

Promoting competition and investment in fibre networks: Hull Area Review 2026–31

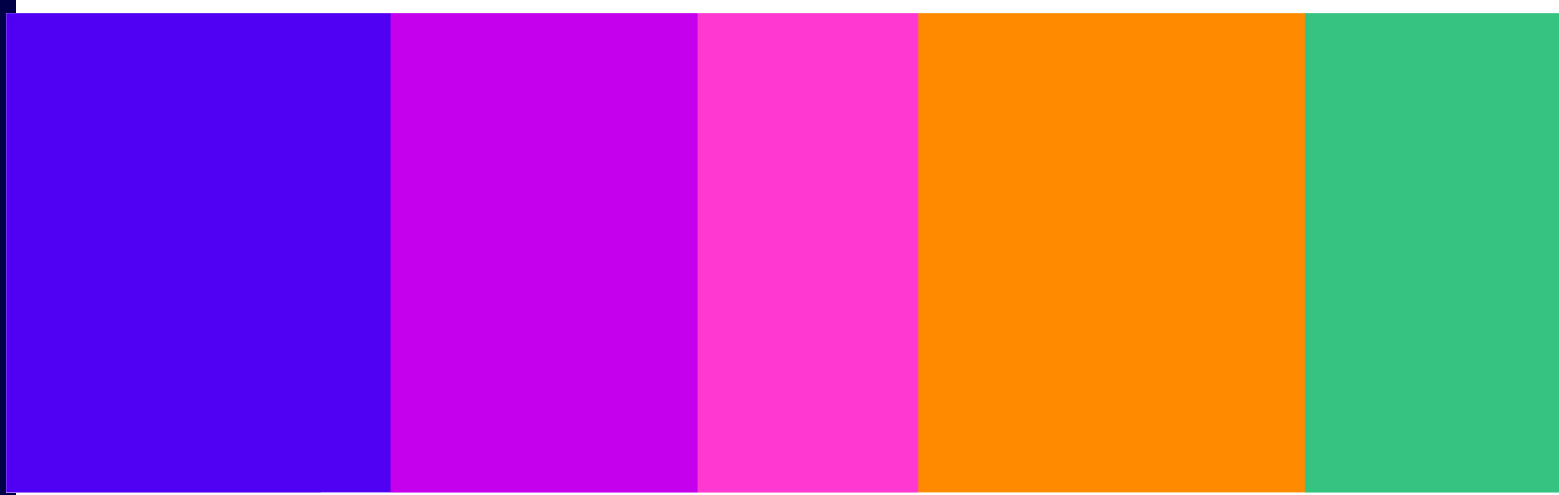
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1. Market context

- 1.1 In this section, we set out background information on the retail and wholesale markets for the provision of broadband and leased line services in the Hull Area. The Hull Area consisted of approximately 198,000 premises in January 2025.¹
- 1.2 Our review considers telecoms services provided at a fixed location in the Hull Area, both broadband and leased lines. These services are delivered over a variety of technologies such as dedicated point to point optical fibre and shared point to multipoint passive optical networks (PON).²

Broadband

- 1.3 This subsection covers:
- a) the structure of the broadband market;
 - b) services provided and take-up of those services; and
 - c) alternative technologies delivering fixed telecoms services.

Structure of the broadband market

- 1.4 The broadband supply chain consists of several links, from infrastructure to sales and marketing, which can be combined within an integrated firm or delivered across several firms.
- 1.5 Fixed telecoms networks are carried by physical infrastructure, such as underground ducts or overhead telegraph poles. Telecoms network operators deploying new network may build their own physical infrastructure or they may use third parties' physical infrastructure, or a combination of both.
- 1.6 Telecoms network operators provide network access to retail internet service providers (ISPs). Retail ISPs typically focus on providing residential consumers and small businesses with broadband services. Some retail ISPs rely on wholesale access to an access network while other retail ISPs are integrated within a network provider.

Telecoms network operators in the Hull Area

KCOM

- 1.7 KCOM is the incumbent telecoms provider in the Hull Area. It operates a vertically integrated model, meaning it controls all stages of broadband service delivery, from owning and using physical infrastructure to deploy its network, to selling directly to consumers and businesses at the retail level. KCOM also provides some regulated and commercial wholesale local access (WLA) services³ although take up of these services to date is very low, as discussed below.

¹ Ofcom analysis of Connected Nations data (collected January 2025).

² Ofcom, March 2025. [Promoting competition and investment in fibre networks: Telecoms Access Review 2026-31](#) (the 'TAR26 March 2025 Consultation'). Annex A6. Paragraphs A6.35-A6.44 provides further details on PONs.

³ WLA services are generally used to provide a retail broadband service.

- 1.8 KCOM completed its roll out of full fibre in 2019 and operates both a full fibre and a legacy copper network.

Alternative networks

- 1.9 Since 2021, alternative network (altnet) operators have rolled out their own full fibre networks, materially expanding their presence in the Hull Area from very low levels of coverage:
- a) MS3 is a regional wholesale provider. In September 2025, MS3 had [redacted] premises ready for service (RFS) in the Hull Area.⁴
 - b) CityFibre is a wholesale provider with substantial coverage across the UK. In early 2025 it acquired Connexin's full fibre network, which had passed around 80,000 premises in the Hull Area during the current, 2021-26, review period.⁵ In November 2025, CityFibre stated that these premises were integrated into its network and available for ISPs to place orders on.⁶
 - c) Grain is an integrated retail-only network provider focused on areas of dense urban premises across the UK. In August 2025, Grain had [redacted] premises RFS in the Hull Area.⁷
- 1.10 As a result of build by altnets, we estimate that as of January 2025 70-79% [redacted]% of premises in the Hull Area had a choice of broadband from KCOM and at least one other network operator.⁸
- 1.11 We expect to see further network expansion by altnets in the Hull Area over the next review period (2026-31).⁹ Until recently, altnets did not have access to KCOM's physical infrastructure (i.e. its ducts and poles). Therefore, almost all the expansion of networks in the Hull Area during the current review period involved altnets building their own physical infrastructure. We expect that physical infrastructure access (PIA) could (subject to its availability) play a more important role in supporting future build, although the rate of build is likely to be slower than during the current review period. In particular:
- a) CityFibre intends to continue the 'work in progress' inherited from Connexin to extend coverage to a further 20,000¹⁰ [redacted] premises and to complete this by [redacted].¹¹ It has also said it has options to extend further throughout Hull over time. [redacted].¹² [redacted].¹³
 - b) MS3's plans [redacted].¹⁴

⁴ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁵ Connexin. 24 March 2025. [CityFibre acquires Connexin's full fibre infrastructure: press release](#). Accessed on 31 October 2025.

⁶ CityFibre. 19 November 2025. [Choice at last- CityFibre brings 30+ ISPs to Hull](#). Accessed on 26 November 2025.

⁷ Grain response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁸ Ofcom analysis of Connected Nations coverage data (collected January 2025). The Connected Nations data does not include Grain although we believe there to be substantial overlap between Grain's build and that of these other two altnets.

