers by differentiating on price or terms and conditions. Where a telecoms provider has SMP at the upstream level, such discrimination can harm competition in downstream markets. One form of discrimination is in relation to the handling of requests for new forms of network access. This has the potential to distort competition at the retail level by placing third-party telecoms providers at a disadvantage compared with the downstream retail business of the vertically integrated provider with SMP. We consider KCOM is in this position in the WLA market in which we have found KCOM to have SMP.
- 2.51 Given the relatively small scale of the potential Hull Area WLA market, the publication of SoRs provides a mechanism to aggregate demand for network access requirements and allow the cost to be spread out between access seekers. If the costs of developing a particular form of access were borne by only one access seeker this could create a significant barrier to competition and so the SoR process helps address this risk.
- 2.52 While this requirement may remove a first-mover advantage from providers seeking access, in our view the benefits of sharing costs among multiple providers to assist the development of effective retail competition outweigh the cost of removing a first-mover advantage.
- 2.53 We consider that the transparency and reporting obligations we have included in the condition are the minimum necessary both to secure that SoRs are dealt with promptly and appropriately by KCOM, and to give potential entrants sufficient confidence that this will be the case.

Conclusion

- 2.54 This SMP condition is an appropriate and proportionate *ex ante* measure to support future access-based competition and complements the general network access remedy discussed in the preceding subsection.
- 2.55 The form of this requirement only goes as far as we consider is necessary to address our concerns. Rather than specifying the exact process that KCOM must follow, the condition allows KCOM to implement its own process within certain parameters.
- 2.56 In order to implement this requirement, we are setting the SMP Condition 3 published in Volume 4. Section 87(5) of the Act allows access obligations authorised by section 87(3) to 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.
- 2.57 In making this decision, 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 the WLA market to secure effective competition in the long term.
- 2.58 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

Requirements for no undue discrimination (NUD)

Our proposals

- 2.59 We proposed to re-impose the current obligation on KCOM that requires it not to discriminate unduly in relation to the provision of network access in the WLA and LL Access markets. We considered it is necessary to retain the obligation as KCOM has the ability and incentive to discriminate unduly against other telecoms providers in favour of its own retail businesses.
- 2.60 Regarding the provision of dark fibre, we proposed to interpret this NUD requirement to mean that KCOM should not unduly favour its own active products over the provision of dark fibre to other telecoms providers.

Stakeholder responses

- 2.61 Connexin said that, despite the NUD obligation, KCOM's wholesale customers are serviced poorly, leading to poor end-customer experience and brand damage that makes it difficult to succeed in the market.⁶⁶

Our reasoning and decisions

- 2.62 Strong downstream competition is vital to ensure the best outcomes for consumers. To achieve this, it is important that KCOM does not unduly discriminate between different customers when supplying access services. Wherever possible, it should provide access to KCOM downstream, non-KCOM access seekers and internally to KCOM itself on the same terms. Without this level playing field, KCOM could engage in practices that could distort downstream competition: for example, by providing access on less favourable terms compared to those obtained by its own downstream businesses. This may in turn discourage competitive entry to retail markets based on wholesale access, negatively affecting consumer outcomes.
- 2.63 Generally speaking, we consider equivalence of inputs (EOI) to be the most effective form of non-discrimination obligation.⁶⁷ EOI is a strict form of non-discrimination, i.e. a complete prohibition of discrimination with no discretion. However, we do not consider it appropriate to apply an EOI obligation in relation to the Hull Area in either the WLA or the LL Access markets, given the limited size of the market and the significant re-engineering work KCOM would have to carry out to existing systems and processes in order to comply with it.
- 2.64 We consider a NUD obligation as the minimum necessary to prevent discrimination in favour of KCOM's own downstream divisions. A NUD obligation allows KCOM more flexibility and may result in a more practical and cost-effective implementation of wholesale inputs in cases where it is economically justified, although it does allow for certain discriminatory conduct provided that the discrimination is not undue.
- 2.65 In the WLA and LL Access markets, our condition provides that we will interpret undue discrimination to be when a dominant provider "does not reflect relevant differences between (or does not reflect relevant similarities in) the circumstances of customers in the transaction conditions it offers, and where such behaviour could harm competition."⁶⁸
- 2.66 Consistent with our provisional view, we have also decided to interpret the NUD requirement in relation to the provision of dark fibre to mean that KCOM should not unduly favour its own active products over the provision of dark fibre to other telecoms providers. For example, the allocation of available dark fibre between KCOM's active

⁶⁶ Connexin response to the 2020 Hull Area WFTMR Consultation, page 2.

⁶⁷ EOI is a remedy designed to prevent a vertically-integrated company from discriminating between its competitors and its own business in providing upstream inputs.

⁶⁸ Ofcom, 2005. [Undue discrimination by SMP providers](#), paragraph 3.5.

product use and provisioning of dark fibre circuits to other telecoms providers should not be unduly discriminatory. Accordingly, if there is a limited amount of dark fibre available in a given route, KCOM should not unduly prioritise the provisioning of its own active services over the provisioning of dark fibre to other telecoms providers.

Conclusion

- 2.67 We consider the imposition of the NUD conditions as detailed above to be proportionate in that they are the minimum necessary to prevent discrimination that would adversely affect competition and ultimately cause detriment to citizens and consumers.
- 2.68 To implement these decisions, we are setting the SMP Condition 4 in Volume 4.
- 2.69 Section 87(6)(a) of the Act authorises the setting of an SMP condition requiring the dominant provider not to discriminate unduly against particular persons, or against a particular description of persons, in relation to matters connected with network access to the relevant network or with the availability of relevant facilities. Section 87(6)(b) of the Act authorises the setting of an SMP condition requiring the dominant provider to publish, in such manner as we may direct, all such information as they may direct for the purpose of securing transparency in relation to such matters.
- 2.70 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

Ensuring transparency

- 2.71 Requirements for transparency of charges, terms and conditions in markets in which one operator has SMP are complementary remedies to ensure that third-party telecoms providers can make effective use of the dominant operator's network access. We explain below our decision to impose on KCOM requirements to:
- a) publish a reference offer;
 - b) notify changes to charges, terms and conditions; and
 - c) notify changes to technical information.

Requirement to publish a reference offer (RO)

Our proposals

- 2.72 We proposed to re-impose an obligation that KCOM must publish a RO in relation to the provision of network access in the WLA and LL Access (including dark fibre access (DFA)) markets. We proposed that the RO must continue to set out several matters at a minimum, including the terms and conditions for provisioning, technical information, and service level agreements and service level guarantees.

- 2.73 We proposed that the RO for dark fibre must set out an explanation of any differences between KCOM's provision of DFA services and its provision of corresponding active leased lines services.
- 2.74 In addition, we proposed that KCOM must publish an internal reference offer (IRO) in relation to services it uses in a different manner from other telecoms providers, or where it uses similar services.
- 2.75 Our proposed condition, like the existing one, provided for Ofcom to give directions requiring KCOM to modify its RO.

Stakeholder responses

- 2.76 Two stakeholders commented on our proposed requirement to publish a RO.
- 2.77 Vodafone agreed that there is a need for KCOM to publish a RO for DFA. It said the RO should explain any differences between KCOM's provision of dark fibre and corresponding leased line services. It believed this would create transparency and parity between the two services, assist in detecting anti-competitive behaviour, and provide visibility of terms and conditions.⁶⁹
- 2.78 KCOM considered that DFA should not be subject to an IRO because it delivers its active leased lines over trunked circuits in its inter-exchange network and thus each leased line does not consume its own dark fibre circuit except in the access network.⁷⁰

Our reasoning and decisions

- 2.79 A requirement to publish a RO has two main purposes:
- a) to assist transparency for the detection of potential anti-competitive behaviour; and
 - b) to give visibility of the terms and conditions on which other telecoms providers will purchase wholesale services.
- 2.80 The RO helps ensure stability (in regard to investment and promoting market entry) in the relevant fixed telecoms markets, allowing for speedier negotiations, avoiding possible disputes and giving 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 long-term competition and hence consumers.
- 2.81 The RO obligation specifies the information to be included in the RO and how the RO should be published. We are requiring that the RO sets out (as a minimum):
- a) a description of the services on offer, including technical characteristics and operational processes for service establishment, ordering and repair;

⁶⁹ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.26.

⁷⁰ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.43.

- b) the locations at which network access will be provided;
- c) 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;
- d) information relating to technical standards for network access, interfaces and points of interconnection;
- e) conditions relating to maintenance and quality, i.e. 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;
- f) conditions for access to ancillary, supplementary and advanced services;
- g) details of traffic/network management [WLA]; and
- h) details of measures to ensure compliance with respect to network integrity [WLA].

DFA RO

- 2.82 We have decided that the RO for DFA must set out an explanation of any differences between KCOM's provision of dark fibre services and its provision of corresponding active leased lines services. This is intended to offer transparency within the RO and help achieve appropriate parity between DFA and active wholesale leased lines services. Such transparency in the RO will also assist in detecting any anti-competitive behaviour and provide visibility of the terms and conditions on which other telecoms providers will purchase dark fibre services.

Internal RO

- 2.83 We have considered KCOM's view that it should not be subject to an IRO requirement for dark fibre because it does not consume a dark fibre circuit as an input for its active leased line services. However, we consider it necessary for transparency and to support the NUD obligation⁷¹ that KCOM explains any differences where it uses service(s) in a different manner from other telecoms providers or uses similar services. We are therefore requiring that KCOM publish an IRO in relation to those services. This IRO will allow Ofcom and telecoms providers to identify any differences in the processes for internal use of network access compared to such use by third parties. The IRO should at a minimum set out the same matters as set out in paragraph 2.81 above.

⁷¹ Paragraphs 2.59-2.70.

Conclusion

- 2.84 We consider that the requirement in the WLA and LL Access markets for KCOM to publish a RO is appropriate and proportionate in that it is targeted at addressing the market power that we have found KCOM holds.
- 2.85 We consider that the information that we are requiring to be published in the RO is the minimum that is necessary for providing transparency for monitoring potential anti-competitive behaviour and to give visibility on the terms and conditions of network access.
- 2.86 To give effect to the RO we are setting the SMP Condition 5 in Volume 4.
- 2.87 Section 87(6)(c) of the Communications Act 2003 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 conditions requiring the dominant provider to include specified terms and conditions in the RO. Finally, section 87(6)(e) permits the setting of SMP conditions requiring the dominant provider to make such modifications to the RO as may be directed from time to time.
- 2.88 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

Direction requiring KCOM to amend its RO (WLA only)

Our proposals

- 2.89 We proposed to give a direction using the power in the proposed SMP condition, requiring KCOM to modify its WLA RO so as to remove provisions which require access seekers to be located at exchanges; and to provide appropriate interconnection arrangements anywhere in the Hull Area.

Stakeholder responses

- 2.90 KCOM disagreed with our proposed direction to amend its RO and made the following points:
- a) KCOM argued that Ofcom has not provided compelling evidence of demand for new interconnect arrangements.⁷² It said it is not aware of demand and has received no reasonable requests for such a product.⁷³ Where there is demand, KCOM said the existing SoR process would be adequate for handling requests. It believed CPs should have to place a committed order before it undertakes work to develop new products.⁷⁴

⁷² KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 4.9-4.12.

⁷³ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 2.4 and 4.6.

⁷⁴ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 2.5 and 4.6.

- b) KCOM noted that the choice of benchmark for the distant interconnect product is unclear given the lack of an Openreach equivalent.⁷⁵ It was also concerned that it would be unable to recover the costs of developing this product if demand is low.⁷⁶
- c) KCOM argued that the direction risks impeding its improvements to KCOM's wholesale systems and operations, which aim to increase uptake of wholesale access products.⁷⁷
- d) It said the requirement to publish an amended RO within three months of our final statement is unreasonable.⁷⁸

2.91 Other stakeholders agreed with our proposed direction for KCOM to amend its RO:

- a) Connexin agreed that the cost of accommodation services prevents ISPs from unbundling KCOM exchanges, stating that the survey cost (£9,981.58⁷⁹) required to access an exchange has prevented it from unbundling an exchange in the past. It said that Openreach does not charge for surveys if there is no space.⁸⁰ It also stated that KCOM's current interconnect offering, using its WFLA⁸¹ and BSIL⁸² products, is unsustainably expensive for many ISPs.⁸³
- b) FCS welcomed the proposed changes to KCOM's RO.⁸⁴

2.92 Vodafone stated that there is a need for KCOM to hand over dark fibre and active Ethernet services in a similar fashion and said it would expect up to two points of interconnection.⁸⁵

Our reasoning and decisions

2.93 As part of this review, we interviewed stakeholders in order to determine why KCOM's fibre WLA product is not currently purchased by any provider. The evidence paints a mixed picture. There is a perceived lack of space in KCOM's next generation access (NGA) exchanges.⁸⁶ Stakeholders suggest that a combination of cost (in particular, the one-off

⁷⁵ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 4.6.

⁷⁶ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 4.6 and 4.16.

⁷⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 4.13-4.14.

⁷⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 4.7.

⁷⁹ See <https://www.kcom.com/media/1452/p13-s30-accommodation-service.pdf> [accessed 19 October 2021].

⁸⁰ Connexin response to the 2020 Hull Area WFTMR Consultation, page 3.

⁸¹ WFLA means KCOM's wholesale fibreline access product, see [Wholesale FibreLine Access \(WFLA\) | KCOM](#) [accessed 19 October 2021].

⁸² BSIL means KCOM's broadband service interconnect link product, see [BSIL | KCOM](#) [accessed 19 October 2021].

⁸³ Connexin compared KCOM's WFLA and BSIL products to CityFibre's ENNI extension link (10G interconnects). KCOM's offering was 98.3% more expensive. Connexin response to the 2020 Hull Area WFTMR Consultation, page 3.

⁸⁴ FCS response to the 2020 Hull Area WFTMR Consultation, page 1.

⁸⁵ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.22.

⁸⁶ In a meeting between [redacted] and KCOM on 2 October 2019, KCOM noted that WFLA provides a mechanism for unbundling KCOM exchanges but "accommodation areas for such co-location facility, while scoped, do not currently exist as no provider chose to use KCOM's LLU offering". KCOM's response dated 5 February 2020 to the s.135 notice dated 8 January 2020, question 13. Co-location is the provision of space and associated facilities at a KCOM exchange for the hosting of telecom provider equipment. [redacted]. Vodafone has indicated that one of the reasons it does not currently have a point of presence in the Hull Area may be due to the difficulties associated with being able to access co-location space. Meeting between Ofcom and Vodafone, 24 February 2020.

costs associated with building space in exchanges)⁸⁷, and a perception among access seekers that KCOM may be unwilling to work with them⁸⁸ all play a role.

- 2.94 Evidence from some [redacted] providers suggests that the cost associated with the build of accommodation services may be prohibitive to certain entrants.⁸⁹ Some access seekers have looked at ways of accessing KCOM's WLA services that do not involve locating their equipment in exchanges.⁹⁰
- 2.95 The model of requiring operators with SMP to offer accommodation services in their exchanges was originally developed for the provision of WLA services over copper networks. Copper 'local loop unbundling' (LLU) was originally exchange-based because the copper lines terminated in the exchange, therefore this was the logical and easiest place to hand them over (i.e. unbundle) to an LLU operator. Furthermore, the early LLU technologies, e.g. ADSL/ADSL2+⁹¹ performed well over the typical line lengths between exchanges and end-user premises. In addition, the equipment for these early technologies required the space and power afforded by exchange buildings. Therefore, entrants to the WLA market had to purchase accommodation services in order to unbundle copper exchanges.⁹²
- 2.96 However, with an all-fibre access network, the need for an access-seeker to locate equipment in the local exchange, and therefore purchase associated accommodation services, no longer applies. This is principally because fibre-based transmission networks do not suffer the same degree of signal attenuation as copper-based networks. Operators building new full-fibre networks have more flexibility as to where they locate their network equipment. This includes the option of longer fibre cable lengths, freeing operators from needing to locate their equipment in an exchange.
- 2.97 As noted above, KCOM has completed its roll-out of full-fibre, and we are only proposing to regulate the provision of WLA services over KCOM's fibre network. It therefore no longer appears to be the case that access seekers should require accommodation services in order to enter the WLA market in the Hull Area, and it follows that a RO which requires access seekers to do so can no longer be considered fair and reasonable.
- 2.98 We have considered the impact of the above analysis on the appropriate regulation for KCOM.

⁸⁷ MS3 considers that the cost of unbundling several of KCOM's exchanges too high. Call between Ofcom and MS3, 8 June 2020. Connexin considers that the number of exchanges relative to the number of properties and the unknown costs of unbundling have deterred it from pursuing the option – Connexin considers this option too risky. Call between Ofcom and Connexin, 7 November 2019 and email from Connexin, 1 July 2020. [redacted].

⁸⁸ [redacted]. [redacted].

⁸⁹ [redacted] and [redacted], KCOM's response dated 5 February 2020 to the s.135 notice dated 8 January 2020, question 13.

⁹⁰ [redacted]. MS3 has enquired about the possibility of arranging its own accommodation services and obtaining direct fibre connection from KCOM's WLA equipment to this point outside the exchange. Call between Ofcom and MS3, 8 June 2020. [redacted].

⁹¹ ADSL means asymmetric digital subscriber line. See Annex 2.

⁹² In the rest of the UK, providers such as Sky and TalkTalk invested in locating equipment in BT's local exchanges in order to unbundle BT's copper lines to provide services to customers served by those exchanges. In Hull, this has not happened.