⁹ We are not aware of any network build in the Hull Area having been publicly subsidised through Project Gigabit to date. Publicly available data on Project Gigabit accessible through [Thinkbroadband](#). Accessed on 11 November 2025.

¹⁰ CityFibre. 24 March 2025. [CityFibre acquires Connexin's full fibre infrastructure in strategic agreement](#). Accessed on 31 October 2025.

¹¹ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹² CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted] [redacted].

¹³ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹⁴ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

- c) Grain states that it could pass [redacted] premises in the Hull Area. [redacted].¹⁵ Grain also stated that [redacted].¹⁶
- d) KCOM's internal documents indicate [redacted].¹⁷

Retail providers in the Hull Area

- 1.12 KCOM directly supplies its own retail services across the Hull Area as well as supplying wholesale services. Grain also provides direct to retail services.
- 1.13 MS3 and CityFibre provide wholesale access to a number of ISPs.
- a) MS3 listed 30 different smaller ISPs using its network in October 2025, its largest ISPs by take up being [redacted].¹⁸
 - b) CityFibre stated that as of 19 November 2025 over 30 ISPs have access to its network in the Hull Area, including Sky, Vodafone, and TalkTalk.¹⁹ CityFibre has [redacted].²⁰ [redacted] Connexin, which now operates as a retail ISP separate to the network acquired by CityFibre [redacted].²¹
- 1.14 Increased competition at the wholesale level is facilitating entry into the Hull Area by some ISPs that were only available outside the Hull Area. We note that previously none of the five largest UK retail ISPs (BT, Sky, VMO2, TalkTalk and VodafoneThree) provided retail broadband services in the Hull Area:
- a) Sky stated that [redacted].²² [redacted].²³
 - b) VodafoneThree stated that [redacted].²⁴
 - c) PXC, TalkTalk group's wholesale platform which provides simplified integration between network providers and retail ISPs, [redacted].²⁵
 - d) [redacted].²⁶
 - e) [redacted].²⁷ In late September 2025, MS3 announced that it had signed a partnership with Zen Internet.²⁸

Residential and small business fixed broadband services

Take up of residential and business broadband products

- 1.15 KCOM continues to be the main provider of retail services in the Hull Area, although the share of the residential and business broadband market served over altnets has increased over the current review period.

¹⁵ Grain response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹⁶ Grain response dated [redacted] to s135 notice dated [redacted], questions [redacted].

¹⁷ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted]. In its internal document [redacted].

¹⁸ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹⁹ CityFibre. 19 November 2025. [Choice at last- CityFibre brings 30+ ISPs to Hull](#). Accessed on 26 November 2025.

²⁰ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

²¹ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

²² Sky response dated [redacted] to s135 notice dated [redacted], question [redacted].

²³ Sky response dated [redacted] to s135 notice dated [redacted], question [redacted].

²⁴ VodafoneThree response dated [redacted] to s135 notice dated [redacted], question [redacted].

²⁵ PXC response dated [redacted] to s135 notice dated [redacted], question [redacted].

²⁶ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted]. [redacted].

²⁷ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted].

²⁸ ISP review. [ISP Zen Internet Signs Deal to Harness MS3's UK Full Fibre Network UPDATE](#). Accessed on 29 November 2025.

- 1.16 We estimate that currently around 71-80% [redacted]% of all premises in the Hull Area with a fixed broadband connection were connected over KCOM's network.²⁹ Almost all (91-100%) [redacted]% of KCOM's customers were customers of its retail ISP.³⁰ In June 2025 KCOM supplied:
- [redacted] retail connections in the Hull Area (residential and business),³¹
 - [redacted] connections to white label resellers,³² and
 - [redacted] wholesale connections. [redacted].³³ [redacted].³⁴
- 1.17 Taken together, we estimate that altnets currently supply around 20-29% [redacted]% of all fixed broadband connections in the Hull Area:³⁵
- MS3 supplied [redacted] WLA connections in the Hull Area in October 2025. The three largest ISPs on its network, [redacted], account for [redacted]% of these connections.³⁶
 - CityFibre supplied [redacted] wholesale broadband connections over its network in July 2025, [redacted].³⁷
 - In May 2025, Grain supplied [redacted] retail broadband connections in the Hull Area.³⁸
- 1.18 As set out above, we anticipate that more ISPs will enter the Hull Area in the near to medium future.

Retail broadband products and pricing

Retail products and speeds

- 1.19 Almost all households in the Hull Area have access to a full fibre network. By comparison, across the whole of the UK, fibre to the premises (FTTP) access stood at 74% in January 2025.³⁹
- 1.20 The speeds and types of products available in the Hull Area are broadly comparable across ISPs.⁴⁰ However, the products that customers tend to choose differ, with KCOM customers on average choosing lower speeds than customers served by other ISPs.
- KCOM offers residential broadband services with download speeds of 100-900Mbit/s and social tariffs with 30-50Mbit/s download speeds. In July 2025, the median download speed provided to a KCOM residential retail customer was [redacted]Mbit/s. This includes the approximately [redacted] KCOM customers on a social tariff.⁴¹ [redacted].⁴²
 - Connexin offers broadband services with download speeds of 175-2,500Mbit/s. In September 2025, the median download speed offered by Connexin was [redacted]Mbit/s.⁴³

²⁹ Ofcom analysis of provider data.

³⁰ KCOM response dated [redacted] to our s135 notice dated [redacted] concerning the s135 notice dated [redacted], question [redacted].

³¹ KCOM response dated [redacted] to our s135 dated [redacted] concerning the s135 notice dated [redacted], question [redacted].

³² KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted].

³³ This includes connections [redacted]. KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted].

³⁴ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted].

³⁵ Ofcom analysis of provider data.

³⁶ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

³⁷ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

³⁸ Grain response dated [redacted] to s135 notice dated [redacted], question [redacted].

³⁹ Ofcom. May 2025. [Connected Nations update: Spring 2025](#).

⁴⁰ Other ISPs have recently launched services over CityFibre's network.

⁴¹ KCOM response dated [redacted] to s135 notice dated [redacted] concerning the s135 notice dated [redacted], question [redacted].

⁴² KCOM response dated [redacted] to s135 notice dated [redacted] concerning the s135 notice dated [redacted], question [redacted].

⁴³ Connexin response dated [redacted] to s135 notice dated [redacted], question [redacted].

- c) Grain offers download speeds of 150-1,000 Mbit/s and social tariffs with 15-30 Mbit/s download speeds. In May 2025, the median download speed offered by Grain was [redacted]Mbit/s.⁴⁴
- d) MS3 offers its ISPs 100-1,000 Mbit/s wholesale products. In October 2025, 81-90% [redacted]% of wholesale connections supplied by MS3 delivered 1,000Mbit/s download speeds.⁴⁵

Retail pricing

- 1.21 Over the current review period KCOM's prices have been relatively stable but tended to be more expensive than comparable products offered by ISPs in the rest of the UK.
- a) Analysis of advertised broadband prices collected by Pure Pricing shows that across the current review period KCOM's advertised broadband prices have been among the highest in the UK.⁴⁶
 - b) Analysis of KCOM residential retail fixed broadband customer billing data for July 2025 showed that the median monthly rental price paid was £[redacted] per month (including VAT). There is [redacted].⁴⁷
- 1.22 KCOM introduced new retail prices in September 2025 which lowered standard monthly rentals on its 100 to 900Mbit/s products by between £9 and £21 per month compared to its previous list prices.⁴⁸ For example, the standard rental price of its 500Mbit/s residential product reduced from £62.99/month to £47.99/month i.e. a 24% reduction. By comparison, outside the Hull Area, BT offers a 500Mbit/s residential product for £34.99/month.⁴⁹ Although KCOM's prices therefore remain higher than those typical in the rest of the UK, the price changes may reflect an increase in existing and potential competition in the retail market in the Hull Area.
- 1.23 Altnets in the Hull Area, consistent with behaviour observed in the rest of the UK, have offered low introductory prices, typically priced significantly below KCOM's offers for the same speeds. A KCOM management update dated June 2025 states that [redacted].⁵⁰ Our analysis of the KCOM customer data described found no signs that [redacted].⁵¹

Role of existing retail regulation

- 1.24 The upstream remedies we propose to put in place (see Volume 3) to address KCOM's significant market power (SMP) at the wholesale level are just one of the ways we seek to promote competition and improve outcomes for customers in the Hull Area. They sit alongside our other existing initiatives which we expect will support the development of competition over this next review period, including:

⁴⁴ Grain response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁴⁵ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁴⁶ Ofcom analysis of Pure Pricing's Monthly Broadband Pricing Tracker Reports.

⁴⁷ KCOM response dated [redacted] to our s135 Notice dated [redacted], question [redacted].

⁴⁸ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted] and KCOM price list. [Consumer broadband products](#) (dated 28 August 2025). Accessed on 4 December 2025.

⁴⁹ BT Full Fibre500 product with a 24-month contract as at 6 November 2025, price increases to 38.99/month on 31 March 2026 and £42.99 on 31 March 2027. BT. [Best BT Broadband Deals For November 2025 | £0 activation fee](#). Accessed on 11 November 2025.

⁵⁰ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted]. In its internal document 'KCOM. Consumer base management commercial update, (June 2025).'

⁵¹ KCOM response dated [redacted] to our follow-up email dated [redacted] concerning the s135 notice dated [redacted], question [redacted].

- a) One Touch Switch (OTS)⁵² – New rules came into effect on 3 April 2023 requiring providers to operate a ‘One Touch Switch’ (OTS) process for residential customers looking to switch their landline or broadband services. In September 2024, OTS went live. This makes broadband switching quicker, easier and more reliable, so that for the first time customers moving between different networks or technologies will have their switch managed entirely by their new provider.
- b) End Of Contract Notifications (ECNs) and Annual Best Tariff Notifications (ABTNs)⁵³ – Our ECN regulations require broadband providers to notify consumers of when their contracts are coming to an end and of the best deals available, to provide consumers with up-to-date information to help them to decide whether, and when, to switch their provider. In addition, broadband providers must also send any customers who are already out of contract an ABTN explaining that they are out of contract and the other deals available to them.⁵⁴
- c) General Conditions (GC’s) including requirements to provide clear and accurate price information - providers must give consumers and small business customers clear and accurate price information at the point of sale, including both the price of the service and any price rises in pounds and pence rather than as percentage.⁵⁵ This information helps customers understand how much they will pay throughout their contract and makes it easier to compare competing offers.

1.25 Evidence reviewed suggests that OTS is having an impact in the Hull Area. For example,

- a) KCOM’s internal documents [redacted].⁵⁶
- b) A KCOM August 2025 management update found that [redacted].⁵⁷
- c) A KCOM March 2025 CEO Report states [redacted].⁵⁸

Alternative technology to deliver fixed telecoms services

1.26 This market overview has so far focused on fixed line broadband connections. However, broadband services can also be provided to fixed locations using wireless services.

1.27 In a fixed wireless access (FWA) network, wireless links are used to provide broadband connectivity to a fixed location, such as a residential premises. This can be done by a mobile network operator (MNO) or a wireless internet service provider (WISP).

1.28 FWA take-up in the Hull Area has fallen significantly compared to the start of the current review period. In January 2025, around [redacted]% of premises in the Hull Area were served by FWA services.⁵⁹ This was only around a third of the number of premises that were connected by FWA in the Hull Area in 2020.

⁵² Ofcom. September 2024. [Simpler and quicker broadband switching is here.](#)

⁵³ Ofcom. April 2022. [Are you in or out of contract?.](#)

⁵⁴ Ofcom, April 2025. [General Conditions of Entitlement.](#) C1.30-C1.36.

⁵⁵ Ofcom, April 2025. [General Conditions of Entitlement.](#) C1.3-C1.7. This applies to providers of Public Electronic Communications Services when they provide such services to consumers and to microenterprise, small enterprise, and not-for-profit customers unless they have expressly agreed otherwise.

⁵⁶ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted]. In its internal document KCOM ‘Consumer Base management trading meeting update (May 2025).

⁵⁷ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted]. In its internal document KCOM Base Management Update (August 2025).

⁵⁸ KCOM response dated [redacted] to s135 notice dated [redacted], question [redacted]. In its internal document CEO Report (March 2025).

⁵⁹ Ofcom analysis of Connected Nations data (collected January 2025).

- a) Connexin, the largest WISP supplier in 2020, is shifting its customer base onto fixed broadband. Connexin stated that [redacted].⁶⁰
 - b) Take up of FWA provided by MNOs in the Hull Area is also low. BT Group currently supply approximately [redacted] customers in the Hull Area.⁶¹ VodafoneThree is the largest provider, supplying [redacted] customers in August 2025.⁶² Three stated that [redacted].⁶³ This suggests that [redacted].
- 1.29 As we set out in our TAR26 March 2025 Consultation, developments in non-geostationary orbit (NGSO) satellites, including low earth orbit (LEO) and medium earth orbit (MEO) satellites, have improved the availability and quality of satellite delivered fixed broadband services.⁶⁴ However, these services remain significantly more expensive than fixed line services and their user base skews towards more rural areas that are less likely to have access to either a decent fixed broadband line or FWA broadband service.⁶⁵

Leased line services

- 1.30 In this subsection we provide context on the leased line market.
- 1.31 Leased lines provide users with high quality business connectivity services between two fixed locations. Generally, larger organisations such as large enterprises, public sector organisations and MNOs are more likely to buy leased lines than smaller businesses.
- 1.32 Leased line services tend to be symmetric (the upload and download speeds are the same), uncontended (either the capacity is not shared with other users, or the provider has otherwise guaranteed the capacity), and provide a guaranteed speed. Additionally, leased lines may provide a dedicated physical connection which is not shared with other users and therefore provides greater security than residential broadband services. As a result, leased lines can be significantly more expensive per end-user than broadband services which are provided over shared infrastructure. However, there is also increasing availability of leased line equivalent services offered over shared XGS-PON⁶⁶ technology.
- 1.33 Common leased line use cases include providing connectivity between business sites; business connectivity to virtual private networks (VPNs), the internet and cloud computing services; mobile network connectivity (often referred to as ‘mobile backhaul’) and broadband network connectivity (often referred to as ‘fixed backhaul’) which provides connectivity from fixed broadband operators’ equipment back to the operators’ backhaul and core networks.
- 1.34 Below we discuss:
- a) the coverage of leased line networks in the Hull Area;
 - b) the services provided by each network operator; and

⁶⁰ Connexin response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁶¹ BT Group response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁶² Combined data of VodafoneThree response dated [redacted] to s135 notice dated [redacted], question [redacted] and Three response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁶³ Three response dated [redacted] to s135 dated [redacted], question [redacted].