- 2.99 Currently, KCOM is required to provide network access on reasonable request, and to produce a RO which includes information as to the locations at which network access will be provided and the conditions for access to ancillary services.⁹³ In order to access KCOM's WLA services under its current RO the access seeker is required to interconnect their network (usually via a Layer 2 Ethernet switch) to KCOM's optical line terminal (OLT).⁹⁴ KCOM's current product which does this is called WFLLA CableConnect. KCOM's RO for this product specifies that "*WFLLA CableConnect provides a dedicated fibre connection between the designated ethernet port on a KCOM OLT used to serve End Users in the Hull Area and an ethernet port on the CP's transport switch that is located in the CP Equipment Room at the same WFLLA Site as KCOM's OLT*". It further specifies that WFLLA CableConnect is available at those WFLLA Site locations "*as notified by KCOM to the CP from time to time*".⁹⁵ WFLLA Site is defined by KCOM as "*the site of an operational building of KCOM where the CP is able to connect to the WFLLA Service.*"⁹⁶
- 2.100 These provisions have the effect of forcing entrants to locate in KCOM's exchanges, regardless of the preferences of the access seeker. Where there is a lack of space in exchanges, it may force the access seeker to incur the costs of carrying out building work. An entrant that wants a different sort of access must go through a more uncertain process of requesting a new form of access by submitting a SoR to KCOM under existing SMP Condition 2.
- 2.101 Our view is that since it is now not technologically necessary for an access seeker to locate in an exchange, there is no regulatory reason why the RO should list in advance all the specific addresses where KCOM will provide access, and no economic reason why the access seeker should be forced to locate in KCOM's exchanges rather than in space it owns itself or space it rents from a third party. SMP regulation should therefore in principle secure that KCOM provides suitable interconnect products that allow traffic to be handed over from KCOM's network to the access seeker's network anywhere in the Hull Area where a reasonable request for such interconnection might be made.
- 2.102 An access seeker would need to establish its own point of presence outside of KCOM's NGA exchange. This is common practice. For example, an access seeker could purchase rack space in a data centre.⁹⁷
- 2.103 KCOM is required by the existing SMP condition to set out 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); to set

⁹³ 2018 WLA/WBA Statement, Conditions 1 and 4, see in particular Condition 4.2A b) and d).

⁹⁴ See Annex 2.

⁹⁵ KCOM, 2019. Reference Offer Wholesale FibreLine Local Access, [Schedule 2: WFLLA CableConnect Service](#) [accessed 19 October 2021].

⁹⁶ KCOM. Reference Offer for the Provision of Accommodation Services, [Schedule 1: Definitions](#). [Access 3 July 2020].

⁹⁷ Data centres are premises whose main purpose is to house computing, data and application hosting, and communications equipment. They tend to have multiple tenants and may be owned and operated by carriers and/or run by third party providers that are carrier neutral. A carrier neutral data centre is owned and operated entirely independently of network providers and allows interconnection to and between multiple telecoms providers.

out the locations at which access will be provided (for example, another telecom provider's point of presence); and also to set out the technical standards for network access, including as to security. We are keeping these requirements.

- 2.104 We have considered whether we should specify the details of suitable interconnect products. We will not do so, as we consider that it would be more appropriate for KCOM to establish the appropriate technical specifications.
- 2.105 However, the existing SMP Condition on the RO provides for Ofcom to give a direction requiring KCOM to modify the RO and requires KCOM generally to comply with such directions as Ofcom may give from time to time. As set out above, we are maintaining that direction making power unchanged. We also have direction making powers in Condition 1, to require KCOM to provide network access on such terms, conditions and charges as Ofcom direct and to include such associated facilities and ancillary services as reasonably necessary for the provision of such network access.
- 2.106 For all the reasons set out above, and in order to secure that KCOM complies with its obligation to provide network access on reasonable request, on fair and reasonable terms and to promote competition, we are giving a direction under those powers to KCOM, requiring it to modify its RO so as to remove provisions which require or have the effect of requiring access seekers to be located at exchanges and to describe the manner in which an access seeker may interconnect its electronic communications network with KCOM's anywhere in the Hull Area where a reasonable request for such interconnection might be made.
- 2.107 Consistent with its obligation in SMP Condition 1 to provide access on fair and reasonable terms, we expect KCOM to engage with any reasonable request for interconnection from access seekers to understand their requirements, and to provide a technically suitable interconnection that allows traffic to be handed over from KCOM's network to an access seeker's network. While what exactly is required will depend on the circumstances, we would expect a limited range of interconnection products, described in the RO, to be appropriate for this.

Network adjustments

- 2.108 Our power to impose a remedy in the WLA market extends to requiring KCOM to make adjustments to its existing network to make access available, provided these are based on the nature of the problem identified, proportionate and justified in light of the requirements set out in Section 4 of the Act. Network adjustments involve facilitating access to KCOM's network. We therefore supplement the specific requirement to provide access with the following guidance on when this obligation will apply in cases involving the provision of interconnection at a particular location in the Hull Area for the purposes of

accessing WLA services. We expect KCOM to assess the reasonableness of such a request by considering whether the following three criteria are met⁹⁸:

- a) Is the requested adjustment **necessary**? This criterion considers whether there is an alternative option which would render the requested adjustment unnecessary, provided this alternative allows for a reasonably equivalent outcome for the requesting telecoms provider compared to making an adjustment.
- b) Is the requested adjustment **feasible**? This criterion considers whether there are barriers that prevent KCOM from making the required adjustment.
- c) Does the requested adjustment **improve efficiency**? This criterion considers whether the requested adjustment promotes efficiency and is therefore consistent with the rationale for requiring KCOM to provide access to its network.

2.109 Where it is necessary, feasible and more efficient for KCOM to make an adjustment to its network than for a rival to build that itself, KCOM will be required to do so in order to facilitate access to WLA services. As set out further below, it will be able to recover its costs of doing so.

2.110 We expect that similar arrangements would apply for interconnection as for active leased lines (where KCOM provides a service to any location on reasonable request, including locations that are not currently connected to its fibre network). The obligation we are imposing is therefore not unduly onerous to KCOM, while being the minimum needed to secure that the remedy is effective.

Pricing

2.111 The price of any new interconnection products will be required to be fair and reasonable. We consider that KCOM's charges are likely to be fair and reasonable if they are consistent with it making a reasonable return and a reasonable contribution to common cost recovery, and do not equate to a margin squeeze. In order to inform our enforcement priorities, we typically identify appropriate benchmark prices against which to compare KCOM's prices. We consider as a starting point that a reasonable price for a distant WLA interconnection within the Hull Area is not likely to exceed the price for an equivalent length and bandwidth active leased line product.⁹⁹

Implementation

2.112 We do not consider that developing appropriate interconnection products is likely to be disproportionately onerous for KCOM. The current regulatory condition requires KCOM to carry out a survey and potentially building work in each of the NGA exchanges at the request of the access seeker. By contrast, we consider that KCOM already provides

⁹⁸ These are the same criteria that apply in paragraph 3.41 below to network adjustments for DFA.

⁹⁹ We note that KCOM's active leased lines products will be benchmarked against Openreach's equivalent products. See paragraph 3.85.

products which contain the elements that would be needed for an appropriate set of interconnection products. For example, the BSIL backhaul service can be provided to either a telecoms provider's point of presence or a designated point-of-interconnect (PoI). The PoI use case is equivalent to an in-span interconnect (ISI) interconnect variant, similar to type of interconnection we would envisage being possible as part of this remedy. While the BSIL contains additional functionality in respect of WFLA management which is not required for a WLA interconnection and so is likely to be relatively more expensive and inappropriate for use in this regard, the example suggests that there are already workable solutions for linking KCOM's network to an access seeker's network.

- 2.113 However, having considered the points raised by KCOM we have decided to extend the implementation period that we consulted on by 3 months and we consider this will provide adequate time for KCOM to develop appropriate WLA interconnection products and consult on the change where appropriate with its wholesale customers.¹⁰⁰ We will therefore require KCOM to publish its amended RO within 6 months of the publication of our final statement.

Conclusion

- 2.114 We consider that this requirement is the minimum necessary to secure that KCOM provides an appropriate RO, which does not tie access seekers unnecessarily to the purchase of space in its NGA exchanges. In conjunction with our non-discrimination remedy (see paragraphs 2.59 to 2.70), it would promote entry to the WLA market in a proportionate manner.
- 2.115 We note that the obligation to secure that an access seeker can interconnect outside of an exchange is an elaboration of the general access condition. We are therefore now implementing this by giving a direction under section 49 of the Act and Condition 1.3(b)(ii), 1.4 and 1.5, as well as Condition 5.11, which is set out in Volume 4.
- 2.116 In Section 6 below, we explain why the giving of this direction will satisfy the test set out in section 49 of the Act.

Requirement to notify changes to charges, terms and conditions

Our proposals

- 2.117 We proposed to continue to require KCOM to give advance notice before making changes to its charges or terms and conditions for the provision of existing or new network access in the WLA and LL Access markets (which will now include DFA).

¹⁰⁰ To clarify, as set out in paragraph 2.137, the requirement to notify changes of technical information 90 days in advance does not apply in this case.

Stakeholder responses

- 2.118 Stakeholders did not comment on our proposed requirement to notify changes to charges, terms and conditions.

Our reasoning and decisions

- 2.119 This condition will require KCOM to publish an access charge change notice (ACCN) relating to any changes to charges for wholesale network access services.¹⁰¹ We consider that this requirement is appropriate and proportionate for the WLA and LL Access markets.
- 2.120 Notification of changes to charges at the wholesale level has the joint purpose of improving transparency so as to detect possible anti-competitive behaviour and giving advance warning of price changes to competing providers who purchase wholesale access 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. Notifying changes therefore helps to ensure stability in markets.
- 2.121 There may be some disadvantages to advance notification, particularly in markets where there is some competition. It can lead to a ‘chilling’ effect where other telecoms providers follow KCOM’s charges rather than act dynamically to set competitive charges. We do not consider, on balance, that this consideration undermines the rationale for imposing a notification of charges condition in these markets.
- 2.122 We are aligning the requirements in the WLA and LL Access markets to so as to ensure that ACCNs include the following:
- a) a description of the network access in question;
 - b) a reference as to where the terms and conditions associated with the network access in question can be found in KCOM’s RO;
 - c) the date on which the new charges take effect (or the period over which the new charges will apply); and
 - d) the current and proposed charge.
- 2.123 We are continuing to require KCOM to publish advance notification of changes according to the following notice periods:
- a) Changes involving new network access – 28 days;
 - b) Price reductions for existing network access – 28 days;

¹⁰¹ An ACCN is a contractual notification of a change to the price of a regulated network access service issued by the incumbent provider.

- c) Price rises for existing network access which return the charge to the original level after the end of a temporary price reduction – 28 days;
 - d) Any other changes for existing network access – 56 days.
- 2.124 We note that we have imposed a notification period of 90 working days for most price increases for the rest of the UK. However, we consider that conditions in the Hull Area, and the differences between KCOM and BT’s networks, are such that 56 days is sufficient.
- 2.125 The condition does not require notice to be given of changes that are directed or determined by Ofcom or are a consequence of such direction or determination (including because of the setting of an SMP condition).

Conclusion

- 2.126 We consider that the requirement to notify charges, terms and conditions is proportionate in that it only requires that information that other telecoms providers would need to know (in order to adjust for any changes) would be notified. The notification periods are the minimum required to allow changes to be reflected in downstream offers.
- 2.127 To implement these remedies, we are setting the SMP Condition 6 in Volume 4.
- 2.128 Section 87(6)(b) of the Act authorises the setting of SMP conditions requiring the dominant provider to publish, in such manner as Ofcom may from time to time direct, all such information as they may direct for the purpose of securing transparency in relation to matters connected with network access. Section 86(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as Ofcom may direct, the terms and conditions on which it is willing to enter into an access contract.
- 2.129 In Section 4 below, we explain why the setting of this SMP condition will satisfy the test set out in section 47 of the Act.

Requirement to notify changes to technical information

Our proposals

- 2.130 We proposed reimposing a requirement on KCOM to publish in the WLA and LL Access markets (now including DFA) any new or modified technical characteristics, points of network access and technical standards within a reasonable time period and at least 90 days in advance of KCOM entering into a contract to provide new network access or making changes to existing network access, unless Ofcom consents otherwise.

Stakeholder responses

- 2.131 Stakeholders did not comment on our proposed requirement to notify changes to technical information.

Our reasoning and decisions

- 2.132 We consider that the requirement to notify technical information which we are imposing in each market is appropriate and proportionate; and complements the requirement to publish a RO.
- 2.133 The aim of this regulation in providing advance notification of changes to technical characteristics is to ensure that competing providers have sufficient time to respond to changes that may affect them. For example, a competing provider may need to introduce new equipment or modify existing equipment or systems to support a new or changed technical interface. Similarly, a competing provider may need to make changes to its network in order to support changes in the points of network access or configuration.
- 2.134 This remedy is important in the fixed telecoms markets to ensure that providers who compete in downstream markets are able to make effective use of existing or, where applicable, new wholesale services provided by KCOM. The technical information required by competing providers includes (but is not limited to):
- a) information on network configuration;
 - b) locations of the points of network access; and
 - c) technical standards (including any usage restrictions and other security issues).
- 2.135 We believe that the requirement to publish changes 90 days in advance is an appropriate safeguard to allow sufficient time for competing providers to make modifications to their network to enable them to support such changes.
- 2.136 For the LL Access market, we are continuing to allow the exception to the minimum notice period for amendments to technical specifications that are developed and agreed through the NICC Standards Limited forum.¹⁰² Telecoms providers are likely to be aware of NICC specifications due to their participation in the forum and in these circumstances should KCOM provide notification of changes based on the NICC standard we would not consider it necessary to impose a 90-day notice period.
- 2.137 The condition does not require notice to be given of changes that are directed or determined by Ofcom or are a consequence of such direction or determination (including because of the setting of an SMP condition).

Conclusion

- 2.138 We consider that the requirement to notify technical information is proportionate in that it only requires information that other telecoms providers would need to know and that the

¹⁰² NICC is a technical forum for the UK communications sector that develops interoperability standards for public communications networks and services in the UK. See [NICC](#) [accessed 20 October 2021]).

proposed notification periods are the minimum required to allow changes to be reflected in downstream offers.

- 2.139 To give effect to these requirements, we are setting the SMP Condition 7 at Volume 4.
- 2.140 As set out above section 87(6)(b) of the Act authorises the setting of SMP conditions which require a dominant provider to publish, in such manner as Ofcom may direct, all such information for the purpose of securing transparency in relation to network access as Ofcom may direct.
- 2.141 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

Requirement to publish quality of service information

Our proposals

- 2.142 We proposed reimposing an SMP condition in the WLA market which requires KCOM to comply with any quality of service (QoS) reporting requirements Ofcom may direct. We note that we have not to date imposed any such direction on the WLA market.
- 2.143 We also proposed to impose this obligation in relation to the LL Access market (including dark fibre).
- 2.144 This SMP condition provides a mechanism whereby we can direct KCOM to publish QoS information. Particularly as DFA is a new service not previously provided by KCOM, there is a risk that KCOM will favour its downstream retail business in the provision of this service, and it has the ability and incentive to reduce QoS where such action would reduce its costs (thus increasing its profits). Such action by KCOM would undermine other telecoms providers' ability to compete with KCOM's downstream business.
- 2.145 This obligation allows us to make directions as to the publication of QoS information by KCOM if it becomes necessary and proportionate to do so, to ensure transparency.

Stakeholder responses

- 2.146 Vodafone agreed with the QoS obligation and said that there is a need for KCOM to publish QoS information for dark fibre. It suggested that KCOM may favour its downstream retail business when providing this service and that it has the ability and incentive to lessen QoS to reduce its costs, which would undermine other providers' ability to compete.¹⁰³
- 2.147 Connexin raised service quality concerns in respect of KCOM's obligations not to discriminate unduly which we have addressed earlier in this section.¹⁰⁴ [redacted].¹⁰⁵

¹⁰³ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.26.

¹⁰⁴ Connexin response to the 2020 Hull Area WFTMR Consultation, page 2.

¹⁰⁵ [redacted].

Our reasoning and decisions

- 2.148 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 QoS (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 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.
- 2.149 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 would, if necessary, enable 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.
- 2.150 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 condition imposed previously in the WLA market and is designed to support transparency as to QoS in the Hull Area.
- 2.151 Taking account of stakeholders' comments, we have considered whether it would be appropriate to make a direction at this time to require KCOM to publish QoS information relating to the supply of wholesale access in the WLA or LL Access markets (including dark fibre as suggested by Vodafone). Given the overall scale of the market and that it may take time for significant levels of take up of WLA and dark fibre to develop, we consider that it is not proportionate to make such a direction at this time.¹⁰⁶
- 2.152 We may consider specifying publication in the future if we consider that it becomes necessary and proportionate to do so.

Conclusion

- 2.153 We consider that the requirements set out above are proportionate in that they are addressing the market power that we have provisionally found KCOM holds. Our requirements go no further than is necessary to address KCOM's ability and incentive to provide poor quality provisioning and repair services.

¹⁰⁶ [3<].

- 2.154 Following on from the above, to give effect to this requirement, we are setting SMP Condition 8 at Volume 4 requiring KCOM to comply with any QoS reporting requirement we may direct in relation to network access it provides for the WLA and the LL Access markets (including dark fibre).
- 2.155 Section 87(6)(b) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as Ofcom may from time to time direct, all such information as they may direct for the purpose of securing transparency in relation to matters connected with network access.
- 2.156 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

Regulatory financial reporting

- 2.157 We have decided to impose accounting separation and cost accounting obligations on KCOM in the WLA and the LL Access markets. We implement these obligations by way of a single SMP Condition and associated directions which specify what information we require KCOM to prepare and provide for each market. Further details of the accounting separation and cost accounting obligations, and our detailed regulatory financial reporting requirements are set out in Section 4.

Requirement to produce a wholesale pricing transparency report (LL Access only)

- 2.158 To date, KCOM has been required to submit to Ofcom an annual pricing transparency report relating to the LL Access market. In our 2020 Hull Area WFTMR Consultation, we proposed to reimpose this requirement, and extend it to cover the pricing of the dark fibre product which we have now decided to require KCOM to supply as a further remedy to its SMP.¹⁰⁷
- 2.159 KCOM has been required to list all the wholesale leased lines services that it provides (both internal and external sales) that fall within the regulated LL Access market in the Hull Area, accompanied with certain information about each leased line. For DFA, we proposed to require KCOM to provide the equivalent information for all dark fibre services sold (both internally and externally) that fall within the regulated LL Access market in the Hull Area.