⁶⁴ Ofcom. TAR26 March 2025 Consultation, [Volume 2](#). Paragraph 4.29.

⁶⁵ Ofcom. TAR26 March 2025 Consultation, [Volume 2](#). Paragraphs 2.71-2.74.

⁶⁶ XGS-PON is a 10Gbit/s symmetric PON technology (‘XG’ refers to 10Gbit/s and ‘S’ for symmetric). Symmetric means XGS-PON has a capacity of 10Gbit/s in both downstream (towards the end-user) as well as upstream (towards the provider’s network) direction.

- c) the take up of those services.

Presence of leased line network operators in the Hull Area

- 1.35 As in the broadband market, leased line network operators build their networks using physical infrastructure, such as ducts and poles. They may build this physical infrastructure themselves or deploy network using third party physical infrastructure. The leased line network can then be used to sell leased line services directly to end-users, or to intermediaries who then sell them to end-users.
- 1.36 Leased line networks tend to be built around likely sites of leased line demand such as central business districts or large business parks.⁶⁷ The final connection to the demand site is typically built to order. Therefore, completing the final connection is likely to be a more significant undertaking over longer distances than for broadband networks, where the distance to a RFS property tends to be relatively shorter.
- 1.37 KCOM's ubiquitous coverage allows it to readily provide leased line connections across the Hull Area. We estimate that in December 2023 KCOM had network within 50m of almost all (91-100%) [redacted]% potential leased line demand sites in the Hull Area.⁶⁸ We provide further information on how we calculate leased line network coverage in Annex 7.
- 1.38 Three other network operators offer leased lines in the Hull Area. Although their networks expanded over the current review period, their coverage of leased line demand sites in the Hull Area remains partial. Based on network information as of December 2023 we estimate that:
- a) CityFibre operated leased line network within 50m of 21-30% [redacted]% of potential demand sites in the Hull Area.⁶⁹ CityFibre [redacted].⁷⁰ As discussed above, CityFibre acquired Connexin's network in 2025. [redacted].⁷¹
 - b) MS3 operated leased line network within 50m of 21-30% [redacted]% of potential demand sites in the Hull Area.⁷² MS3 has continued to expand its network since. We therefore expect that the share of demand sites it is close to will have increased.
 - c) Openreach operated leased line network within 50m of 0-10% [redacted]% of potential demand sites in the Hull Area.⁷³ We are not aware of material expansion of the Openreach network in the Hull Area since.
- 1.39 While we are not aware of any further leased line specific build plans, we understand that access to an effective PIA product in the Hull Area could facilitate further leased line build in the Hull Area. [redacted].⁷⁴
- 1.40 We set out general information on network expansion plans above. Given differences in the distribution of leased line and residential broadband customers across the Hull Area it is

⁶⁷ Some networks are built to provide broadband and leased lines, while others may focus primarily or exclusively on one or the other.

⁶⁸ Ofcom analysis of provider data. In the TAR26, we have recently [consulted on extending the buffer distance](#) used in the leased line modelling. As discussed in Annex 7 we do not consider it appropriate to extend this distance in the Hull Area.

⁶⁹ Ofcom analysis of provider data.

⁷⁰ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁷¹ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

⁷² Ofcom analysis of provider data.

⁷³ Ofcom analysis of provider data.

⁷⁴ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted].

uncertain to what extent these build plans will affect the coverage of potential leased line customers.

Leased line services supplied

Products supplied

- 1.41 Leased lines generally use optical fibre to make the physical connection between two points. Leased lines can be provided by a supplier with or without the active electronics required to ‘light’ the fibre for data transmission. An optical fibre connection provided without active electronics is often referred to as a dark fibre connection. Users of dark fibre must attach their own equipment to the fibres to use these passive connections.
- 1.42 Some telecoms providers may also use shared fibre XGS-PON and other high-speed symmetric PON (e.g., 50G-PON) to deliver high-speed ‘leased line equivalent services.’⁷⁵ In these cases some of the shared capacity can be ‘ringfenced’ for a particular end-user to whom the capacity appears uncontended.
- 1.43 We expect that over the next review period the products offered across different leased line networks in the Hull Area will be broadly comparable. KCOM and MS3 [X]. CityFibre [X].⁷⁶
- 1.44 There has been a gradual shift towards active leased line circuits in the Hull Area offering faster speeds.
- a) As of March 2025, KCOM provided active circuits with speeds of [X]Mbit/s to [X]Gbit/s.⁷⁷ The majority [X]% of new circuits which it provided in the 2025 financial year were for 1Gbit/s bandwidths, more than twice the share [X]% in 2021.⁷⁸ The shift in new connections is reflected more gradually in total circuits given that new circuits account for a small proportion of total circuits. Overall, in March 2025, around [X]% of KCOM leased line circuits in the Hull Area offered 1Gbit/s or more bandwidth.⁷⁹
 - b) MS3 currently provide 1 and 10Gbit/s active connections. The large majority [X] of MS3’s active leased line circuits supplied in the Hull Area offer 1Gbit/s download speed.⁸⁰

Prices

- 1.45 Leased lines are significantly more expensive per end-user than broadband services, even broadband packages specifically targeted at businesses. This is for several reasons, including that leased line products have uncontended capacity, better quality of service parameters compared to broadband (e.g. faster repair times), are more likely to have symmetric upload and download speeds, and because some products use dedicated infrastructure.

⁷⁵ We provide further information on leased line equivalent services in paragraphs A6.40-A6.41 in [Annex 6](#) of the TAR26 March 2025 Consultation.

⁷⁶ CityFibre response dated [X] to s135 notice dated [X], question [X] and [X].

⁷⁷ KCOM wholesale pricing transparency report (WPTR) 2025. The WPTR is a confidential report which KCOM is required to provide to Ofcom annually pursuant to [SMP condition 10](#).

⁷⁸ KCOM WPTR 2025 and 2021.

⁷⁹ KCOM WPTR 2025.

⁸⁰ MS3 response dated [X] to s135 notice dated [X], question [X].

- 1.46 For example, at the wholesale level, KCOM's Ethernet connect access service (ECAS) 1G leased line product (upload and download speeds of 1Gbit/s) has an annual rental price of £3,642⁸¹ compared to the annual rental price of £478.56 for an FTTP broadband connection with download speeds of 900Mbit/s (and upload speeds of 500Mbit/s).⁸²

Take up of leased line services

- 1.47 As when we last reviewed the Hull market, KCOM continues to be the main provider of leased line circuits in the Hull Area. KCOM accounted for most (71-90%) [X]% new leased line connections installed in the Hull Area between January 2020 and December 2023. Although variable year to year, in each of these years KCOM accounted for at least 61-80% [X]% of new connections.⁸³ This is a similarly high share to that found in our last Hull review (Hull WFTMR21).⁸⁴
- 1.48 KCOM's total circuit volumes are also an order of magnitude higher than those of its competitors and were rising during the current review period.
- a) In March 2025, KCOM supplied [X] circuits in the Hull Area, up from [X] in March 2022.⁸⁵ KCOM's two largest customers [X] together accounted for around [X]% of circuits provided in each year since 2022.⁸⁶
 - b) In August 2025, MS3 supplied [X] active circuits, up from [X] in January 2022.⁸⁷ [X] purchased [X] dark fibre circuits from MS3.⁸⁸
 - c) In August 2025, CityFibre provided [X] active circuits in the Hull Area.⁸⁹ [X] purchased [X] circuits in the Hull Area from CityFibre, all of which were passive dark fibre.⁹⁰
- 1.49 MS3's [X].⁹¹ [X].
- 1.50 Customer churn is low in the leased line market. Over the review period KCOM's customer base remained very stable, with only small variations in the number of circuits purchased by its largest customers. Further in any year, only a low level of all KCOM's leased line contracts are renewed despite contract lengths typically being short. For example, between March 2024 and 2025, only [X]% of KCOM's circuit contracts were new or renewed despite the large majority [X]% of contracts in this period having a one-year contract length.⁹²
- 1.51 Users of leased line products described high practical barriers to switching leased line providers:

⁸¹ KCOM. [Annual rental charge for ECAS 1Gb 3 year contract excluding VAT and connection charge](#). Accessed on 15 October 2025.

⁸² KCOM. [Annual rental charge for Connect Fibre Res 900](#). Accessed on 15 October 2025.

⁸³ Ofcom analysis of provider data.

⁸⁴ Ofcom. October 2021. [Hull Area Wholesale Fixed Telecoms Market Review 2021-26](#) (the 'Hull WFTMR21'). Volume 2, Paragraph 4.26. The data used was from 2017.

⁸⁵ Ofcom analysis of KCOM WPTRs 2022-2025.

⁸⁶ Ofcom analysis of KCOM WPTRs 2022-2025.

⁸⁷ MS3 response dated [X] to s135 notice dated [X], question [X].

⁸⁸ [X] response dated [X] to s135 notice dated [X], question [X].

⁸⁹ CityFibre response dated [X] to s135 notice dated [X], question [X].

⁹⁰ [X] response dated [X] to s135 notice dated [X], question [X]; [X] response dated [X] to s135 notice dated [X], question [X].

⁹¹ MS3 response dated [X] to s135 notice dated [X], question [X].

⁹² Ofcom analysis of WPTRs 2022-2025.

- a) [REDACTED].⁹³
- b) [REDACTED].⁹⁴
- c) [REDACTED].⁹⁵
- d) [REDACTED].⁹⁶

Take up of dark fibre

1.52 In the Hull WFTMR21, we required KCOM to offer a dark fibre product in the Hull Area. Take up of this regulated product has been extremely limited. [REDACTED]. KCOM stated that as of October 2025 it provides [REDACTED] dark fibre circuits in the Hull Area.⁹⁷

1.53 We estimate dark fibre supplied by all network providers accounted for a small share (10-20%) [REDACTED]% of all new leased line connections between 2020 and 2023.⁹⁸ Purchasers told us that the primary use for dark fibre in the Hull Area is for mobile backhaul:

- a) [REDACTED].⁹⁹
- b) [REDACTED].¹⁰⁰
- c) CityFibre stated that [REDACTED].¹⁰¹

⁹³ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

⁹⁴ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

⁹⁵ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

⁹⁶ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

⁹⁷ KCOM response dated [REDACTED] to our s135 notice dated [REDACTED] concerning the s135 notice dated [REDACTED], question [REDACTED].

⁹⁸ Ofcom analysis of provider data.

⁹⁹ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED] and [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

¹⁰⁰ [REDACTED] response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

¹⁰¹ CityFibre response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED].

2. Wholesale local access market definition and significant market power assessment

- 2.1 In this section we explain our proposed market definition and SMP assessment for the wholesale local access WLA market. The structure is as follows:
- a) Product market definition for WLA;
 - b) Geographic market definition for WLA;
 - c) Three criteria test; and
 - d) SMP assessment.

Product market definition

Background

- 2.2 WLA relates to network assets used to provide telecoms services at a fixed point close to the end-user. Demand for WLA is derived from consumers' retail demand for different products and bundles, including broadband, TV and landline services.
- 2.3 In the Hull WFTMR21 we defined a single product market for WLA services which included all fixed network technologies at all bandwidths and excluded leased line services and services delivered using wireless technologies.¹⁰²

Our proposed approach

- 2.4 We have recently analysed fixed telecoms markets in the rest of the UK (excluding the Hull Area) in the TAR26 March 2025 Consultation.¹⁰³
- 2.5 In general, we would expect that the same product market exists in the Hull Area, as fixed broadband services can be used to perform the same functions regardless of where they are delivered geographically and generally use the same underlying technologies. We therefore:
- a) take the evidence and provisional conclusions set out in the TAR26 March 2025 Consultation as our starting point; and
 - b) then consider whether there are differences between the Hull Area and other areas of the UK which would point towards differences in the product markets.
- 2.6 This is the same approach that we adopted in our last Hull Area market review.

¹⁰² Hull WFTMR21. [Volume 2](#), Paragraph 3.14.

¹⁰³ TAR26 March 2025 Consultation, [Volume 2](#).