Stakeholder responses

- 2.160 Stakeholders did not comment on the requirement to produce a wholesale pricing transparency report (WPTR).

¹⁰⁷ See Section 3.

Our reasoning and decisions

- 2.161 Our requirement for KCOM to produce a WPTR and submit it to us will provide us with information about the actual charges that are being paid by customers for wholesale leased lines and dark fibre services. This information will enable us to monitor wholesale charges against the benchmarks we have proposed as appropriate for KCOM's dark fibre and leased line products and determine whether KCOM is complying with the obligation to charge fair and reasonable charges.
- 2.162 Moreover, a WPTR enables the monitoring of KCOM's compliance with its other SMP conditions, such as the obligation to publish a RO and not depart from the charges, terms and conditions set out within it, and the obligation not to discriminate unduly.

Conclusion

- 2.163 We consider that imposing this requirement on KCOM is necessary to achieve the aim and effect of the regulation in the LL Access market in which we have determined KCOM to hold SMP. We are therefore reimposing the condition on KCOM to produce a WPTR to be sent to us on an annual basis.
- 2.164 This condition requires KCOM to include in the WPTR the following information separately for each wholesale connection:
- a) For managed wholesale leased line products:
 - i) a specification of each of the service type, interface, bandwidth and circuit orientation;
 - ii) the amount of the connection charge;
 - iii) the date on which the rental charge was agreed;
 - iv) any fixed or minimum term agreed by the dominant provider and a third party in respect of the rental charge;
 - v) the amount and the frequency of the rental charge; and
 - vi) such characteristics of each connection as required to fully determine the connection charge and annual rental charge from the KCOM price list.
 - b) For dark fibre products:
 - i) a specification of each of the service type, presentation and circuit orientation;
 - ii) the amount of the connection charge;
 - iii) the date on which the rental charge was agreed;
 - iv) any fixed or minimum term agreed by the dominant provider and a third party in respect of the rental charge;
 - v) the amount and the frequency of the rental charge; and

- vi) such characteristics of each connection as required to fully determine the connection charge and annual rental charge from the KCOM price list.

- 2.165 To give effect to these requirements, we are setting the SMP Condition 10 at Volume 4.
- 2.166 Section 87(6)(b) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as Ofcom may from time to time direct, all such information as they may direct for the purpose of securing transparency in relation to matters connected with network access.
- 2.167 In Section 6 below, we explain why the setting of this SMP condition satisfies the test set out in section 47 of the Act.

3. Specific remedies: dark fibre and managed Ethernet leased lines

- 3.1 In this section, we set out our decision to require KCOM to provide dark fibre and managed Ethernet leased lines as specific network access remedies, in addition to the general remedies set out in Section 2, to address our concerns arising from KCOM's SMP in the LL Access market.¹⁰⁸
- 3.2 Below we summarise our consultation proposals on dark fibre access (DFA) and stakeholders' responses and explain our decisions around why we are imposing the remedy; the design of the remedy; the pricing of the remedy and its implementation period.
- 3.3 We also discuss why we have decided to require KCOM to continue to supply managed Ethernet leased lines and the pricing of this remedy.
- 3.4 A summary of our specific LL Access remedies is shown in Figure 3.1 below.

Figure 3.1 Summary of the specific LL Access remedies we are imposing on KCOM

Specific remedies in the LL Access market

Requirement to provide Ethernet and dark fibre network access in the following circuit configurations:

- connecting end-user premises and KCOM's optical distribution frame (ODF) site or third-party premises; and
- connecting an end-user premises and another end-user premises.

Aim and effect of the DFA remedy

Our proposals

- 3.5 In the 2020 Hull Area WFTMR Consultation, we proposed introducing a requirement on KCOM to provide access to dark fibre.
- 3.6 In summary, we considered that overall the combination of the cost and flexibility benefits of dark fibre over managed leased line alternatives (such as Ethernet and optical products) and the downward pressure a cheaper dark fibre product would have on the prices of KCOM's existing product portfolio, would allow telecoms providers to compete better on price, service quality, and product offering in downstream markets.

¹⁰⁸ Our SMP determinations are set out in Volume 2.

Stakeholder responses

- 3.7 KCOM did not support our proposal and argued that:
- a) We had overstated the potential benefits of dark fibre in the consultation. It stated that any benefits of DFA for equipment choice will be small, and dark fibre will not lead to a significant reduction in the duplication of active equipment in Hull.¹⁰⁹
 - b) We had not provided compelling evidence that there is demand for dark fibre.¹¹⁰ It said that it is not aware of demand and has received no requests from telecoms providers for DFA.¹¹¹ To the extent there is demand for dark fibre, KCOM argued that there is existing commercial provision of this service in the Hull Area.¹¹²
 - c) The DFA remedy may hinder the development of KCOM's wholesale strategy.¹¹³
 - d) That DFA may undermine alternative providers' investment in the provision of services like mobile backhaul or the provision of higher value business connectivity and DFA services.¹¹⁴
 - e) We had not demonstrated why the statement of requirements (SoR) process is insufficient to meet any demand for DFA.¹¹⁵
 - f) We had overlooked its 'grey fibre' optical wave access service (OWAS) product, which is currently available and offers many benefits attributed to dark fibre.¹¹⁶
- 3.8 Vodafone agreed with our proposed dark fibre remedy and considered that it will enable retailers to innovate and differentiate their services from that of KCOM.¹¹⁷ [X].¹¹⁸

Our reasoning and decisions

A dark fibre remedy offers benefits to users over managed leased lines and makes pricing keener

- 3.9 We remain of the view that regulated access to dark fibre has the potential to deliver material benefits to end users:
- a) We believe there remain material benefits to end users to be able to choose their own equipment. Even if innovation in equipment itself is unlikely given it is standardised globally, dark fibre provides scope for innovation in the functionality of the electronics

¹⁰⁹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.25.

¹¹⁰ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.10-3.12.

¹¹¹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.8.

¹¹² For example, via CityFibre or MS3. KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.14.

¹¹³ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 2.1-2.2.

¹¹⁴ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.15.

¹¹⁵ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.13.

¹¹⁶ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.26-3.28.

¹¹⁷ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.19.

¹¹⁸ [X].

used to deliver services.¹¹⁹ This will allow users to change service features more quickly and cheaply, and to better differentiate their services.¹²⁰

- b) We remain of the view that there will be a reduction in active equipment, potentially saving cost, improving end-to-end reliability, and simplifying operations (by not needing to interface with the wholesaler's systems); and
- c) Users would be able to make efficient decisions on bandwidth upgrades based on the underlying costs of upgrades. We expect that the price of dark fibre will be independent of bandwidth. Telecoms providers will have access to the full capacity of their equipment connected to dark fibre to aggregate multiple active circuits. As a result, the incremental cost incurred by telecoms providers when upgrading bandwidth will represent the incremental cost of providing the equipment required, which in some cases may be zero (or close to zero). This lowers the cost of upgrading bandwidth and ensures upgrade decisions based on true incremental costs. This will allow them to upgrade capacity earlier than when faced with a price premium, potentially relieving constraints or allow them to offer faster services to downstream customers. For example, this could allow mobile network operators (MNOs) to increase their capacity and rollout 5G more quickly in the Hull Area, generating direct benefits for consumers.

3.10 The existence of a dark fibre alternative would also be likely to put downward pressure on the price of KCOM's existing managed leased lines products. This would increase the competitiveness of the market and provide benefits to telecoms providers of those services.

There is potential demand for this remedy in the Hull Area

3.11 There is demand for dark fibre in the Hull Area. We note:

- a) Both [X] and [X] have made informal enquiries about use of dark fibre in Hull.¹²¹
- b) [X] noted that dark fibre is essential in ensuring that the Hull Area is economically viable for the rollout of 5G services.¹²² This is expected to require higher capacity leased lines for providing backhaul and core connectivity. [X] told us that passive access is very important for its 5G roll-out plans and that dark fibre is more appropriate

¹¹⁹ By way of illustration, when mobile operators started using Ethernet circuits for mobile backhaul, they needed the Ethernet circuits to support timing signals. KCOM's Ethernet services did not support this initially and complex and expensive workarounds were used for an extended period until synchronous Ethernet (SyncE) product was introduced. Dark fibre would have allowed mobile operators to create circuits with the required transference of timing signals much sooner and with far less disruption.

¹²⁰ Even though telecoms providers will replicate the functions of KCOM's electronics, they are not limited to implementing these functions in the same way as KCOM does for active services nor to implementing additional features. This could include differentiation based on speed, packages, latency, features, pricing structures and quality.

¹²¹ [X].

¹²² [X].

in the context of the increasing levels of data throughput needed to support improved mobile and 5G connectivity.¹²³

- 3.12 As noted above, we have established through our engagement with stakeholders that there is now a demand for DFA, including to support 5G connectivity. We consider that there is now more demand for dark fibre than was the case when we concluded our last review of business connectivity markets in the Hull Area in 2019.¹²⁴ We also understand that KCOM has indicated that no DFA product is available, when DFA has been informally requested.¹²⁵
- 3.13 More generally, we note that this is a forward-looking review, which needs to consider how demand is likely to evolve over the next five years. We expect demand for dark fibre services to grow over time as bandwidth demand increases. Both in the UK and specifically in the Hull Area, demand for low bandwidth leased line connections has declined, and demand for higher bandwidth requirements has increased. In the Hull Area, we note that the proportion of circuits KCOM supplies at or above 1Gbit/s is increasing over time.¹²⁶ We set out our understanding of the likely growth in bandwidth demand, and for dark fibre services, in paragraphs 2.107-2.112 of Volume 2 of the 2021 WFTMR Statement, and Figures 2.16 and 2.17 of that document, and consider that the findings apply equally to demand in the Hull Area.¹²⁷
- 3.14 We expect telecoms providers would use dark fibre instead of active products where they are able to realise the benefits of dark fibre (i.e. cost and flexibility advantages) which are discussed above. We would expect the dark fibre price to be significantly lower than that of a 10Gbit/s circuit and moderately lower than the price of a 1Gbit/s, 100Mbit/s and 10Mbit/s circuit.

Any adverse impacts of the remedy are proportionate to our overall aim

- 3.15 KCOM argued that the DFA remedy may have an adverse impact on its wholesale strategy.
- 3.16 We consider that a DFA remedy is necessary, and we take account of the potential resources required to achieve that in considering the appropriate implementation period. We note below that we have extended the implementation period from 6 months to 9 months for this remedy.¹²⁸ In addition, we note that KCOM made its comments in

¹²³ [redacted].

¹²⁴ We consider that there is now more demand for passive remedies than we evidenced in our last review, at which time we said “we do not consider that there is sufficient demand for passive remedies or wholesale services more generally in the Hull Area to warrant such an intervention”. 2019 BCMR Statement, paragraph 16.18.

¹²⁵ KCOM has responded to two informal enquiries about dark fibre by noting that either no DFA product is available or dark fibre is not a product that is currently offered (see footnote 25 of Volume 3 of the 2020 Hull Area WFTMR Consultation).

¹²⁶ See Volume 2, paragraph 2.23 and Figure 2.6. In particular, the proportion of KCOM CI Access circuits which are 1Gbit/s or above has increased from [redacted] to [redacted] in the last 2 years (see KCOM Pricing Transparency Reports). The number of circuits which are 10Gbit/s or above has increased by [redacted].

¹²⁷ [redacted].

¹²⁸ See paragraph 3.67.

September 2020. A further year has passed, allowing KCOM to make progress with its own plans absent a regulatory intervention to impose dark fibre. For example, KCOM noted that its new customer portal would be released in 2021. Further, it is unclear that the skillsets required to develop and deliver KCOM's wholesale-focused strategy are similar to those required to implement a dark fibre remedy.

- 3.17 KCOM has argued that the DFA remedy may have a potential adverse impact on rival investment, and on existing providers of dark fibre in the Hull Area. We acknowledged these risks in our consultation. We do not expect dark fibre to materially weaken incentives to invest, because we consider there is not, and is unlikely to be potential for, material and sustainable competition to KCOM at the network level.
- 3.18 We acknowledge that there are existing, competing networks in the Hull Area, and that our proposals may impact upon them but these are small and not expected to expand their services in the Hull Area.¹²⁹ (See Volume 2 paragraph 4.34.)
- 3.19 On balance, we consider the benefits of dark fibre access outweigh any potential impact on investment incentives.

The suggested alternatives to the DFA remedy (SoR/OWAS) are insufficient in this case

- 3.20 An SoR process requires the dominant provider to publish guidelines on the treatment of requests for new forms of network access and deal with such requests in accordance with these published guidelines. This remedy, which complements general network access and non-discrimination conditions, is aimed at addressing the concern of a dominant provider engaging in discriminatory conduct in relation to the development of new forms of network access (e.g. favouring its own retail businesses over rivals).
- 3.21 We have considered whether other providers could rely on KCOM's existing general access and SoR obligations, and whether to impose a new SoR obligation in the LL Access market, instead of imposing a specific obligation on KCOM to provide a wholesale DFA product.
- 3.22 KCOM's existing SoR process meets a regulatory obligation imposed in our last review of the WLA and WBA markets in the Hull Area.¹³⁰ Absent a new regulatory condition, KCOM would not be compelled to comply with this process in relation to requests for new forms of network access in the LL Access market. Following its SoR process in relation to a request for DFA would therefore be at the dominant provider's discretion and would not address the incentives we have identified for KCOM to restrict competition in this market.
- 3.23 Although the general network access remedy we are imposing on KCOM¹³¹ is aimed at addressing this competition problem, implementing a dark fibre product in response to a reasonable request under this provision is likely to require complex industry negotiations about the specific terms of access, including the scope of the product. We believe that this

¹²⁹ Further, the risk of DFA undermining investment where providers are solely focused on broadband products is small.

¹³⁰ 2018 WLA/WBA Statement.

¹³¹ See Section 2.

would be the case even if we were to further complement it with an SoR process regulatory obligation as a remedy in the LL Access market. This would risk uncertainty and delay, undermining the effectiveness of our regulation. Given the demand for and benefits of DFA set out above, we consider that the specific network access remedy requiring KCOM to supply a wholesale DFA product by a specific date is the most appropriate and proportionate way, to ensure that the effects of this SMP remedy are introduced into the LL Access market in the shortest time and with the least uncertainty about the specific terms of access.

- 3.24 A SoR process is most appropriate as a complement to a general network access remedy where the exact nature of access demanded is unclear, and so there would be a significant risk in pre-specifying a particular form of network access. Dark fibre is a relatively standardised product – there is therefore no such risk in our view.
- 3.25 Our decision recognises that the scale and nature of demand for DFA in the LL Access market is likely to be different from demand for new forms of access in the WLA market where we have imposed an SoR process obligation. Demand for a wholesale dark fibre circuit could in some cases arise from *ad hoc* requests from a telecoms provider’s individual business connectivity customers. Therefore, we consider that the costs and time involved in requesting and negotiating a new form of access under the general access remedy are likely to be more of a barrier to obtaining DFA in the LL Access market.
- 3.26 We therefore do not consider that a SoR process would adequately address KCOM’s SMP in the LL Access market.¹³²
- 3.27 KCOM also stated that, in proposing this remedy, we overlooked its ‘grey fibre’ OWAS product, which it said is currently available and offers many benefits attributed to dark fibre.¹³³
- 3.28 We recognise that OWAS provides additional flexibility over other managed services and therefore may deliver some of the benefits of dark fibre described above. However, OWAS does not replicate all the benefits of dark fibre:
- a) The base product includes a 10Gbit/s active Ethernet circuit which may limit the features that can be deployed on this circuit and may therefore not be required by the customer. There may also be equipment duplication for some customers.
 - b) OWAS is more expensive than an equivalent active leased line for bandwidths of 10Gbit/s and below, and significantly more expensive than the benchmark we are setting for a new dark fibre service.¹³⁴ Therefore OWAS is only suitable for requirements which are higher than 10Gbit/s.

¹³² See [Network access requests | KCOM](#) [accessed 19 October 2021].

¹³³ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.26-3.28.

¹³⁴ See discussion of OSA in BCOMR 2019 paragraphs 12.55-12.62.

- c) OWAS is less scalable than dark fibre as each additional wavelength added to increase capacity incurs additional connection and rental charges for customers, unlike when using a dark fibre service.
- 3.29 There has been limited take up of the OWAS product ([<] lines)¹³⁵ and we consider that, in requiring KCOM to offer dark fibre, users will be able to choose the most appropriate solution for their needs, taking into account the additional flexibility that dark fibre offers versus the greater management of OWAS. Alternative telecoms providers could also use dark fibre to offer competing services to OWAS, putting downward pressure on the price of KCOM's product and/or encouraging KCOM to make improvements to its product offering.

Design of the DFA remedy

Our proposals

- 3.30 In our 2020 Hull Area WFTMR Consultation, we proposed a requirement on KCOM to provide dark fibre network access in the following circuit configurations:
- a) connecting end-user premises and KCOM's ODF site or third-party premises; and
 - b) connecting an end-user premises and another end-user premises.
- 3.31 This was to ensure that telecoms providers are able to obtain dark fibre circuits in similar configurations to KCOM's current range of active leased lines, so that purchasers of dark fibre are not at a competitive disadvantage to purchasers of managed equivalents.
- 3.32 To ensure that purchasers of dark fibre can obtain a flexible product suitable for different types of connection, we proposed that KCOM should be required to provide one or more fibre circuits.
- 3.33 We did not specify in regulation more details of the product required. As a starting point, we said we would have regard to the technical, operational (provisioning and repair) and commercial aspects of KCOM's current offer of Ethernet direct access service (EDAS) and Ethernet connect access service (ECAS) circuits, in considering the fairness and reasonableness of the arrangements applicable to dark fibre.
- 3.34 We noted that, as with active leased lines services, a number of ancillary services are necessary to enable and support the provision of dark fibre. This also includes other supporting services used for installation, maintenance, modification, and ceasing of dark fibre. We proposed that, in most circumstances, the same arrangements in respect of ancillary services and network adjustments would apply for dark fibre as for managed Ethernet leased lines, and, as set out above, the requirement in SMP Condition 1 for KCOM

¹³⁵ KCOM response dated 14 October 2021 to the s135 notice dated 7 October 2021, confirming price transparency reports 2017-2021.

to provide access on fair and reasonable terms will suffice for dark fibre as it does for active fibre.

Stakeholder responses

- 3.35 KCOM said that in order to provide DFA services that traverse its core network, it would need to use specific inter-exchange fibres that may require the installation of additional fibre. It said that this will compromise the efficiency of its Ethernet network. It also said that the installation of additional fibre would require investment and management resources.¹³⁶
- 3.36 KCOM also argued that any service level agreements for DFA should be materially different from those for its ECAS and EDAS services to reflect the differences between these services. In particular, it said repair timescales will need to be longer for DFA and provisioning timescales should account for the need to build additional fibre capacity.¹³⁷
- 3.37 KCOM also asked for the following clarifications¹³⁸:
- a) KCOM asked for clarification around network extensions. It noted that there are geographic locations outside its duct and fibre network, for example many network operator sites, which may not have existing fibre connectivity if they are not near other dwellings.
 - b) KCOM also asked for clarification that it would not be required to supply dark fibre between intermediate nodes in its network.

Our reasoning and decisions

KCOM's network architecture and installation of additional fibre

- 3.38 KCOM has submitted that given the nature of its existing leased lines network, it has very few spare fibres. As such, it would be required to install additional fibres between exchanges in order to supply dark fibre services.
- 3.39 Our power to impose a dark fibre remedy in the LL Access market extends to requiring KCOM to make adjustments to its existing network to make dark fibre available, provided these are based on the nature of the problem identified, proportionate and justified in light of the requirements set out in Section 4 of the Act¹³⁹. Network adjustments involve

¹³⁶ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.21-3.23.

¹³⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.36.

¹³⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.43.

¹³⁹ Judgment of [19 June 2014, TDC A/S v Teleklagenævnet C-556/12](#), EU:C:2014:2009, para 44. See also paras 32 and 37: "The concept of 'access' includes making adjustments in order to make available to another undertaking facilities and/or services for the purpose of providing electronic communications services" and "may include an adjustment to an existing network to enable the establishment of a link between that network and the end-user."

facilitating access to KCOM's network. For example, we consider installing additional fibre may be a network adjustment.¹⁴⁰

- 3.40 In light of the requirement that the obligation be proportionate, and the fact that what is necessary is likely to depend on the specific circumstances of any case, we believe it is not appropriate to set prescriptive rules in the SMP condition covering every circumstance. In our view, this would carry risk of regulatory failure. We therefore supplement the specific requirement to provide DFA with the following guidance on when this obligation will apply in cases involving the provision of new fibre infrastructure.
- 3.41 We consider the following three criteria should be applied cumulatively to determine whether particular adjustment falls within the scope of the DFA obligation:
- a) Is the requested adjustment **necessary**? This criterion considers whether there is an alternative option which would render the requested adjustment unnecessary, provided this alternative allows for a reasonably equivalent outcome for the requesting telecoms provider compared to making an adjustment.
 - b) Is the requested adjustment **feasible**? This criterion considers whether there are barriers that prevent KCOM from making the required adjustment.
 - c) Does the requested adjustment **improve efficiency**? This criterion considers whether the requested adjustment promotes efficiency, and therefore does it remain consistent with our rationale for requiring KCOM to provide dark fibre (i.e. unlock the efficiencies from dark fibre).
- 3.42 Where it is necessary, feasible and more efficient for KCOM to install an additional fibre than for a rival to build that itself, KCOM will be required to install that additional fibre if required to do so in order to provide a dark fibre service.
- 3.43 We have considered how these criteria might apply to the scenario where spare fibre capacity between KCOM exchanges may be limited.¹⁴¹ We consider that the DFA obligation will require KCOM to lay new fibre in certain circumstances. The three criteria set out above should be used to identify those circumstances:
- a) In relation to necessity, KCOM should consider whether there are alternative routes along which it could provide dark fibre, and whether it would be possible to aggregate traffic onto fewer fibres in order to free up fibre capacity.
 - b) In relation to feasibility, the relevant factors may include any technical, operational or legal barriers preventing KCOM from laying new fibre.
 - c) In relation to efficiency, the comparison should be between what KCOM would need to do to provide the requested dark fibre, and what a telecoms provider would need to

¹⁴⁰ We set out more on our approach to network adjustments in the 2021 WFTMR Statement, Volume 3, Section 4, paras 4.32-4.44, Section 6, paras 6.73-6.85 and Section 6, paras 6.169-6.174.

¹⁴¹ We consider how these criteria apply to other scenarios in the 2021 WFTMR Statement, Volume 3, Section 6, paras 6.73-6.85 and Section 6, paras 6.169-6.174.

do if it were to lay its own fibre.¹⁴² Where KCOM can provide dark fibre more efficiently (for example, it may be quicker, easier and/or cheaper) it would be required to lay new fibre under the DFA obligation. For example, where KCOM would be required to lay fibre for sections of a route where fibre is exhausted, but other providers would need to lay fibre over the complete route, it is likely that KCOM can meet the request in a more efficient manner.

- 3.44 We expect that it will usually be the case that it is more efficient for KCOM to install that additional fibre if required to do so in order to provide a dark fibre service.

Network extensions

- 3.45 KCOM asked for clarification around network extensions, noting that some locations in the Hull Area are outside its duct and fibre network.

- 3.46 KCOM will not have existing connections to every end customer site within its network footprint as these are ordinarily built at the point of customer demand. Such connections fall within the scope of the obligation if the three criteria set out in paragraph 3.41 are cumulatively met. If these criteria are not met, then such build would be outside the scope of the access obligation. KCOM is not required to construct new physical or fibre infrastructure for competing telecoms providers outside its network footprint. This would amount to an extension of the network rather than making use of existing assets.

- 3.47 Given KCOM has the only ubiquitous fibre network within the relatively small geographic Hull Area, we expect that the requests for DFA would usually be considered network adjustments rather than network extensions and therefore potentially within the scope of the obligation.¹⁴³ KCOM must ensure that any refusal to provide network access, such as dark fibre, is compliant with its obligations under our regulation. By way of guidance, we would usually expect KCOM to provide DFA in the same circumstances as it would provide an active leased line, unless it can justify otherwise.

Intermediate nodes

- 3.48 To clarify, we are requiring KCOM to provide DFA in the circuit configurations set out in paragraph 3.30 and this obligation does not extend to intermediate segments or nodes.

Technical and operational arrangements

- 3.49 As set out in our consultation, we will have regard to the technical, operational (provisioning and repair) and commercial aspects of KCOM's current offer of EDAS and ECAS circuits, as a starting point in considering the fairness and reasonableness of the

¹⁴² This comparison should consider the incremental cost above any planned adjustments – if KCOM would have carried out the work anyway – the incremental cost will be lower – and therefore the adjustment more likely to fall within the scope of the DFA regulation.

¹⁴³ As with any potential network adjustment, whether a specific network adjustment would be within the scope of the obligation would be determined by the application of the three criteria outlined in paragraph 3.41.

arrangements applicable to dark fibre. We note KCOM's comments about service level agreements for DFA, including repair timescales. To the extent that there are any justifiable differences between the arrangements for dark fibre and active leased lines these should be set out in the RO for dark fibre (see paragraph 2.82 above).

Pricing of the DFA remedy

Our proposals

- 3.50 In our 2020 Hull Area WFTMR Consultation, we proposed an obligation for fair and reasonable charges for dark fibre network access.
- 3.51 We said that we would, in general, consider KCOM's charges to be fair and reasonable if they are consistent with making a reasonable return over costs including a reasonable contribution to common cost recovery, and if they do not equate to a margin squeeze.
- 3.52 In order to inform our enforcement priorities, we proposed to benchmark KCOM's prices for dark fibre against Openreach's charges for provision of dark fibre in Area 3. We said that prices in excess of those benchmarks would likely receive further scrutiny.

Stakeholder responses

- 3.53 KCOM argued that our proposal to benchmark KCOM's DFA prices to Openreach failed to recognise the differences between KCOM and Openreach's networks.¹⁴⁴ It also argued that benchmarking against Openreach DFA would not allow it to recover efficiently incurred costs,¹⁴⁵ because:
- a) Currently inter-exchange fibre strands are shared. To facilitate DFA, KCOM would need to dedicate these to a specific user. This would require installation of additional fibre and in some cases additional duct¹⁴⁶; and
 - b) KCOM's smaller scale, compared to Openreach, means product-specific incremental costs (including product development and productisation costs) would be recovered over a much smaller base.¹⁴⁷
- 3.54 KCOM argued that preventing it from setting charges that reflect incremental cost differences may lead to inefficient use of DFA by access-seekers and undermine cost recovery on ECAS and EDAS circuits.¹⁴⁸

¹⁴⁴ KCOM supplementary response to the 2020 Hull Area WFTMR Consultation, paragraph 2.7.

¹⁴⁵ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.31-3.35 and KCOM supplementary response to the 2020 Hull Area WFTMR Consultation paragraph 2.8.

¹⁴⁶ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.21 and 3.34.

¹⁴⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.34.

¹⁴⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.35.

Our reasoning and decisions

- 3.55 Our main objective in the Hull Area is to secure additional competition in the downstream markets. We do not consider rival network build is likely to materialise during the period. As such, we believe a cost-based benchmark is appropriate.
- 3.56 We also believe that a benchmark rate should provide clarity to potential purchasers of the product and be easy to understand.
- 3.57 Openreach's dark fibre prices in Area 3 are subject to a cost-based charge control. These are also readily available for potential purchasers to compare against. As such, we have considered whether these prices would be a suitable benchmark rate.¹⁴⁹
- 3.58 As noted above, KCOM has argued that such a benchmark could lead to a cost recovery issue. We do not believe this will be the case:
- a) As we have explained in paragraph 2.29 above, we consider that a charge control would be disproportionate to the aim of preventing excessive prices in the Hull Area.¹⁵⁰ We consider that Openreach's costs are the best available indicator of KCOM's costs. We do not consider it appropriate to make selective adjustments to this.
 - b) The Openreach benchmark includes an allowance for recovering the costs of network adjustments. We consider this point further below.
 - c) The overall cost of making such adjustments (above that which can be recovered across all downstream customers) is likely to be relatively small, especially if demand is limited, as KCOM itself argues.
 - d) KCOM has made returns significantly above cost of capital in the wholesale CI Access market in the last three years.¹⁵¹
 - e) Requiring KCOM to bear some of these costs will also provide it with incentives to minimize the cost of providing dark fibre – for example, by using spare fibre where possible.
 - f) Active leased lines prices will not be subject to a cost-based benchmark going forward. This provides additional opportunity for recovery of any additional costs incurred.
 - g) KCOM will also have the option of reducing its active leased line prices in order to disincentivise migration to dark fibre if it considered that more cost-efficient. This would be consistent with our ultimate goal of promoting competition in downstream markets.

¹⁴⁹ We also note that using Openreach's price as a benchmark could lead to relatively equal prices for dark fibre in Area 3 in the rest of the UK, and the Hull Area. This could provide additional benefits to providers seeking to purchase dark fibre throughout the UK.

¹⁵⁰ For example, see BCMR 2019, Volume 2, paragraphs 16.56-16.57. We have also adopted this approach historically in the WLA market in the Hull Area. For example, see the 2018 WLA/WBA Statement, paragraphs 4.68-4.70.

¹⁵¹ 2017/18 33.5%, 2018/19 31.2%, 19/20 21.5%. See KCOM 2019/20 RRFs.

- 3.59 We will therefore use Openreach’s dark fibre prices as the benchmark for KCOM’s. In doing so, we will take account of the configuration of the dark fibre circuit and how that compares to the equivalent Openreach circuit.¹⁵² As explained above, Openreach’s dark fibre prices include an allowance for the recovery of network adjustment costs. We expect that KCOM would adopt a similar approach to the recovery of these costs for the benchmark to remain relevant.¹⁵³ In particular, as set out above, we would consider additional fibre installed between KCOM exchanges to enable dark fibre to be consumed to be in the common part of the network, and so purchasers would not be charged directly for this network adjustment. Where KCOM is required to build additional infrastructure, we would expect KCOM to adopt a similar approach to Openreach.
- 3.60 KCOM has also argued that the costs of providing dark fibre would be higher due to product development and productisation costs. We do not consider that these costs are likely to be large.
- 3.61 Finally, we note that this is only a benchmark for our assessment of whether KCOM’s prices are fair and reasonable. We are requiring (private) service level reporting for dark fibre in order to gather further information on KCOM’s costs. If this implies there is a cost recovery concern, we may consider whether an alternative benchmark rate would be more appropriate.

Implementation of the DFA remedy

Our proposals

- 3.62 We proposed to require KCOM to launch a DFA product, including publication of a RO, within 6 months of the publication of our statement.¹⁵⁴

Stakeholder responses

- 3.63 KCOM referred to both a 6 and a 9 month implementation period in its responses, assuming a 6 month implementation period followed by a 90 day notification period.¹⁵⁵ For the avoidance of doubt, this was not what was proposed as the obligation to provide a 90 days’ notice does not apply in this instance.¹⁵⁶

¹⁵² For example, to the extent KCOM supplies dark fibre which run between exchanges, KCOM may charge a main link based on distance (as Openreach does), although we would expect a lower price rise.

¹⁵³ For network adjustments in common parts of Openreach’s network, the costs are capitalised and recovered from connection and rental charges for multiple services over time. For network adjustments specific to an individual customer (this generally equates to network adjustments between a nearby fibre flexibility point and the customer’s premises), the costs up to a threshold of £2,800 are already included in the connection charges, and so are not charged directly to the purchaser. Above this threshold, Openreach can apply excess construction charges.

¹⁵⁴ See 2020 Hull Area WFTMR Consultation, paragraph 2.48.

¹⁵⁵ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.38.

¹⁵⁶ Providers are not required to give 90 days’ notice of changes to information where those changes are a consequence of a direction or determination from Ofcom, as is the case with the introduction of a DFA product. See Volume 4 of this statement, Condition 7.4.

- 3.64 KCOM argued that the proposed implementation period for DFA is inappropriately short, requesting a minimum period of 18 months to avoid the risk of launching a product that does not meet telecoms providers' needs.¹⁵⁷
- 3.65 In making this argument, KCOM said that the development of a DFA product and technical specifications will take some time as it does not have an 'off the shelf' product it can use.¹⁵⁸ It stated that ascertaining network availability, defining product characteristics, updating systems, putting in place appropriate processes, developing a RO and staff training may take longer than the proposed implementation period.^{159, 160} It also argued that these activities will draw on scarce resources, and disrupt KCOM's efforts to develop other commercial services.¹⁶¹
- 3.66 In its supplementary response, KCOM further said that the proposed timeline may require a launch using manual processes, could impact existing work on its IT customer portal and noted that the proposed DFA timetable is shorter than the time initially granted to Openreach to develop its DFA product in 2016 (18 months).¹⁶² KCOM also argued that our decision to amend the timescales for Openreach's implementation of DFA in our November 2021 WFTMR Consultation supports KCOM's view that a 9 month implementation period for the launch of KCOM DFA is insufficient.¹⁶³ In that consultation we proposed that Openreach launch a DFA product (including automation of provision and repair) within 4.5 months of publication, with a further 9.5 months to implement the full DFA product (including automation of all non-essential functionality).

Our reasoning and decisions for dark fibre

- 3.67 We believe it is important that the benefits of dark fibre, as set out above, are realised as soon as is reasonably practicable in the Hull Area. Having considered the points raised by KCOM, we have decided to extend the implementation period that we consulted on, by 3 months, to 9 months.¹⁶⁴ We consider that 9 months is an appropriate period for KCOM to develop a dark fibre product, including the publication of a RO (noting that the 90 day notification period does not apply to changes that are required to comply with an SMP condition).¹⁶⁵
- 3.68 While KCOM does not have an 'off the shelf' dark fibre product, it currently offers active leased line services which share some similarities with dark fibre, including particularly its

¹⁵⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.37-3.42 and KCOM supplementary response to the 2020 Hull Area WFTMR Consultation, paragraphs 2.9-2.11.

¹⁵⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.8.

¹⁵⁹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.39.

¹⁶⁰ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.40.

¹⁶¹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 3.41.

¹⁶² KCOM supplementary response to the 2020 Hull Area WFTMR Consultation, paragraphs 4.6-4.10.

¹⁶³ KCOM supplementary response to the 2020 Hull Area WFTMR Consultation, paragraph 2.9.

¹⁶⁴ We proposed a 6-months' implementation period in the 2020 Hull area WFTMR Consultation, paragraph 2.48.

¹⁶⁵ To clarify, as set out in footnote 156 above, the requirement to notify changes of technical information 90 days in advance does not apply in this case.

grey fibre OWAS product.¹⁶⁶ It is likely that the ordering systems and processes for these services could be repurposed for dark fibre, and any training requirements for dark fibre could sit alongside existing work streams for active service provision. We acknowledge that, in order to launch a dark fibre product in a timely manner, some ordering and lifecycle management systems may need to be manual on launch.

- 3.69 KCOM has compared our proposed implementation period to the implementation period imposed upon Openreach in the rest of the UK. In our view, these comparisons are not instructive, given the differences in the requirements placed on Openreach and in particular the scale of its operations in the rest of the UK. For example, rolling out a programme of training to Openreach staff located across the whole of the RoUK is likely to require significantly more time than the lower numbers of KCOM staff providing services for only the Hull Area.