Our starting point

- 2.7 In the TAR26 March 2025 Consultation, we provisionally defined a single market for WLA services at all bandwidths for residential and business services. In reaching this provisional conclusion, we found that:
- a) Our focal product should include the supply of WLA services by fixed networks to support the delivery of broadband services to consumers.¹⁰⁴
 - i) Including all bandwidth speeds in the proposed focal product reflects economies of scope inherent in supplying multiple downstream broadband services from a single access connection.
 - ii) Including broadband products targeted at businesses, particularly small and medium-sized enterprises (SMEs), as well as residential customers reflects that the wholesale products used to supply those different retail services are the same. The differentiation between business products and products targeted at residential customers is based on retail market features, not the WLA market.
 - iii) We do not include leased line products in the focal product for WLA. While technology continues to evolve and over time greater economies of scope may emerge between the provision of broadband and leased line services, at this stage we consider it appropriate to start our analysis with separate focal products.
 - b) The constraints posed by retail services provided over wireless technologies are not sufficient to warrant inclusion within the relevant product market. We consider the potential impact of FWA, mobile broadband, and satellite services.¹⁰⁵
 - i) Evidence shows that despite FWA product advancements, FWA take-up is expected to be relatively low compared to fixed broadband. The evidence also shows that there may be capacity restraints limiting FWA supply in some areas. Consistent with this, evidence from network providers suggests they consider the competitive constraint of FWA on fixed access is likely to be limited.
 - ii) Evidence shows the take-up of mobile broadband as an alternative to fixed broadband in homes and businesses is currently – and is expected to remain – relatively low.
 - iii) Compared to fixed broadband, take-up of satellite broadband services is also relatively low. It is relatively more popular in hard-to-reach areas where gigabit capable fixed broadband is unavailable. At present, fixed broadband providers can often offer a service with better performance at lower retail prices than satellite services.
 - c) The constraints posed by leased lines were not sufficient to warrant inclusion within the relevant product market. We expect that residential consumers and most businesses that currently take broadband services will not see leased lines as a substitute to their WLA based service, given that leased lines are in general priced significantly above broadband services and offer many features they may not need. In any case, demand for broadband services from those businesses is likely to account for only a small proportion of overall demand for broadband services.

¹⁰⁴ TAR26 March 2025 Consultation, [Volume 2](#). Paragraphs 4.6-4.12.

¹⁰⁵ TAR26 March 2025 Consultation, [Volume 2](#). Paragraphs 4.13-4.35.

Differences that might affect the product market in the Hull Area

- 2.8 In Hull WFTMR2021 we found FWA was more popular in the Hull Area than in the rest of the UK. We have investigated whether these differences have persisted.
- 2.9 The evidence received shows that take-up of FWA in the Hull Area has fallen. In January 2025, approximately 0-10% [8<] of premises in the Hull Area were served by FWA services.¹⁰⁶ This was only around a third of the number of premises that were connected by FWA in the Hull Area in 2020.¹⁰⁷
- 2.10 We therefore conclude that FWA poses a weak constraint on fixed broadband in the Hull Area and provisionally conclude, as in the rest of the UK, not to expand the product market to include FWA.
- 2.11 We have not identified any other potential differences between the Hull Area and other areas of the UK which would point towards differences in the product markets.

Our provisional view

- 2.12 Based on the analysis set out above, we propose to define a single product market for WLA services at a fixed location which includes:
- a) all fixed networks;
 - b) all speeds; and
 - c) both residential and business services.
- 2.13 We provisionally exclude services in the leased line access (LLA) market, and wireless services.

Geographic market definition

Background

- 2.14 In Hull WFTMR21, we defined the Hull Area as a single geographic market. We found competitive conditions differed between the Hull Area and the rest of the UK. KCOM was the incumbent in the Hull Area and neither VMO2 nor Openreach were present. At the time there was also only minimal altnet presence in the Hull Area.
- 2.15 It remains the case that competitive conditions in the Hull Area are different from the rest of the UK with KCOM the incumbent and neither VMO2 nor Openreach present. However, since our last review there has been significant entry into the Hull Area by altnets, as described in Section 1.

Our proposed approach

- 2.16 The key consideration in defining geographic markets is to identify areas within which competitive conditions are sufficiently similar to enable them to be grouped together as one geographic market.

¹⁰⁶ Analysis of Connected Nations data (collected January 2025).

¹⁰⁷ TAR26 March 2025 Consultation, [Volume 2](#). Paragraph 2.11.

- 2.17 Since market reviews look ahead to how competitive conditions may change in the future, we need to sufficiently capture the expected or foreseeable competitive conditions during the review period.
- 2.18 There is inherent uncertainty in defining geographic markets over the forward look, particularly during a dynamic period in which network rollout and competition is still developing. We have used our regulatory judgment to assess the evidence we have gathered and to take a view on likely developments over the period of the review.

We consider there is one geographic market in the Hull Area

- 2.19 Based on the evidence available, our assessment is that competitive conditions across the Hull Area will be sufficiently similar over the next review period (2026-31) to define a single geographic market. We consider that there is, or there is likely to be potential for, material and sustainable competition across the Hull Area.
- 2.20 We estimate that in January 2025, 70-79% [3<] of premises in the Hull Area were passed by at least one of CityFibre and MS3.¹⁰⁸ Altnets have expanded their footprints since and expect to continue to do so over the upcoming review period. We set this out in more detail in Section 1.
- 2.21 As a result, we expect that a larger share of premises in the Hull Area will be covered by at least one altnet by the end of the next review period. However, the precise scale and location of this additional build is uncertain, such that we are unable now to identify any pockets of the Hull Area where competition is unlikely to develop. This suggests that KCOM faces existing or potential network competition across the Hull Area.
- 2.22 We note that there are some parts of the Hull Area where multiple altnets are already present.¹⁰⁹ We have also considered whether competitive conditions are sufficiently different in those areas than in the rest of the Hull Area such that we should define a separate geographic market. However, these areas are currently small in relative and absolute terms. Take up of altnets in these areas, similar to the rest of the Hull Area, is low (but increasing), indicating that even in these areas competition is still developing. While we expect competitive conditions in these areas to continue to develop over the next review period, as with the rest of the Hull Area, it is uncertain how that will play out, and the extent to which competitive conditions in these areas will be different to other parts of the Hull Area. Therefore, while the presence of altnets may offer greater potential for material and sustainable competition, we do not consider that competition in these areas is sufficiently well established such that they are distinct from the competitive conditions in the rest of the Hull Area.
- 2.23 As such, our provisional conclusion is that for the purpose of the SMP assessment, the constraint on KCOM across the Hull Area is sufficiently similar, such that it represents a single geographic market. We recognise this results in an area where competitive conditions are not completely homogeneous.

¹⁰⁸ Ofcom analysis of Connected Nations data, (collected January 2025). In addition, Grain reported that in August 2025 it had passed [3<] premises in the Hull Area, which equates to 0-10% [3<] of premises in the Hull Area. Grain response dated [3<] to s135 notice dated [3<], question [3<].

¹⁰⁹ See Table A7.2 in Annex 7 for further details.

- 2.24 However, there is no requirement for competitive conditions to be perfectly homogeneous across a geographic market; rather, we should assess whether the level of competition faced by KCOM is likely to be sufficiently similar across a given market.
- 2.25 We also consider that the competitive conditions within the Hull Area differ significantly from those in the rest of the UK, for the reasons set out above.
- 2.26 As such, we propose that the relevant geographic market is the Hull Area. We propose to retain the boundaries of the Hull Area as delineated in Hull WFTMR21.

Application of the three criteria test

- 2.27 In this subsection, we consider whether the three criteria set out in section 79(2B) of the Communications Act 2003 (the 'Act') are met in relation to the WLA market.