Requirement to continue to supply Ethernet leased lines

Our proposal

- 3.70 In our consultation, we considered whether the imposition of a specific dark fibre remedy on the LL Access market was sufficient to address KCOM's SMP in this market, and whether it would be appropriate for KCOM to change or withdraw its RO for active leased line services if it provides dark fibre.
- 3.71 Although we envisaged that, over the longer term, competition based on dark fibre would reduce the need for regulated active fibre products, we expected that this may take some time to establish itself.
- 3.72 In the interim, we deemed it important that active services continue to be provided and proposed to impose a specific remedy on KCOM to provide Ethernet leased lines.
- 3.73 We considered that without a form of specific access, there is a risk that KCOM could seek to withdraw or change the active products it currently offers under the general network access obligation.

Stakeholder responses

- 3.74 Stakeholders did not comment on our proposal to impose a specific remedy for Ethernet leased lines.

¹⁶⁶ KCOM offers three point-to-point active leased line products, OWAS ([Optical Wave Access Service \[accessed 19 October 2021\]](#)), ECAS ([Ethernet Connect Access Service \[accessed 19 October 2021\]](#)) and EDAS ([Ethernet Direct Access Service \[accessed 19 October 2021\]](#)). Unlike dark fibre, these active leased line services include equipment at either end which 'lights' the fibre, impacting the potential use cases.

Our reasoning and decisions for Ethernet leased lines

- 3.75 We consider that imposing this specific remedy is proportionate, taking account of the general access obligation which KCOM is under, since the specific access obligation we are imposing does no more than secure the continued provision of the general types of product that already KCOM provides. Therefore, we consider the impact of imposing it on KCOM is small. The benefits to competition in terms of certainty and security that the active services will continue to be provided by KCOM over the review period appear to us to be sufficient to justify imposing a specific remedy.
- 3.76 We are therefore imposing a specific network access obligation on KCOM to provide Ethernet leased lines. We consider this proportionate and necessary for this review period while we allow competition based on dark fibre to become fully established. We will consider whether this specific form of access continues to be necessary in future reviews.

Conclusion for dark fibre and Ethernet leased lines

- 3.77 We consider that these requirements in the LL Access market are proportionate in that they are targeted at addressing the market power that we have determined KCOM holds. We do not consider that different types of obligations or more limited network access requirements would be sufficient to address the competition concerns we have identified.
- 3.78 In order to implement these remedies, we have set SMP Condition 2 published in Volume 4.

Pricing of active leased line access products

Our proposals

- 3.79 We proposed an obligation for charges for network access to be fair and reasonable in the LL Access market, as the minimum regulation necessary to address the risk that KCOM may fix or maintain prices in such a way as to have adverse consequences to end-users.¹⁶⁷ This proposed requirement would apply to the provision of active leased line products.
- 3.80 We said that, in general, we would consider KCOM's charges to be fair and reasonable if they are consistent with making a reasonable return over costs, including a reasonable contribution to common cost recovery, and if they do not equate to a margin squeeze.¹⁶⁸
- 3.81 We proposed to benchmark KCOM's active leased lines charges against Openreach's equivalent active leased line products, namely the LL Access products in Area 2 and Area 3 subject to a charge control.¹⁶⁹

¹⁶⁷ 2020 Hull Area WFTMR Consultation, paragraph 2.14-2.15.

¹⁶⁸ 2020 Hull Area WFTMR Consultation, paragraph 2.14-2.16.

¹⁶⁹ 2020 Hull Area WFTMR Consultation, paragraph 2.22.

- 3.82 We also proposed to include the power for Ofcom to make directions in order to secure the supply of services and fairness and reasonableness in the terms, conditions and charges of network access, including a requirement in our condition for KCOM to comply with any such directions.¹⁷⁰

Stakeholder comments

- 3.83 Vodafone agreed with our proposal to align KCOM's charges for active leased lines with Openreach's equivalent products.¹⁷¹ [3<].¹⁷²

Our reasoning and decisions

- 3.84 We consider that dark fibre should be the primary focus of our regulation, given the benefits it offers over and above active leased line services. We expect that customers will increasingly rely on dark fibre and move away from active leased lines. However, this transition will take time and, in the interim, we consider some form of regulatory protection is necessary, given that we have found KCOM to have SMP, among others, in the provision of active leased lines and there a risk of harm arising to consumers absent regulation.
- 3.85 We reflect this in our pricing benchmark. Our view is that alignment of KCOM's charges for active leased lines with Openreach's equivalent active leased lines products (namely, the LL Access products in Area 2 and Area 3 subject to a charge control) would raise a presumption of KCOM's charges being fair and reasonable. Openreach's prices are being kept stable in real terms through a CPI-0% charge control, rather than being cost-based. We consider that benchmarking dark fibre prices to a cost-based benchmark, and benchmarking active leased lines prices to prices kept stable in real terms, provides appropriate protection for consumers in the market for active leased lines, while supporting migration to dark fibre and encouraging telecoms providers to invest as deeply in the network as possible.
- 3.86 In addition, we are including the power for Ofcom to make directions in order that we can secure the supply of services and, where appropriate, fairness and reasonableness in the terms, conditions and charges of network access. Our condition for the WLA and LL Access markets (including dark fibre access) includes a requirement for KCOM to comply with any such directions.
- 3.87 These remedies will enable us to intervene more quickly where terms, conditions or charges are not fair and reasonable than if we relied solely on *ex post* competition law.

¹⁷⁰ 2020 Hull Area WFTMR Consultation, paragraph 2.23.

¹⁷¹ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.18.

¹⁷² [3<].

4. Regulatory financial reporting requirements

Legal framework

- 4.1 Sections 87(7) and 87(8) of the Act allow us to impose accounting separation conditions on a dominant provider relating to network access to the relevant networks or the availability of relevant facilities, including requirements about the accounting methods to be used in maintaining the separation.
- 4.2 Section 87(6)(b) of the Act authorises us to set significant market power (SMP) conditions which require a dominant provider to publish, in such manner as we may direct, such information as we may direct, for the purpose of securing transparency in relation to matters connected with network access to the relevant network or with the availability of the relevant facilities.
- 4.3 Section 87(9)(c) authorises us to set conditions imposing on the dominant provider such rules as we may make about the use of cost accounting systems for the purposes of price controls in relation to matters connected with the provision of network access to the relevant network, or with the availability of the relevant facilities; and such rules as we may make in relation to those matters about the recovery of costs and cost orientation.
- 4.4 Under section 87(10) this can include conditions requiring the application of presumptions in the fixing and determination of costs for the purposes of the price controls, recovery of costs and cost orientation rules, and the cost accounting system. Where such conditions are imposed, section 87(11) imposes a duty on us to set an SMP condition which requires the dominant provider to publish a description of the cost accounting system and to include in that description details of:
 - a) the main categories under which costs are accounted for; and
 - b) the rules applied for the purposes of that system with respect to the allocation of costs.
- 4.5 We may still also take due account of relevant recommendations, although we are no longer required to do so. We consider the 2005 EC Recommendation on accounting separation and cost accounting systems¹⁷³ to be particularly relevant.

¹⁷³ [Commission Recommendation of 19 September 2005](#) on accounting separation and cost accounting systems under the regulatory framework for electronic communications (2005/698/EC) (the '2005 EC Recommendation').

- 4.6 We also consider the 2013 EC Recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment.¹⁷⁴

SMP conditions

- 4.7 To date, KCOM has been subject to regulatory financial reporting requirements in relation to the SMP markets in which it is regulated. These requirements were imposed on KCOM by way of a SMP condition set in each regulated market, and directions imposed in each market pursuant to the associated SMP condition. The SMP condition set out our general regulatory financial reporting requirements, including accounting separation and cost accounting. The directions then set out our detailed regulatory financial reporting requirements. The most recent directions were set out in the 2019 KCOM Regulatory Financial Reporting Statement¹⁷⁵ (2019 KCOM RFR Statement).
- 4.8 As part of these requirements, each year KCOM has had to prepare regulatory financial statements (RFS). The RFS have been prepared according to a defined framework and methodology and include published statements as well as information that is not published but submitted to Ofcom privately.
- 4.9 This section explains our decisions to continue to impose general regulatory financial reporting requirements, including accounting separation and cost accounting, on KCOM. We do so by way of an SMP condition in each SMP market in which it is regulated, together with directions setting out our detailed regulatory financial reporting requirements.
- 4.10 The regulatory financial reporting conditions and directions we have imposed on KCOM are included in Volume 4. In the 2020 Hull Area WFTMR Consultation, the expectation was that this statement would have been published by 1 April 2021 in advance of the start of the 2021/22 financial year. As a result of this statement being published today, part way through the 2021/22 financial year, KCOM could have been required to publish the RFS on two different bases: pre and post the date of this statement, which would have been disproportionate. We have amended the SMP condition to ensure that this does not happen and that the RFS for the whole of the 2021/22 financial year are prepared on the basis of the regulatory financial reporting conditions and directions set out in this statement.

¹⁷⁴ [Commission Recommendation of 11 September 2013](#) on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU) (the '2003 EC Recommendation').

¹⁷⁵ Ofcom, 2019. [KCOM Regulatory Financial Reporting: Statement](#).

Our proposals

- 4.11 In our consultation, we proposed accounting separation and cost accounting obligations as part of a package of remedies to address the competition concerns identified in our consultation.
- 4.12 We proposed to impose a new SMP condition in that was almost the same as the old SMP Condition 8¹⁷⁶, with the exception of:
- a) a five-month extension to the deadline for KCOM to publish its RFS;
 - b) changes required to reflect the deadline for KCOM to introduce the new dark fibre products; and
 - c) changes required to the provision relating to the maintenance of accounting records for network services and network activities, which previously applied to LL Access, and now applies to both the WLA and LL Access markets.

Stakeholder responses

- 4.13 KCOM supported our proposals, commenting “KCOM considers that Ofcom’s proposed regulatory financial reporting proposals reflect the attributes detailed above¹⁷⁷ and broadly agrees that the remedies are appropriate and proportionate.”¹⁷⁸ KCOM responded that it “agrees with Ofcom’s proposal to extend KCOM’s reporting deadline. KCOM considers it is appropriate to adjust the deadline for KCOM to publish its RFS, requiring that for the reporting year 2021/22 and subsequent years KCOM publish and deliver to Ofcom the RFS and the corresponding audit opinion within a period of nine months after the end of the financial year to which the RFS relates. There are clear reasons for making this proposed change given changes to KCOM’s Group Limited’s ongoing financial reporting obligations following the acquisition of the company by MEIF 6 Fibre Limited on 1 August 2019 and the subsequent de-listing from the London Stock Exchange on 2 August 2019”.¹⁷⁹
- 4.14 Vodafone considered that regulatory reporting for the Hull Area is fundamental to attempting to remedy KCOM’s SMP and to facilitate market entry.¹⁸⁰ Purebroadband also agreed with our proposed regulatory financial reporting SMP condition.¹⁸¹

Our reasoning and decisions

- 4.15 We have decided to impose regulatory financial reporting obligations in each of the markets in which we have decided that KCOM has SMP (WLA and LL Access).

¹⁷⁶ 2018 WLA/WBA Statement, paragraph 8.6.

¹⁷⁷ See paragraph 4.18 below.

¹⁷⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.4.

¹⁷⁹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.4.

¹⁸⁰ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraphs 3.27-3.28.

¹⁸¹ Purebroadband response to the 2020 Hull Area WFTMR Consultation, page 3.

Purpose of financial regulatory reporting obligations

- 4.16 KCOM's regulatory financial reporting obligations secure the creation and retention of the information needed for our regulation of SMP markets, particularly price controls, to be, and be seen to be, effective. They provide us with the information necessary to help us make informed regulatory decisions and information necessary to assess the impact and effectiveness of our decisions, for example, trends in the usage and returns associated with regulated services. They also enable us to monitor and, if necessary, enforce NUD and price control regulations.
- 4.17 Publication of some information helps inform stakeholders so they can have confidence that KCOM is complying with its obligations, and that regulation is effective and appropriate to achieve its purpose. It enables stakeholders to identify and bring issues to our attention and effectively contribute to the regulatory regime. This promotes confidence in the market, which in turn creates the conditions for effective competition.
- 4.18 As we set out in the 2019 KCOM RFR Statement, effective reporting should have the following attributes:
- a) **Relevance.** The information needs to answer the right questions, in the right way and at the right time.
 - b) **Reliability.** The underlying data must be reliable, suitable rules for treatment of data must be chosen and those rules need to be followed.
 - c) **Transparency.** The basis of preparation should be understood by the users of the reports and the presentation of the data should be clear.
 - d) **Proportionality.** The reporting requirements should be proportionate to the benefits.

Accounting separation requirements

- 4.19 An accounting separation requirement allows Ofcom and stakeholders to monitor the activities of KCOM to ensure that, where relevant, it does not discriminate unduly in favour of its own downstream business and to monitor KCOM's activities in respect of the fair and reasonable pricing obligations. This, combined with a 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.
- 4.20 The condition includes the obligations we consider appropriate to secure the reporting is robust and can be verified, including obligations as to audit and record keeping.
- 4.21 We consider that our decision to impose an accounting separation obligation, together with a cost accounting obligation (see below), in respect of KCOM's provision of WLA services and LL Access will help ensure these regulatory reporting objectives are met.

Cost accounting requirements

- 4.22 We consider a cost accounting obligation necessary to ensure the appropriate maintenance and provision of accounts in order to monitor KCOM's activities with regard to the pricing remedies we are implementing and to monitor their effectiveness in addressing the competition concerns. It is also necessary to secure that information continues to be created and captured so as to secure, and to give stakeholders confidence, that pricing can continue to be appropriately regulated in future, creating the conditions for the price controls we are now proposing to impose to be effective. It also relates 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.
- 4.23 The condition includes the obligations we consider appropriate to secure the reporting is robust and can be verified, including obligations as to audit and record keeping.
- 4.24 We consider that our decision to impose an accounting separation obligation (see above), together with a cost accounting obligation, will help to ensure that these objectives are met.
- 4.25 In the rest of this section, we set out the detail of the remedies, including a package of directions we are giving under the remedies.
- 4.26 In Section 6 below, we explain why the setting of these SMP conditions will satisfy the tests set out in sections 47 and 88 of the Act.

Reporting deadline in the SMP conditions

- 4.27 KCOM was previously required to publish the RFS and corresponding audit opinion within 4 months after the end of the financial year to which they relate. KCOM's financial year ends on 31 March, and therefore the old condition required it to publish its RFS no later than 31 July.
- 4.28 Following the acquisition of KCOM by MEIF 6 Fibre Limited,¹⁸² KCOM was delisted from the London Stock Exchange on 2 August 2019. As a result of the delisting, it is no longer subject to the listing rules requirement to file its financial statements within four months after its financial year end. It is now subject to the Companies Act 2006 requirement to file its statutory accounts within nine months of its financial year end.
- 4.29 KCOM wrote to us on 27 March 2020 to explain that the 31 July deadline for submitting its RFS for 2019/20 and subsequent financial years was impracticable given a change in KCOM's corporate status and its deadline to file its statutory financial statements. KCOM requested an extension of five months, with a new deadline of 31 December. After

¹⁸² London Stock Exchange, 3 June 2019. [Recommended Cash Offer for KCOM Group PLC](#) [accessed 9 July 2020].

consulting, Ofcom published a consent ('Consent Statement') to this request on 4 June 2020.¹⁸³

- 4.30 As set out in the Consent Statement, we consider that the prompt publication of KCOM's RFS is important because it provides Ofcom with the information necessary to make informed regulatory decisions. It also provides transparency and reasonable confidence to stakeholders that KCOM has complied with its SMP obligations. For the reasons given in our Consent Statement we consented to a five-month deferment to the deadline for publication and delivery to Ofcom of KCOM's RFS and corresponding audit opinions for 2019/20 and 2020/21.
- 4.31 Consistent with the decision in the Consent Statement, we have decided that KCOM must publish and deliver to Ofcom the RFS and the corresponding audit opinion no later than nine months after the end of the financial year to which the RFS relate. We consider that the prompt publication of KCOM's RFS is important and will monitor KCOM's compliance with its obligation.
- 4.32 As consequence of extending KCOM's reporting deadline from four to nine months, it became apparent that some of the dates by which KCOM had to prepare, provide to Ofcom and in some cases publish the primary accounting documents¹⁸⁴, the secondary accounting documents¹⁸⁵ and the wholesale catalogue¹⁸⁶ were no longer appropriate. We have decided to amend the relevant SMP conditions to ensure the same level of information is provided on a more logical and proportionate timeframe, alongside the RFS. The amendments reduce the burden of regulation on KCOM whilst providing stakeholders and ourselves with the same level of information.

SMP directions

- 4.33 To give effect to our remedies we are giving five directions under section 49 of the Act and the regulatory financial reporting SMP condition we are imposing in relation to WLA and LL Access, as follows:
- a) Network components direction;
 - b) Transparency direction;

¹⁸³ Ofcom, 2020. [Consent for KCOM to defer its 2019/20 and 2020/21 Regulatory Financial Statements: Statement](#) (the 'Consent Statement').

¹⁸⁴ The primary accounting documents are contained within the description of cost accounting system (DOCAS) (see under transparency direction) that would have been i) prepared six months and published nine months after this statement and ii) prepared and published alongside the RFS. We have removed the first requirement.

¹⁸⁵ The secondary accounting documents are contained within the DOCAS (see under transparency direction) that would have been i) provided to Ofcom eight months after this statement and ii) prepared and published alongside the RFS. We have removed the first requirement.

¹⁸⁶ The wholesale catalogue sets out the name and characteristics of all regulated wholesale services that KCOM provides It would have been i) prepared six months and provided to Ofcom nine months after this statement and ii) prepared and provided alongside the RFS. We have removed the first requirement.