High and non-transitory barriers to entry

- 2.28 Barriers to entry and expansion exist in the WLA market, arising from the cost of constructing a significant scale local access network and connecting customers. Further, in the WLA market, the existence of high sunk costs in establishing coverage across an area creates significant economies of scale, because once the high fixed cost of investment in network build has been sunk, these can be spread across a large number of active customers.
- 2.29 Moreover, even where most of the build has been completed, barriers to sustainable entry remain high. Altnets need to achieve sufficient take-up and revenues, to become an established and sustainable competitor to KCOM. As discussed as part of the SMP assessment, absent regulation, this is likely to be highly challenging.
- 2.30 Accordingly, high and non-transitory barriers to entry are likely to persist in the WLA market in the Hull Area.

A market which does not tend towards effective competition

- 2.31 We assess competitive conditions in WLA markets in the SMP assessment section below. In summary, while entry and expansion by MS3, CityFibre and Grain over the last review period has started to reduce KCOM's market share in the Hull Area, it is still high and, as further discussed as part of the SMP assessment, is likely to remain so over the next review period.
- 2.32 While there has been significant build by altnets in the Hull Area, altnets need to achieve sufficient take-up and revenues, as well as scale, to become sustainable competitors to KCOM. This will require further investment. The extent to which these challenges will be overcome remains uncertain, and the potential for sustainable competition is assisted by the existence of continued WLA regulation.
- 2.33 Accordingly, we do not consider the market will tend towards effective competition in the absence of regulation.

Insufficiency of competition law

- 2.34 We set out our competition concerns arising from KCOM's SMP in WLA markets in more detail below. In summary, absent regulation, KCOM's SMP would give it the incentive and ability to engage in forms of conduct that could distort competition and/or harm consumers.

- 2.35 Competition law, in particular the rules prohibiting the abuse of a dominant position, is an important part of the legal framework with which KCOM needs to comply. Given its position of SMP (which equates to the competition law concept of dominance) KCOM has a special responsibility not to allow its actions on the market (where conditions of competition are weak) to distort or impair competition.
- 2.36 However, we consider that competition law remedies would be insufficient to address the identified competition concerns on their own in this context.
- a) First, competition law would focus on tackling the abuse of a dominant position and would not be as effective as *ex ante* regulation in promoting and protecting competition from rival networks in the WLA market and in downstream retail markets.
 - b) Second, regulation must remain effective for the review period, and *ex ante* regulation better enables us to do this as it can be tailored to the particular circumstances in the markets and services provided.
 - c) Third, competition law does not provide enough regulatory certainty, which itself can undermine competition – and regulatory certainty is important in encouraging long-term investment in competing networks. In contrast, a benefit of *ex ante* regulation is that all industry stakeholders are clear in advance on the regulation that will apply.
 - d) Fourth, *ex ante* regulation can facilitate more timely enforcement due to the greater certainty and specificity provided. Although significant fines can be levied for breaches of competition law, which do have some reputational and commercial implications, cases often take considerable time, by which point the damage to competition may be irreversible.
- 2.37 On that basis, while competition law enforcement may be used in appropriate circumstances, we do not consider that it would be sufficient to rely on it alone and so consider that *ex ante* regulation is required.

Provisional conclusion on WLA market definition and the three criteria test

- 2.38 We provisionally consider that the three criteria test set out in section 79(2B) of the Act is met.
- 2.39 We therefore propose to identify the following market for the purposes of making a market power determination: a single market for wholesale local access services provided at a fixed location in the Hull Area.

SMP assessment

Background

- 2.40 In Hull WFTMR21, we concluded KCOM had market power in the WLA market in the Hull Area. KCOM had a near 100% share of the WLA market, which reflected the fact that existing altnets were very small. Further, we considered that the external constraints on KCOM arising from out-of-market products such as FWA services were weak.

Proposed approach and evidence considered

- 2.41 Our SMP assessment analyses the competitive conditions within the Hull Area and therefore determines whether KCOM has a position of SMP in the WLA market.

- 2.42 To conduct this assessment, we ultimately need to evaluate the extent to which over the next review period – absent regulation in the WLA market – KCOM would have the power to behave to an appreciable extent independently of competitors, its own customers and ultimately consumers.
- 2.43 The following subsection is structured as follows:
- a) First, it sets out what different types of evidence indicate about the competitive conditions in the Hull Area.
 - b) It then draws this analysis together to set out our provisional SMP finding.

Market shares in the WLA

- 2.44 Market shares provide a useful first indicator of competitive conditions. The more competing networks that have managed to attain a material share of connections, the stronger the indication that the intensity of competition is greater.
- 2.45 KCOM has a very high market share with 71-80% [redacted]% of the WLA market as of January 2025.¹¹⁰ This reflects that it has a ubiquitous network in the Hull Area, a large installed base, and KCOM retail as an anchor tenant.
- 2.46 While entry and expansion of altnets over the current review period has started to reduce KCOM’s market share in the WLA market, KCOM’s share is still very high and, as further discussed below, is likely to remain so over the review period in the absence of regulation.

Table 2.1: Market shares for proposed WLA market

| | Share of connections (%) |
|-----------|--------------------------|
| KCOM | 71-80 [redacted] |
| MS3 | 11-20 [redacted] |
| CityFibre | 1-10 [redacted] |
| Grain | 1-10 [redacted] |
| Total | 100 |

Source: provider supplied information.

KCOM retail as an anchor tenant

- 2.47 KCOM can rely on its own retail ISP, which accounts for a very large share (91-100%) [redacted]% of KCOM’s WLA connections, as a stable anchor tenant.¹¹¹ KCOM’s strong retail position reduces the current contestable WLA market which could make it more challenging for altnets to drive take-up and become sustainable.
- 2.48 We estimate KCOM has a very high retail share of around 71-80% [redacted]% in the Hull Area.¹¹² KCOM retail has the advantage of being the most established fixed broadband brand in the Hull Area with a large installed base. Although we note that some potential entrants have existing non-broadband customer bases in the Hull Area which they could cross sell

¹¹⁰ Provider supplied information.

¹¹¹ KCOM response dated [redacted] to the s135 notice dated [redacted], question [redacted].

¹¹² Provider supplied information.

broadband to if they entered, we note KCOM retail benefits from strong incumbency advantages.