- c) Form of the ‘properly prepared in accordance with’ (PIA) audit opinion for the RFS direction;
 - d) Preparation, audit, delivery and publication of the RFS direction; and
 - e) Form and content direction.
- 4.34 The network components direction, transparency direction and form of the PPIA audit opinion for the RFS direction are unchanged from 2019 KCOM RFR Statement.
- 4.35 The preparation, audit, delivery and publication direction includes new reporting requirements in relation to WLA and LL Access markets. In relation to both markets we are requiring service level information to address concerns over excessive pricing of certain services and to help evaluate the effectiveness of the remedies, including in some cases using Openreach equivalent prices as a benchmark for KCOM’s fair and reasonable prices. This information will be provided to us in confidence as additional financial information (AFI).
- 4.36 The form and content direction includes a requirement for KCOM to disaggregate the SMP markets within the two KCOM wide schedules.
- 4.37 The rest of this section is structured as follows:
- the requirements unchanged from the 2019 KCOM RFR Statement.
 - new requirements in respect of the preparation, audit, delivery and publication of the RFS directions and the form and content directions.

The requirements unchanged from the 2019 KCOM RFR Statement

Our proposals

- 4.38 We proposed that the network components direction, transparency direction and audit of the RFS direction are imposed in the same form as in the 2019 KCOM RFR Statement.

Consultation Responses

- 4.39 KCOM responded that it “agrees with Ofcom proposal to leave the requirements unchanged from the 2019 RFR Statement.”¹⁸⁷ No other stakeholder commented on this specific proposal.

¹⁸⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.5.

Our reasoning and decisions

Network component direction

- 4.40 To preserve the integrity and consistency of KCOM's regulatory financial reporting it is important that there is a single list of components used to attribute costs to services in regulated markets.
- 4.41 We are giving a direction specifying the cost components to be used by KCOM to prepare the RFS as at 1 April 2021, i.e. the components that must appear in the cost component list as at this date.
- 4.42 We are giving the network components direction in relation to KCOM in each of the WLA and LL Access markets in the Hull Area.
- 4.43 To ensure we can monitor KCOM's activities and that it complies with the NUD and fair and reasonable charging obligations imposed in all markets in which KCOM is regulated through the use of relevant network components, we are requiring the same list of network components as set out in the 2019 KCOM RFR Statement.
- 4.44 The direction continues to contain the following network components:
- a) Electronics;
 - b) Field provision;
 - c) Field maintenance;
 - d) Local loop infrastructure;
 - e) Exchange concentrator;
 - f) Exchange-exchange transmission link;
 - g) Back-office provision;
 - h) Back-office maintenance;
 - i) Sales and product management;
 - j) PPP for narrowband call services;
 - k) Net current assets; and
 - l) Other.
- 4.45 Our direction which specifies the list of network components ensures that the presentation and usability of the RFS continues and gives confidence to stakeholders about the absence of bias in the preparation of the RFS. It specifies no more network components than necessary to ensure we can monitor KCOM's activities.
- 4.46 The direction is set out in Volume 4 (see Direction 1, Schedule to the Notification).

- 4.47 In Section 6 below, we explain why the giving of this direction satisfies the test set out in section 49 of the Act.

Transparency Direction

- 4.48 In order for regulatory financial reporting to secure its objectives, it is important that Ofcom and other stakeholders can understand the information presented. It is therefore necessary that a sufficiently transparent description of KCOM's regulatory cost accounting system (including attribution and valuation methodologies) be published, such that a suitably informed reader can gain a clear understanding of the information presented in KCOM's RFS.
- 4.49 We have therefore given a transparency direction in relation to KCOM in each of WLA and LL Access markets in the Hull Area. This direction reflects our requirements set out in above.
- 4.50 The transparency direction requires KCOM to publish documentation that describes its regulatory cost accounting system, that is, the accounting system that is used to meet KCOM's obligations on cost accounting and accounting separation. KCOM's description of cost accounting system (DOCAS) sets out the KCOM organisational structure, the objectives of the accounting separation framework and how KCOM's system meets that objective through a 'tier framework and cascade approach'. It sets out in more detail how the tier framework and cascade approach works. It explains KCOM's attribution methods for revenues and costs. It explains its methodology for valuing assets on a current cost basis (CCA). It provides detail on the methodology used to estimate traffic minutes and routing factors for different types of calls. As well as providing transparency to stakeholders on KCOM's regulatory cost accounting system, the document also serves as a reference point for KCOM's auditors for their PPIA opinions (see below). The current documentation (for 2019/20) is published on KCOM's website.¹⁸⁸ This information is necessary for Ofcom and other providers to understand the information presented in the RFS and enable the RFS to fulfil their function.
- 4.51 We consider that the transparency direction requires a sufficiently transparent description of KCOM's regulatory cost accounting system (including attribution and valuation methodologies) such that a suitably informed reader can gain a clear understanding of the information presented in KCOM's RFS. Our direction does not require more information than necessary to ensure that presentation of the basis of preparation is transparent for users of the RFS. On this basis, we consider that the transparency requirement remains appropriate.
- 4.52 We note that our requirement for KCOM to provide new WLA and LL Access products, i.e. ancillary interconnection products for WLA and dark fibre services, requires KCOM to

¹⁸⁸ KCOM, 25 May 2021. [Description of Cost Accounting System \(DOCAS\): Representing the Primary and Secondary Accounting Statements together with Wholesale and Retail Catalogues](#) (KCOM 2019/20DOCAS) [Accessed 15 October 2021].

consider how accounting for the new services should be explained in the DOCAS. This does not require a change to the direction.

4.53 The direction is set out in Volume 4 (see Direction 2, Schedule to the Notification).

4.54 In Section 6 below, we explain why the giving of this direction satisfies the test set out in section 49 of the Act.

Form of the PPIA audit opinion for the RFS direction

4.55 This direction requires KCOM to secure from its regulatory auditor a PPIA opinion. This opinion considers whether the RFS has been prepared in accordance with the 'rules'. The 'rules' in this case refer to the DOCAS prepared by KCOM, as well as the regulation surrounding the RFS. The PPIA opinion represents a view on whether the rules have been followed.

4.56 The direction gives users confidence that the information is free from material error and has been prepared following the accounting methodology statements published by KCOM and relevant directions issued by Ofcom. To preserve the integrity and consistency of the RFS we consider that all markets should be subject to the same audit direction.

4.57 We consider that the PPIA audit opinion provides us and stakeholders with reasonable confidence that KCOM's RFS is free from material error and has been prepared following the DOCAS published by KCOM and relevant directions issued by us.

4.58 We consider this confidence remains necessary and have given the Audit of the RFS Direction in relation to KCOM in each of the WLA and LL Access markets in the Hull Area. The audit direction requires KCOM to secure PPIA (properly prepared in accordance with) opinions on the RFS. We consider that the audit requirements are no more than is necessary to ensure that an appropriate level of assurance is provided on the RFS.

4.59 The direction is set out in Volume 4 (see Direction 3, Schedule to the Notification).

4.60 In Section 6 below, we explain why the giving of this direction satisfies the test set out in section 49 of the Act.

Reporting requirements in relation to the preparation, audit, delivery and publication of KCOM's RFS direction and the form and content direction

4.61 The preparation, audit, delivery and publication of KCOM's RFS direction sets out the financial information KCOM is required to provide for the RFS. Some elements of the published RFS relate to KCOM as a whole, while others are market specific. The direction sets out:

- a) the titles of the schedules KCOM is required to provide and publish both in general and for each regulated market; and

- b) that KCOM is required to prepare, secure, and publish an audit opinion in relation to the KCOM-wide schedules and the regulated markets.
- 4.62 The form and content direction sets out the detail of what information KCOM’s regulatory financial reporting should include. It is closely related to the preparation and publication requirements of the preparation, audit, delivery and publication of KCOM’s RFS direction. The form and content direction sets out the format (i.e. the description) of the information contained within the schedules that KCOM is required to produce under the preparation, audit, delivery and publication of KCOM’s RFS direction.
- 4.63 The requirements relating to the titles of the schedules KCOM provides and publishes must be consistent with the form and content direction, which sets out the detail to be included within the schedules.
- 4.64 This preparation, audit, delivery and publication of KCOM’s RFS direction also sets out that KCOM is required to prepare, secure, and publish an audit opinion in relation to the KCOM-wide schedules and the regulated markets. The requirements relating to the publishing of the audit opinion must be consistent with the form of the PPIA audit opinion for the RFS direction. The effect of the preparation, audit, delivery and publication of KCOM’s RFS direction (which sets out the names and descriptions of the required schedules) and the form and content direction (which sets out the detail to be contained within the schedules) is to require KCOM to produce information on a KCOM wide and on a market basis. Some of this information is published, some provided in private. Whilst KCOM’s regulatory cost accounting system holds information on a service level, we have not previously required this to be published or provided to us in confidence.
- 4.65 Both directions are, in our view, necessary and appropriate to preserve the integrity and consistency of the RFS. All SMP markets will be subject to appropriate reporting requirements.

Our proposals in respect of published information

- 4.66 In the 2020 Hull Area WFTMR Consultation we proposed that the existing requirements in respect of markets that we made a provisional SMP finding remained unchanged.

Consultation responses

- 4.67 KCOM responded that it “agrees that in respect of the markets where Ofcom has made a provisional SMP finding (WLA and LL Access (including where required DFA)), it is appropriate to maintain the current requirement on KCOM to publish KCOM-wide and market level information”¹⁸⁹, as well as providing specified private information to Ofcom (consistent with Ofcom’s proposed regulatory findings). No other stakeholder commented on this specific proposal.

¹⁸⁹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.6.

Our reasoning and decisions for published information

KCOM wide information

- 4.68 We have decided to require that KCOM continue to publish the schedules listed in Figure 4.1 in relation to KCOM-wide information.

Figure 4.1 KCOM wide schedules to be provided and published

Schedule Currently provided – 2019/20 RFS (page reference)	Justification for retention and publication
Consolidation Cost Profit and Loss. (page 8). Consolidation MCE (page 9).	These schedules set out the return KCOM is making from regulated markets. This demonstrates to stakeholders the effectiveness of regulation across KCOM.
Reconciliation Profit and Loss. (pages 37 and 38). Reconciliation MCE (page 39)	These schedules reconcile KCOM's RFS to its statutory accounts. This provides us and stakeholders with confidence that the information in the RFS is a record of KCOM's actual costs.
Consolidated Network Activity Statement (page 10)	This schedule provides confidence to stakeholders that KCOM is attributing costs correctly across network components in accordance with its cost accounting and accounting separation obligations.

- 4.69 We consider that in respect of the preparation, audit, delivery and publication of KCOM's RFS direction, KCOM must continue to provide and publish these schedules.
- 4.70 In respect of the form and content of the consolidation cost profit and loss and consolidation MCE schedules, we require that KCOM disaggregates the current year and prior year totals into the individual SMP market and residual activities. In line with our SMP findings we would expect the figures under the 'Total' to be split between 'WLA', 'LL Access' and 'Residual Activities'. We also require that the current year and prior year figures are disclosed on separate pages. This disaggregation does not involve the disclosure of any new information (the WLA and LL Access figures would be disclosed in the relevant market statement (see below), whilst residual activities can be calculated¹⁹⁰). This provides transparency to stakeholders by setting out in one place the level of revenues, costs, assets and returns for each market allowing easier comparisons of markets and trends within KCOM.
- 4.71 The requirements are included in the preparation, audit, delivery and publication of KCOM's RFS direction and form and content direction in Volume 4 (see Direction 3, Schedule to the Notification).

¹⁹⁰ By subtracting the WLA and LL Access figures from the KCOM-wide figures.

Market level information

4.72 We require that KCOM continues to publish information market level information for markets in which we have made an SMP finding. This information is consistent across the regulated markets and is set out below in Figure 4.2.

Figure 4.2 Market level schedules to be provided and published

Schedule currently provided	Market – Currently provided –2019/20 RFS page reference		Justification
Current Market where services are currently reported	WLA ¹⁹¹	CISBO ¹⁹²	To reflect new market structures
New Market	For 2021/22 onwards– WLA	LL Access (including dark fibre)	
Market Profit and Loss Summaries	Page 14	Page 20	Trends in market-level financial performance allow us to monitor developments in the market and are informative in the context of considering the impact and effectiveness of remedies. Market-level cost information also provides transparency regarding how KCOM has attributed costs between regulated markets (and between regulated and unregulated markets). We see this as facilitating stakeholder confidence that such costs have been attributed consistently.
Market MCE	Page 15	Page 21	

¹⁹¹ Currently WLA is subsumed within the WBA market for reporting purposes. In practical terms, the form and content of the schedule is the same (revenues and costs etc). What will change is the quantum of the numbers being reported on as they will only relate to the WLA market.

¹⁹² Whilst we will require reporting of the LL Access market, the nearest approximation to that market is the current contemporary interface symmetric broadband origination market (CISBO) which includes active leased line services using contemporary interface (CI) technologies. As with WLA, the form and content will be the same, but the quantum of the numbers will change.

- 4.73 In respect of WLA, KCOM previously reported WLA services within the WBA market. As set out in Section 5 of Volume 2, we are deregulating the WBA market. Consistent with that decision, the WLA market should only contain information relating to WLA services.
- 4.74 In general, we consider that some information should be published where KCOM has regulatory reporting obligations to allow stakeholders to have reasonable confidence that KCOM has complied with its SMP conditions and add credibility to the regulatory financial reporting regime.¹⁹³
- 4.75 We have decided to require KCOM to continue to publish these schedules in respect of the WLA and LL Access markets. We are making no changes to the form and content of these schedules.
- 4.76 The requirements for private information related to interconnection are included in the preparation, audit, delivery and publication of KCOM’s RFS direction and form and content direction in Volume 4.
- 4.77 We have given the preparation, audit, delivery and publication of the RFS direction in relation to KCOM in each of the SMP markets in relation to published information as set out in Volume 4.
- 4.78 In Section 6 below, we explain why the giving of this direction satisfies the test set out in section 49 of the Act.

Private information

- 4.79 We require KCOM to provide us with some information privately. We require this information to make informed regulatory decisions, monitor compliance with SMP conditions and ensure that those SMP conditions continue to address the underlying competition issues.
- 4.80 To date, KCOM has provided us with both KCOM-wide information and market level information. We have decided to require KCOM to continue to provide us with this information in relation to the WLA and LL Access markets, with no changes to the form and content of these schedules. We set this out in detail below.

KCOM-wide

Figure 4.3 KCOM-wide schedules to be provided in confidence

Schedule currently provided	Justification for non-publication and continued provision in private
Residual profit and loss	

¹⁹³ 2018 KCOM Regulatory Financial Reporting Statement, paragraph 2.6.

<p>Residual MCE</p>	<p>This information will help demonstrate to us that KCOM is using an appropriate regulatory cost accounting system to attribute costs to markets, including residual markets. Stakeholders are already provided information on how costs are attributed to regulated and both wholesale and retail residual market in the reconciliation statements and the KCOM network activity statement. Whilst we need the information to ensure the correct attribution of costs between regulated and unregulated markets, we do not consider that it is necessary to provide detailed information on non-regulated services to stakeholders.</p>
<p>Inter market turnover</p>	<p>This schedule allows us to see the retail residual revenue from each regulated market and is required by us to monitor accounting separation obligations in relation to sales made to retail residual. It is not however appropriate to provide to stakeholders as it relates to non-regulated services.</p>

Market level

Figure 4.4 KCOM market level schedules to be provided in confidence

<p>Schedule currently provided</p>	<p>Justification for non-publication and continued provision on a confidential basis</p>
<p>Market network activity statements</p>	<p>This information will help demonstrate to us that KCOM is using an appropriate regulatory cost accounting system to attribute costs to markets, including residual markets. Stakeholders are already provided information on how costs are attributed to regulated markets and residual in the reconciliation statements and the KCOM network activity statement.</p> <p>We do not consider it appropriate to provide detailed information on a regulated market basis where a cost-based charge control is not being imposed.</p>

Service level Information

4.81 In respect of service level information, in the consultation¹⁹⁴ we proposed to require KCOM to provide us with two new schedules specific to services within the WLA and LL Access markets. The two new confidential schedules were:

- a) **Service level information.** Information on the volume of specified services (set out in paragraph 4.82 and 4.83) sold, the average prices, revenues and fully allocated cost (FAC) costs. The proposed form and content for each market is as follows:

Figure 4.5: Service level information form and content

Service Level Information	Internal Volume	External Volume	Internal Price	External Price	Internal Revenue	External Revenue	Total Revenue	Internal Cost FAC	External Cost FAC	Total Cost FAC	Internal Unit Cost	External unit cost
Name of service												
Service 1	x	x	£x.xx	£x.xx	£xk	£xk	£xk	£xk	£xk	£xk	£x.xx	£x.xx
Service 2	x	x	£x.xx	£x.xx	£xk	£xk	£xk	£xk	£xk	£xk	£x.xx	£x.xx
Service 3	x	x	£x.xx	£x.xx	£xk	£xk	£xk	£xk	£xk	£xk	£x.xx	£x.xx
Other services (aggregated)					£xk	£xk	£xk	£xk	£xk	£xk		
Total					£xk	£xk	£xk	£xk	£xk	£xk		
Note 1	Split service between internal and external if there are cost differences											
Note 2	The total should agree to Market Summary											
Note 3	This unit costs should agree to breakdown of service level costs. Can be combined if internal and external are identical											

- b) **Breakdown of service level costs.** Information on specified services on a FAC basis by network cost component.

¹⁹⁴ 2020 Hull Area WFTMR Consultation, Volume 3, paragraphs 3.63-3.67.

Figure 4.6: Service level costs breakdown

Breakdown of service level costs	Service 1		Service 2		Service 3	
	Int	Ext	Int	Ext	Int	Ext
Electronics	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Field provision	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Field maintenance	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Local Loop infrastructure	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Exchange concentrator						
Exchange-exchange Transmission link						
Back-office Provision	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Back-office Maintenance	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Sales and Product Management	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
PPP for narrowband call services						
Net Current Assets	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Other	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx
Total FAC	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx	£x.xx

Note 1

These totals should agree to Service level information

Note 2

Where internal and external service costs are identical, can amalgamate

Note 3

Network Components not used by services within that market can be omitted

4.82 We proposed to require separate schedules in respect of both AFI's for the WLA and LL Access markets, which must reconcile to the total figures in the published RFS.¹⁹⁵ We proposed¹⁹⁶ the following specified WLA services to be included in the schedules:

- a) Wholesale fibreline local access (WFLLA) FTTP end user rental charges (all bandwidths)
- b) WFLLA FTTC
- c) WFLLA end user new provide
- d) Other WFLLA end user connection charges
- e) Other WFLLA fixed charges
- f) WFLLA excess construction charges
- g) Time related charges
- h) Other services in the WLA market (not specified)

¹⁹⁵ For example, the revenues for the WLA services must add up to the total revenues in the published WLA market. This would not be possible where the units of measurement are not consistent across the services – e.g. volumes would be a mixture of connections, rentals etc.

¹⁹⁶ Whilst we set out these services in paragraph 3.64 of the 2020 Hull Area WFTMR Consultation, we omitted to include them in the draft legal instrument. We have corrected this in the made version.

- i) The specified services in this list are the current service names as per the KCOM website¹⁹⁷, that for reasons set out in in Section 2 are subject to fair and reasonable charging obligations. The ‘Other’ services have been specified to enable to reconcile the AFI to the published RFS, for groups of services or to the market itself.
- 4.83 In respect of the LL Access market we proposed to specify the following services to be included in the schedules
- a) Dark fibre services
 - i) Single fibre rental charges
 - ii) Fibre pair rental charges
 - iii) Single fibre connection charges
 - iv) Fibre pair connection charges
 - v) Charge per right when tested¹⁹⁸
 - vi) Charge per cessation¹⁹⁹
 - vii) Patch panels²⁰⁰
 - viii) Dark fibre excess construction charges
 - ix) Other dark fibre services in the LL Access market (not specified).
 - b) Active services
 - i) ECAS 1Gbit/s rentals
 - ii) Other ECAS rentals
 - iii) ECAS connection charges²⁰¹
 - iv) ECAS excess construction charges
 - v) Other ECAS services in the LL Access market (not specified)
 - vi) EDAS 1Gbit/s rentals
 - vii) Other EDAS rentals
 - viii) EDAS connection charges²⁰²
 - ix) EDAS excess construction charges
 - x) Other EDAS services in the LL Access market (not specified)

¹⁹⁷ KCOM, [WFLLA Price list](#) and KCOM, [Ethernet Direct Access Service](#) (EDAS Price list) [accessed 20 October 2021].

¹⁹⁸ Single fibre and fibre pair reported together unless different prices are charged.

¹⁹⁹ Single fibre and fibre pair reported together unless different prices are charged.

²⁰⁰ Single fibre and fibre pair patch panels reported together unless different prices are charged.

²⁰¹ ECAS and EDAS connections reported together unless different prices are charged.

²⁰² ECAS and EDAS connections reported together unless different prices are charged.

xi) Other active services in the LL Access market

4.84 The specified dark fibre services in this list are not currently provided by KCOM and cover access circuits and end to end access circuits. For the reasons set out in Section 3, these will be subject to fair and reasonable charging obligations. The active services specified in this list are the current service names per the KCOM current price lists²⁰³ The 'Other' services have been specified to enable the AFI to be reconciled to the published RFS.

Stakeholder Responses

- 4.85 In respect of the existing private information KCOM agreed it was appropriate to continue to provide "specified private information to Ofcom (consistent with Ofcom's proposed regulatory findings)".²⁰⁴
- 4.86 KCOM expressed concerns about the introduction of service level reporting in connection with dark fibre. It said "KCOM considers it important that Ofcom recognises it will be necessary to undertake new activities to accurately record this information. For example, KCOM does not currently have accurate records of dark fibre lengths. This will incur cost and will be a time-consuming activity".²⁰⁵
- 4.87 KCOM said "To the extent that Ofcom reaches a decision to the contrary and chooses to implement the DFA remedy, KCOM considers it important that Ofcom recognises that it will be necessary to undertake new activities to adjust its system".²⁰⁶ KCOM continued "On the above basis, should Ofcom continue to consider the introduction of DFA to be appropriate, KCOM considers that the reasonable period of time that KCOM proposes for the introduction of DFA is in part reflected in the RFR activities that KCOM needs to undertake (including systems updates)".²⁰⁷
- 4.88 Vodafone agreed with the new requirements, saying that "this service level information is very useful for operators that are potentially thinking about entering the market to understand the dynamics".²⁰⁸ "The huge market share of Kingston causes potential market entrants alarm and serves as a barrier to market entry, any additional information is extremely useful".²⁰⁹ It asked for publication of this information: "we do not understand why this additional service level information is proposed to be given to Ofcom on a confidential basis and not published alongside the main RFS. We believe it would be both beneficial for potential market entrants and consumers in the Hull area if this additional

²⁰³ EDAS price list.

²⁰⁴ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.8. It set out the current private information as being in respect of WLA, KCOM currently reports WLA services within the WBA market. As set out in Volume 2 Section 4, of the 2020 Hull Area WFTMR Consultation Ofcom proposes to deregulate the WBA market. Consistent with that proposal, Ofcom is proposing to require that WLA market should only contain information relating to WLA services.

²⁰⁵ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.8 bullet 1.

²⁰⁶ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.8 bullet 2.

²⁰⁷ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 7.8 bullet 3.

²⁰⁸ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.29.

²⁰⁹ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.29.

service level information was published”.²¹⁰ No other stakeholder commented on this specific proposal.

Our reasoning and decisions

- 4.89 We contacted KCOM by email on 6 June 2021²¹¹ and 13 July 2021²¹² to discuss its concerns over service level reporting in connection with DFA. We subsequently had a call with KCOM on 14 July 2021.²¹³
- 4.90 During that call, KCOM said that the concern over dark fibre was the time taken to set the new services and to make them available to other telecoms providers, rather than the subsequent accounting and reporting of the services within the RFS. This was confirmed by a follow up e-mail from KCOM in which it said “You will be aware that KCOM said at paragraph 3.42 of our response to the WFTMR that 18 months between any statement requiring DFA product launch and launch would be necessary (paragraphs 3.37 to 3.41 explain the reasons – comparable with BT). On that basis we would anticipate no DFA reporting requirement before the 2023-2024 FY. So, it would be the product development side of things that would be on the critical path and we could be ready to report in the RFS by 2023-2024 if DFA was mandated”.²¹⁴
- 4.91 Following on from our conversations with KCOM arising out of its response to the consultation, for the reasons set out below, we have decided that it is both appropriate and proportionate to adopt the proposals set out in our consultation without any modification.
- 4.92 In response to Vodafone’s question as to why this information is not published, whilst we agree that the information would be useful to it, in particular if it were seeking to supply WLA or LL Access services itself, that is not the purpose of publishing this information. As set out in above²¹⁵, the purpose of publishing service level information would be to provide confidence that KCOM is complying with its obligations, and that regulation is effective and appropriate to achieve this. Given that the pricing remedy on WLA and LL Access services is ‘fair and reasonable’ which we consider can be achieved by benchmarking them to Openreach’s equivalent prices (as set out in Sections 2 and 3 above), service level costs are not relevant for compliance purposes. The effectiveness of the remedy can be measured by returns at the market level rather than at the service level.
- 4.93 We consider that the extra information by way of new requirements in respect of WLA and LL Access markets is justified for the following reasons.

²¹⁰ Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 3.29.

²¹¹ Email from [redacted] (Ofcom) to [redacted] (KCOM) Tuesday 8 June 2021 16:35.

²¹² Email from [redacted] (Ofcom) to [redacted] (KCOM) Tuesday 8 July 2021 16:25.

²¹³ Call between [redacted] (Ofcom) and [redacted] (KCOM) Thursday 14 July 2021 17:00.

²¹⁴ Email from [redacted] (KCOM) to [redacted] (Ofcom) Monday 19 July 2021 18:05.

²¹⁵ See paragraph 4.35.

- a) As explained, above (see paragraph 2.28) we consider that for the WLA and LL Access markets there is risk KCOM might fix or maintain some or all of its prices for network access at an excessively high levels or impose a margin squeeze in relation to such access services. Service level information can be used to help identify where costs were being inapparently attributed to services required by external Telecom Providers to access KCOM's network.
- b) As explained above (see paragraphs 2.27 to 2.36) we have imposed in the WLA and LL Access markets (including DFA) an obligation for charges for network access to be fair and reasonable. Our assessment is that KCOM's charges are fair and reasonable if they are consistent with KCOM making a reasonable return and a reasonable contribution from those services to common cost recovery, and do not equate to a margin squeeze. Service level revenue and cost information can be used to examine the level of returns in those services and would be the starting point to analyse common cost recovery.
- c) As explained above (see paragraph 2.34), in respect of WLA services, for the up to 40/10Mbit/s service, there is a specific benchmark equal to Openreach's up to 40/10Mbit/s service and for those above the services above 40Mbit/s, an assessment of fair and reasonable pricing may include reference to Openreach's prices for equivalent bandwidth products. Service cost information can be compared to Openreach price information to assess the effectiveness of the pricing benchmark and consider whether differences from the Openreach benchmark are fair and reasonable.²¹⁶
- d) As explained above (see paragraph 3.85), in respect of LL Access, we are imposing price benchmarks against Openreach's equivalent active leased lines products. Service level cost can be used both to assess the effectiveness of the pricing benchmark and consider whether differences from the Openreach benchmark are fair and reasonable.²¹⁷
- e) As explained above (see paragraphs 3.55 to 3.61) in respect of dark fibre charges, we are imposing a price benchmark set at Openreach's provision of dark fibre in Area 3. Service level cost information can be used to assess the effectiveness of this policy, including how costs compare to prices given that we do not consider rival network build is likely to materialise at scale during the review period.
- f) As set out in its DOCAS²¹⁸, KCOM currently attributes costs on a service basis. Requesting this information in private will require little incremental work for KCOM.

4.94 The requirements for private information related to WLA and LL Access are included in the preparation, audit, delivery and publication of KCOM's RFS direction and form and content direction in Volume 4 (see Direction 4, Schedule to the Notification).

²¹⁶ On the basis that we have access to Openreach service level cost information, which we do.

²¹⁷ On the basis that we have access to Openreach service level cost information, which we do.

²¹⁸ KCOM 2019/20 DOCAS, page 21.

- 4.95 We are giving the preparation, audit, delivery and publication of the RFS direction in relation to KCOM in each of the SMP markets in relation to private information as set out in Volume 4.
- 4.96 In Section 6 below, we explain why the giving of this direction satisfies the test set out in section 49 of the Act.

SMP condition and SMP directions

- 4.97 The SMP condition is SMP Condition 9 of the suite of SMP conditions we have imposed in Volume 4.
- 4.98 The text of the directions is in Volume 4.

Non SMP markets

Our proposals

- 4.99 In respect of the following wholesale markets, we did not make a provisional SMP finding in our consultation:
- a) WBA
 - b) WFAEL
 - c) ISDN2
 - d) ISDN30
 - e) WCO.
- 4.100 We proposed to remove regulatory financial reporting requirements in those markets, including WFAEL, ISDN2, ISDN30 and WCO markets where there was a 12-month transition period.

Stakeholder responses

- 4.101 KCOM responded that it agreed that it is appropriate to remove the reporting requirements in those markets where Ofcom proposes to find that KCOM has no SMP (i.e. the WBA, WFAEL, ISDN2, ISDN30 and WCO markets). It also agreed with Ofcom's proposal not to impose cost accounting or accounting separation reporting requirements for the proposed transition period in voice markets.²¹⁹ It asked for confirmation that there was no need to revoke the obligations relating to narrowband markets set out in the 2004 Regulatory Accounting Notification.²²⁰

²¹⁹ KCOM response to the 2020 Hull Area WFTMR Consultation, paragraph 7.4.

²²⁰ [Regulatory Financial Reporting Obligations on BT and Kingston Communications – Final Statement and Notification](#) 22 July 2004 (the '2004 Regulatory Accounting Notification').

- 4.102 Those respondents that commented on our overall proposals (Vodafone and Purebroadband) also agreed with the proposals.

Our reasoning and decision

- 4.103 Ofcom is not making an SMP finding in relation to WBA, WFAEL, ISDN2, ISDN30 or WCO markets. We remain of the view that cost accounting and accounting separation remedies relating to these markets should therefore no longer apply. Whilst there will be a 12-month transition period where there will be some regulation in relation to the WFAEL, ISDN2, ISDN30 and WCO markets, none of the remedies we have imposed for the transitional period require a financial reporting remedy.
- 4.104 We have revoked the 2004 Regulatory Accounting Notification.

5. Fixed voice transitional arrangements

- 5.1 In Section 6 of Volume 2, we set out our decision to deregulate the WFAEL, ISDN2/30 and WCO markets on the basis that they do not satisfy the three criteria test and, therefore, are not markets suitable for *ex-ante* regulation.²²¹
- 5.2 In this section, we set out our decision to partially maintain regulation on these markets for a 12-month transitional period.

Our proposals

- 5.3 In our 2020 Hull Area WFTMR Consultation we proposed to deregulate the WFAEL, ISDN2/30 and WCO markets.²²² However, we also proposed to partially maintain regulation in these markets for a transitional period of 12 months.²²³
- 5.4 In proposing the transitional period, we were conscious that there will remain a small number [X] of telecoms providers who will continue to purchase KCOM Line Rental (KLR)²²⁴ in order to serve consumers in the Hull Area.²²⁵ We considered a 12-month transitional period would be proportionate to allow those providers sufficient time to consider their business case and transition to alternative arrangements if they wish, avoiding shocks to the market and harm to consumers.
- 5.5 Figure 5.1, below, sets out the remedies we proposed to maintain during the 12-month transitional period. We did not propose to require KCOM to publish any financial information in relation to its regulated services in the WFAEL, ISDN2/30 and WCO markets during this time.

²²¹ 2021 WFTMR Statement, Volume 2, Section 5.

²²² 2020 WFTMR Consultation, Volume 2, Section 5.

²²³ 2020 WFTMR Consultation, Volume 3, Section 5.

²²⁴ KLR is a wholesale access product which enables other telecoms providers to supply voice services over KCOM's WFAEL, ISDN2 lines or ISDN30 lines.

²²⁵ Less than 0.5% of fixed telephone services are supplied by telecoms providers using KLR. KCOM response dated 5 February 2020 to the s.135 notice dated 8 January 2020.

Figure 5.1: Summary of the proposed transitional remedies on KCOM in the WFAEL, ISDN2, ISDN30 and WCO markets in the Hull Area

WFAEL market	ISDN2/30 markets ²²⁶	WCO market
Provide network access on reasonable request, subject to fair and reasonable pricing	Provide network access on reasonable request	Provide network access on reasonable request, subject to fair and reasonable pricing
Requirement not to unduly discriminate	Requirement not to unduly discriminate	Publish a RO
Publish a RO	Publish a RO	Notify changes to charges
Notify changes to charges		Interconnection
		Provide network access on reasonable request
		Publish a RO
		Notify changes to charges

Stakeholder responses

- 5.6 KCOM made several comments on our proposed fixed voice transitional arrangements:
- a) It agreed that businesses that rent regulated KLR services would need time to adjust their plans, and that a 12-month transitional period is reasonable.²²⁷ However, it asked that we consider a mechanism to allow it to shorten this transitional period should alternative fibre services become available.²²⁸
 - b) It disagreed that a transitional period for WCO and interconnect circuits is necessary. For WCO, it stated that alternative services are available, and it expects the volumes of WCO users to decline. For interconnect, it stated that it has no incentive to withdraw existing time division multiplex (TDM)²²⁹ interconnect until agreements are in place to migrate to IP.²³⁰
 - c) It said that the fair and reasonable pricing obligation should not prevent it from recovering its costs or setting prices that incentivise migration to alternative fibre

²²⁶ These remedies only apply to 'existing' ISDN2 and ISDN30 lines: lines that were purchased or ordered prior to 1 December 2018, consistent with 2017 NMR Statement, paragraphs 11.8-11.12.

²²⁷ KLR is a wholesale access product which enables other telecoms providers to supply voice services over KCOM's WFAEL, ISDN2 lines or ISDN30 lines.

²²⁸ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 6.3.

²²⁹ TDM is a method of putting multiple data streams in a single signal by separating the signal into many segments, each having a very short duration. Each individual data stream is reassembled at the receiving end based on the timing.

²³⁰ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 6.4.

services. While we did not say we would benchmark KCOM's prices against BT, KCOM noted that doing so may not allow for cost recovery.²³¹

5.7 Vodafone argued for a longer transitional period of 24 months. It considered 12 months too short to plan and implement migrations and argued that this could disadvantage vulnerable customers who may be more reluctant to adopt new services.²³²

5.8 Purebroadband agreed with our proposals.²³³

Our reasoning and decisions

Length of the transitional period

5.9 We consider it proportionate for telecoms providers already purchasing regulated KLR services to be able to continue purchasing these services for a transitional period of 12 months. This provides market certainty, giving providers time to consider their business case and transition to alternative arrangements, should they wish to.²³⁴

5.10 Introducing a mechanism to cut short the transitional period would undermine market certainty. Extending the transitional period to 24 months is not, in our view, necessary given the relatively small scale of the market in the Hull Area and the limited potential for consumer harm.²³⁵

Need for a WCO and interconnect transitional period

5.11 We consider it necessary for the transitional arrangements to apply to WCO and interconnect circuits.

5.12 Currently, telecoms providers that rent regulated KLR to provide their customers with voice services have no choice but to buy WCO and interconnect services from KCOM. Therefore, to ensure stability during the transitional period, the regulation should also apply to these markets. Such stability could be undermined by introducing the possibility for KCOM to alter (or threaten to alter) the current arrangements for providing WCO or interconnect to its KLR customers. KCOM could have an incentive to do this in order to disrupt rivals in the market for supplying retail fixed voice services.

²³¹ KCOM first response to the 2020 Hull Area WFTMR Consultation, paragraph 6.5-6.6.

²³² Vodafone response to the 2020 Hull Area WFTMR Consultation, paragraph 2.20.

²³³ Purebroadband response to the 2020 Hull Area WFTMR Consultation, page 3.

²³⁴ For example, providers could migrate WFAEL customers to VoIP services using KCOM's WFLA product and ISDN customers could migrate to KCOM's SIP Trunking service.

²³⁵ In 2019/2020 there were approximately 169,000 WFAEL services in the Hull Area (KCOM RFS19/20) of these less than 0.5% of fixed telephone services are supplied by telecoms providers using KLR [3<] (KCOM response dated 5 February 2020 to the s.135 notice dated 8 January 2020). Approximately 15 lines are captured under our ISDN2/30 regulation.

- 5.13 The existing regulation on interconnection with KCOM's voice network was implemented due to its SMP in the WCO market.²³⁶ During the 12-month transitional period, we have decided to retain the following interconnect obligations:
- a) Requirement to provide network access on reasonable request (interconnect)
 - i) Obligations requiring KCOM to continue to meet reasonable requests to provide access to interconnect circuits and to provide such access on fair and reasonable terms and conditions will remain in place during the transitional period. This is necessary as KCOM could have an incentive not to provide interconnect circuits on a fair and reasonable basis, which would reduce the effectiveness of the other transitional remedies we are imposing on KCOM.
 - b) Requirement to publish a RO (interconnect)
 - i) We are retaining existing requirements for the transparency of charges, terms and conditions during the transitional period, in order to complement the requirement to provide access to interconnect circuits and to provide such access on fair and reasonable terms and conditions. These requirements will ensure other telecoms providers will be able to continue to make effective use of KCOM's voice network during the transitional period.
 - c) KCOM is required to publish a RO that includes:
 - i) A clear description of the services on offer.
 - ii) Terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable providers to make technical and commercial judgments such that there is no material adverse effect on competition.
 - iii) Conditions relating to maintenance and quality (service level agreements and guarantees). The inclusion of service levels, as part of the contractual terms of the RO, that provide for a minimum acceptable level of service, will ensure that services are provided in a fair, reasonable and timely and non-discriminatory fashion.
 - iv) Information relating to technical interfaces and points of interconnection. Such information should ensure that providers are able to make full and effective use of all the services provided.
 - v) Terms and conditions on with KCOM supplies its services.
 - d) Requirement to notify changes to charges (interconnect)
 - i) We are retaining the existing requirement for KCOM to notify changes to charges during the transitional period. KCOM is required to give 56 days' notice of changes

²³⁶ 2017 NMR Statement, paragraphs 17.112-17.113.

to charges²³⁷, which will give telecoms providers time to plan for changes that could occur once KLR services cease to be regulated.

Implementation of a fair and reasonable pricing obligation throughout the transitional period

- 5.14 We consider that a fair and reasonable charges obligation is appropriate for regulated KLR services and WCO, in relation to calls made on any regulated KLR service, during the transitional period. Absent this, KCOM would have the ability to set its prices at such a level that it effectively creates a price squeeze, damaging downstream competition or causing shocks to the markets. This could harm consumers unless providers are given time to make alternative arrangements.
- 5.15 Consistent with this concern, were we required to assess whether KCOM's pricing was fair and reasonable during the transitional period, we would consider whether the pricing amounted to a margin squeeze. We consider that this is necessary and sufficient to protect downstream competition during the transitional period.²³⁸ We do not propose to specifically benchmark KCOM's prices to Openreach's for these products during the transitional period.
- 5.16 KCOM will only be required to provide telecoms providers with KLR services subject to fair and reasonable pricing if they are purchasing any KLR services immediately prior to the beginning of the forthcoming market review period. The fair and reasonable pricing obligation will apply to existing regulated KLR circuits, as well as new KLR circuits that are purchased by such telecom providers within the first 12 months of the review period. KCOM will not be required to provide any other telecoms providers with new KLR circuits.
- 5.17 Consistent with the regulation of ISDN2 and ISDN30 markets in the 2017 NMR Statement, this transitional regulation only applies to ISDN exchange lines that were purchased prior to 1 December 2018.²³⁹
- 5.18 The requirement to provide reasonable network access to WCO, subject to a fair and reasonable pricing obligation, applies to calls originated on regulated KLR services. These existing WCO obligations only apply to regulated KLR services purchased before the beginning of the market review period, as well as any new regulated KLR services which are purchased by those telecoms providers within the first 12 months of the review period. The WCO obligations do not apply to KLR services used to provide ISDN2/30 exchange lines purchased after 1 December 2018.

²³⁷ This notice period was implemented in 2017 NMR Statement, paragraphs 18.71-18.76.

²³⁸ In principle, this does not prevent KCOM from raising its wholesale prices as long as it maintains a sufficient margin with its retail prices.

²³⁹ In NMR 2017 we distinguished between "existing" ISDN lines, installed before 1 December 2018, and "new" ISDN lines, installed after 1 December 2018. We found that existing ISDN2/30 users may find it more difficult to switch to IP-based alternatives because of high migration costs, so any changes to the current service may disproportionately affect them. We targeted our remedies at existing lines to address this concern.

Publication of a RO

- 5.19 We are retaining the condition on KCOM to publish a RO for its services in the WFAEL, ISDN2/30 and WCO markets.²⁴⁰ This is to give visibility to the terms and conditions on which other providers can purchase wholesale services, to ensure KCOM complies with its obligations during the 12-month transitional period.
- 5.20 KCOM is required to publish a RO for its services in the WFAEL, ISDN2/30 and WCO markets, which includes:
- a) a clear description of the services on offer including technical characteristics and operational processes for service establishment, ordering and repair;
 - b) the locations of points of network access and the technical standards for network access;
 - c) conditions for access to ancillary and supplementary services associated with the network access including operational support systems and databases etc.;
 - d) contractual terms and conditions, including dispute resolution and contract negotiation/renegotiation arrangements;
 - e) charges, terms and payment procedures; and
 - f) SLAs and SLGs.

Notify changes to charges

- 5.21 We are retaining the obligation on KCOM to notify (by means of a written notice) changes to standard charges for wholesale network access in the WFAEL and WCO markets in the Hull Area during the transitional period. The notice periods are set out in Figure 5.2 below and only apply to services in the WFAEL and WCO markets that are still subject to the fair and reasonable pricing obligation.

Figure 5.2: Notice period requirements²⁴¹

Notice period	
WFAEL	<p>90 days for changes to the WLR rental charge;</p> <p>28 days for price reductions and price changes relating to the end of a temporary²⁴² price reduction (both in relation to WLR rental charges); and</p> <p>28 days for changes to charges for all other services</p>

²⁴⁰ The RO publication obligation only applies to services in the WFAEL, ISDN 2/30 and WCO markets that are still subject to the fair and reasonable pricing obligation.

²⁴¹ These notice periods were imposed in NMR 2013 and FAMR 2014 and maintained in NMR 2017.

²⁴² A 'temporary' price reduction 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.

WCO

56 days for changes to charges for standard wholesale charges

No undue discrimination (NUD)

5.22 We are retaining the NUD obligation on KCOM for the WFAEL and ISDN2/30 markets, to ensure that there is appropriate protection to remedy the incentive and ability for KCOM to engage in discriminatory practices for KLR services. This obligation applies only to services in the WFAEL and ISDN2/30 markets that are still subject to the network access obligation. It does not apply to the WCO market.²⁴³

Accounting separation and cost accounting obligations

5.23 We are not requiring KCOM to publish any financial information in relation to its regulated services in the WFAEL, ISDN2/30 and WCO markets during the transitional period. The obligation to publish a RO for its services in the WFAEL, ISDN2/30 and WCO markets is sufficient to ensure KCOM complies with its transitional obligations.

Conclusion

5.24 We have decided to partially maintain regulation on the WFAEL, ISDN2/30 and WCO markets for a transitional period of 12 months, as set out above.

5.25 We consider this is consistent with section 46(8A) of the Act which provides that we can continue to treat a person (here KCOM) previously determined as having SMP in a given market, who we determine no longer has SMP in that market, as continuing to have SMP in that market for so long as we consider necessary to ensure a sustainable transition for those benefiting from the obligations imposed as a result of the previous SMP determination.

5.26 For the reasons set out above we consider that the 12-month period is necessary for a sustainable transition for telecom providers from KCOM's services to alternative services. We consider 12 months is no longer than necessary to achieve this aim.

²⁴³ In the 2017 NMR Statement we did not impose a NUD obligation for the WCO market. 2017 NMR Statement, paragraphs 11.150-11.152.

6. Legal tests

- 6.1 In this volume we set out our decision to require KCOM to provide network access and associated pricing and non-pricing remedies designed to support and make effective that network access. In summary, we have decided to impose to the extent set out above the following general remedies in the WLA and the LL Access (including dark fibre) markets:
- a) Requirement to provide network access on reasonable request, and on fair and reasonable terms, conditions and charges (excludes copper-based services in the WLA market);
 - b) Requirements relating to requests for new forms of network access [WLA only];
 - c) Requirement not to unduly discriminate;
 - d) Requirement to publish a reference offer;
 - e) Requirement to notify changes to charges, terms and conditions;
 - f) Requirement to notify technical information;
 - g) Requirement to publish quality of service information as directed by Ofcom;
 - h) Regulatory financial reporting (general accounting separation and cost accounting); and
 - i) Requirement to produce a wholesale pricing transparency report [LL Access only].
- 6.2 As set out in this volume, we are also imposing a specific remedy in the LL Access (including dark fibre) market:
- a) Requirement to provide Ethernet and dark fibre network access in the following circuit configurations:
 - i) connecting end-user premises and KCOM's ODF site or third-party premises; and
 - ii) connecting an end-user premises and another end-user premises.
- 6.3 In order to give regulatory effect to our decision we will set the SMP conditions and give the directions set out in Volume 4.

Section 47 tests

- 6.4 For each SMP condition set out in this statement, we consider that the conditions satisfy the tests set out in section 47 of the Act, namely that the obligations are:
- a) objectively justifiable in relation to the networks, services or facilities to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;

- c) proportionate to what the condition or modification is intended to achieve; and
- d) transparent in relation to what it is intended to achieve.

Objectively justified

- 6.5 We consider that each of the SMP conditions we are imposing are objectively justifiable. The remedies that we are imposing are designed to address the market power that we have identified in our market analysis (Volume 2). As explained in Section 1, our market analysis has found that KCOM has the ability and incentive to:
- a) refuse to supply access and thus restrict competition in the provision of products and services in the relevant downstream markets;
 - b) set excessive wholesale charges or, in combination with downstream prices, engage in a price squeeze behaviour (also referred to as margin squeeze);
 - c) favour its downstream retail businesses to the detriment of its competitors in the relevant retail markets, by both price and non-price discrimination; and
 - d) not maintain an adequate level of service quality in the provision and repair of wholesale services or to discriminate in the quality of provision.
- 6.6 Therefore, in the absence of a requirement to provide network access, supported by associated obligations, KCOM could refuse or impede access, or it could provide access on less favourable terms and conditions compared to those obtained by its own downstream businesses. We are exercising our discretion in setting these obligations in favour of an approach that promotes wholesale access-based competition for the reasons set out in Section 1. We consider that wholesale access-based competition is likely to offer the best long-term outcome for consumers and businesses.
- 6.7 We explain in Sections 2, 3 and 4 for each obligation we are imposing, why we consider that obligation is objectively justified in the context of the markets we are reviewing.

Not such as to discriminate unduly

- 6.8 We consider that the conditions do not discriminate unduly against KCOM. We have concluded that KCOM is the only telecoms provider to hold SMP in the markets that we have identified and the conditions seek to address that market position.

Proportionate

- 6.9 We consider that each of the conditions is proportionate to what that condition is intended to achieve. In each case, we are imposing an obligation on KCOM that: is effective to achieve our aim; is no more onerous than is required to achieve that aim; and does not produce adverse effects which are disproportionate to our aim. We explain why we consider each imposed remedy is proportionate in the context of the markets we are reviewing in Sections 2, 3 and 4.

Transparent

6.10 We consider that each of the SMP conditions is transparent in relation to what is intended to be achieved. The text of the SMP conditions is published in Volume 4 and the intended operation of those SMP conditions is explained in this document. This statement sets out our analysis of responses to the consultation and the basis for our final decisions.

Section 49 tests

6.11 In Section 2, we explain why we are making a direction in the WLA market relating to KCOM's reference offer (RO).

6.12 We consider the direction satisfies the tests set out in section 49(2) of the Act, namely that it is:

- a) Objectively justifiable because the requirements will remove an unnecessary barrier to entry for access seekers in that market and should secure the provision of access wherever in the Hull Area it is reasonably appropriate.
- b) Not unduly discriminatory because it reflects KCOM's market position in the Hull Area.
- c) Proportionate because the requirements will be no more than is necessary to ensure the effectiveness of the regulation.
- d) Transparent because it is clear that the intention of the modifications is to make sure that KCOM's RO contains appropriate provisions as to ancillary services.

6.13 In Section 4, we also explain why we are making the following directions in the WLA and LL Access (including dark fibre) markets relating to regulatory accounting:

- a) Network components direction
- b) Transparency direction
- c) Form of the PPIA audit opinion for the RFS direction
- d) Preparation, audit, delivery and publication of the RFS direction
- e) Form and content direction.

6.14 We consider that the directions satisfy the tests set out in section 49(2) of the Act, namely that in each case the proposed direction is:

- Objectively justifiable because the requirements will seek to ensure that through the information to be provided, both in public and on a confidential basis, stakeholders have sufficient robust information about the products and services they purchase to provide them with reasonable confidence about KCOM's compliance with its SMP conditions and that we have sufficient information necessary to carry out our functions.

- Not unduly discriminatory because it reflects KCOM's market position in the Hull Area. BT is the only other SMP provider, and also has regulatory accounting obligations, and we have explained the reasons for requiring relevant information from KCOM both publicly and on a confidential basis.
- Proportionate because the requirements will be no more than is necessary to ensure the effectiveness of the regulation and ensures that Ofcom and stakeholders are provided with a sufficient level of appropriately robust information and does not extend beyond these.
- Transparent because it is clear that the intention of the modifications is to make sure that the RFS remain fit for purpose and that Ofcom and stakeholders are provided with a sufficient level of information and assurance.

Section 88 tests

- 6.15 We set out in Section 1 of this Volume the risks we see that KCOM might fix its prices at an excessively high level or may impose a price squeeze as a consequence of its SMP in the WLA and LL Access markets, which would have adverse consequences for end-users of public electronic communications services.
- 6.16 In relation to our controls on prices and the associated accounting separation and cost accounting obligations, as required by section 88 of the Act, we consider that the setting of the SMP conditions is appropriate for the following purposes:
- a) Promoting efficiency – we consider that supporting access-based competition promotes efficiency. In the absence of competitive pressures, we believe that KCOM would have limited incentives to reduce the cost of providing WLA services and LL Access. Our requirements encourage KCOM to achieve greater productive efficiency by allowing it to keep any profits it earns from reducing costs over the review period.
 - b) Promoting sustainable competition – the conditions are intended to encourage competitive entry at the most upstream level where we consider that it will be effective in the Hull Area. We consider that during the review period there is a reasonable prospect of wholesale access-based competition emerging.
 - c) Conferring the greatest possible benefits on end-users of public electronic communications services – we consider that wholesale access-based competition will offer the best long-term outcome for consumers and businesses. Our view is that it is necessary to require KCOM to provide wholesale access on fair and reasonable charges in order to set the right conditions for competitive entry. We consider that the long-term benefits to consumers of our approach will be larger than any short-term costs incurred by KCOM.
- 6.17 We do not consider that a demonstrable retail price constraint is present (see Volume 2), or that we could ensure effective and non-discriminatory access without controlling prices and imposing a cost accounting requirement.

- 6.18 We have also taken account of the extent of KCOM's investment in building a full-fibre network. We consider that a price control is an appropriate measure in each of the WLA and LL Access markets. A price control allows KCOM the ability to recover its costs (including a reasonable return on its investments) and can incentivise KCOM to increase its productive efficiency as a way of increasing its profitability. Our requirements also address the risk that KCOM would set wholesale access charges at a level which would discourage competitive entry.
- 6.19 By setting a fair and reasonable obligation and price benchmarks we provide predictability and stability over the control period, consistent with supporting market entry by providers seeking to use KCOM's wholesale access products. We consider competitive conditions in Hull to be such that the investment case for overbuilding KCOM's new full-fibre network in the Hull Area is likely to be very challenging, and we do not consider there is potential for material and sustainable competition at that level of the value chain over this market review period.

Section 46 tests

- 6.20 In Section 5 we explain that we are retaining SMP services conditions to apply to KCOM for a transitional period of 12 months in the WFAEL, ISDN2, ISDN30 and WCO markets. We consider this is consistent with section 46(8A) of the Act which provides that we can continue to treat a person (here KCOM) previously determined as having SMP in a given market, which we determine no longer has SMP in that market, as continuing to have SMP in that market for so long as we consider necessary to ensure a sustainable transition for those benefiting from the obligations imposed as a result of the previous SMP determination.
- 6.21 For the reasons set out in Section 5 we consider that the 12-month period is necessary for a sustainable transition for telecoms providers from KCOM's regulated services to alternative services. We consider 12 months is no longer than necessary to achieve this aim.

Section 87 factors

- 6.22 We are imposing SMP services conditions requiring KCOM to give such entitlements as respects the provision of network access to the relevant network, the use of the relevant network and the availability of the relevant facilities. As explained in Section 2, in determining which conditions are authorised by section 87, we have taken into account in particular the factors set out in section 87(4) of the Act.

Ofcom's duties

- 6.23 As set out in Volume 1, we consider the package of SMP conditions and directions both individually and together meet our duties in sections 3 and 4 of the Act.