2.49 The existence of incumbency advantages for KCOM retail are well documented within KCOM's own management documents. For example:

- a) KCOM's [REDACTED]. KCOM's [REDACTED].¹¹³
- b) KCOM's [REDACTED].¹¹⁴
- c) KCOM's [REDACTED].¹¹⁵
- d) KCOM [REDACTED].¹¹⁶
- e) Customer retention efforts set out in KCOM's [REDACTED].¹¹⁷

Barriers to entry and expansion

2.50 We have recently analysed fixed telecoms markets in the rest of the UK (excluding the Hull Area) in the TAR26 March 2025 Consultation. We provisionally found that entrants into the WLA market are likely to face high barriers to entry and expansion:¹¹⁸

- a) Rolling out a network to provide WLA services involves significant capital investment to cover the material costs of construction and customer connections.
 - i) This creates a large economy of scale because once the high fixed cost of investment in network build has been sunk, these can be spread across a large number of active customers. In a similar fashion, there are also economies of scale arising from the fixed cost of operating a network such as marketing, customer operations and maintenance.
 - ii) In addition to build costs, completing the rollout and connecting customers can be affected by the need for wayleaves, availability of resources (including workforce) and the need for street works. This means it will take time before rival networks establish themselves as sustainable competitors.
- b) There are challenges for altnets to achieving sufficient take-up even where they have overcome the barriers to building a network. Most altnets will need to focus on gaining additional take-up and revenues to achieve financial sustainability and attract further investment, which is required to fund any residual build and fund customer connections to the network they have already built. In doing so we found they face challenges including:
 - i) attracting retail customers can be difficult due to switching costs;
 - ii) securing deals with large wholesale customers can assist new entrants in becoming established, but this is a lengthy, complex and uncertain process; and
 - iii) in the absence of SMP regulation of the WLA markets, BT would have the ability to engage in strategic behaviour that makes it more difficult for altnets to gain take-up, as well as deter additional network build.

2.51 We consider that these barriers are likely to also be present for altnets seeking to enter or expand into the WLA market in the Hull Area, particularly given KCOM's strong retail

¹¹³ KCOM response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED]. In its internal document [REDACTED].

¹¹⁴ KCOM response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED]. In its internal document [REDACTED].

¹¹⁵ KCOM response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED]. In its internal document [REDACTED].

¹¹⁶ KCOM response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED]. In its internal document [REDACTED].

¹¹⁷ KCOM response dated [REDACTED] to s135 notice dated [REDACTED], question [REDACTED]. In its internal document [REDACTED].

¹¹⁸ TAR26 March 2025 Consultation, [Volume 2](#). Paragraph 4.140-4.144.

position and the more limited existing wholesale volumes.¹¹⁹ We note that absent SMP regulation KCOM may in the Hull Area have a similar ability as BT in the rest of the UK to deter altnet take-up and expansion. Under the modified Greenfield approach, we assess SMP in the absence of regulation in the WLA market. This means that our assessment includes conduct that could take place if KCOM faced no regulation in WLA.

Countervailing buyer power

- 2.52 Countervailing buyer power is likely to be weak given ISPs cannot pose a credible threat to switch sufficiently large volumes of consumers to alternative suppliers.
- 2.53 Purchasers may have a degree of buyer power where: a) they purchase a significant and material proportion of a supplier's total volumes; and b) they have a credible threat of switching to an alternative supplier, or to self-supply, to an extent that would materially impact the supplier's profitability.
- 2.54 Neither of these conditions exist in Hull. KCOM retail accounts for the vast majority (91-100%) [§<] of KCOM's WLA volumes.¹²⁰ Buyers who could in principle exert countervailing buying power therefore account for only 0-10% [§<] of KCOM's volumes, reducing any buyer power.

Provisional findings

- 2.55 As set out in our product market definition, we consider KCOM faces weak out of market constraints.
- 2.56 Based on the preceding analysis, we provisionally conclude that KCOM will have SMP in the WLA market in the Hull Area for the duration of the next review period.

Consultation questions

Question 2.1: Do you agree with our proposed market definition for WLA? Please set out your reasons and supporting evidence for your response.

Question 2.2: Do you agree with our provisional conclusion that KCOM holds SMP in the supply of WLA products in the Hull Area? Please set out your reasons and supporting evidence for your response.

¹¹⁹ The large wholesale customers in the rest of the UK do not have an existing broadband base in the Hull Area to migrate. As noted above, they may have existing non-broadband customer bases in the Hull Area to which they could cross sell broadband.

¹²⁰ KCOM response dated [§<] to our follow-up email dated [§<] concerning the s135 notice dated [§<], question [§<].

3. Leased line access market definition and significant market power assessment

3.1 In this section we explain our proposed market definition and SMP assessment for the leased line access (LLA) market. The structure is as follows:

- a) Product market definition for LLA;
- b) Geographic market definition for LLA;
- c) Three criteria test; and
- d) SMP assessment.

Product market definition

Background

3.2 LLA services are services which connect between end-user sites and the first point of aggregation, or in some cases, between end-user sites. Typically, LLA services have offered:

- a) capacity which is uncontended (and so does not fluctuate and is not subject to reduction) and symmetric (the capacity is the same in both directions);
- b) additional quality of service features, such as fast repair times and installation times, reserved bandwidth and diverse physical routes (to eliminate single points of failure); and
- c) often a dedicated physical connection between the user site and the provider's network (providing greater security).

3.3 These are different from other services such as consumer and business broadband connections which tend to be contended and are often asymmetric. In addition, leased lines tend to be significantly more expensive as costs are likely to be shared across fewer users.

3.4 In the Hull WFTMR21, we defined a single product market for LLA, which:

- a) included services at all bandwidths;¹²¹
- b) included dark fibre used to supply or self-supply leased line services;
- c) included mobile backhaul in the same market as enterprise customers; and
- d) excluded business-grade connectivity services provided over Ethernet first mile (EFM) and broadband.

Our proposed approach

3.5 As for WLA services, in general, we would expect that the same product market exists in the Hull Area as in the rest of the UK, as leased line services can be used to perform the same functions regardless of where they are delivered geographically. We therefore:

¹²¹ This included all fibre-based Ethernet and wave division multiplexing (WDM) services.

- a) take the evidence and provisional conclusions set out in the TAR26 March 2025 Consultation as our starting point; and
- b) then consider whether there are differences between the Hull Area and other areas of the UK which would point towards differences in the product markets.

3.6 This is the same approach that we adopted in our last Hull Area market review.

Our starting point

3.7 In the TAR26 March 2025 Consultation, we provisionally conclude that there is a single product market for leased line access services at all bandwidths, which includes:¹²²

- a) all wholesale fibre-based Ethernet and WDM services, at all bandwidths;
- b) leased line equivalent services delivered over symmetric PON (e.g. XGS-PON);¹²³ and
- c) dark fibre used to supply or self-supply leased line services.

3.8 We provisionally concluded that the product market excludes broadband services, wireless technologies, and inter-exchange connectivity (IEC) services between BT exchanges.¹²⁴

3.9 In reaching this provisional conclusion, we found that:

- a) All bandwidths are part of the same product market, based on supply-side substitutability.
 - i) Providers of point-to-point leased lines are equally able to supply all bandwidths, and so able to switch between them quickly and at low cost.
 - ii) Given that we found that there is supply-side substitutability between different bandwidths, we did not consider it necessary to come to a view on whether leased line services of different bandwidths are also substitutable from a consumer's perspective.
- b) Leased line equivalent services delivered over symmetric PONs (such as XGS-PON) are in the same product market.
 - i) We expect that for many leased line customers, the key service features are symmetry of upload and download speeds, uncontended capacity, and the continuity and reliability of the service, guaranteed by quality-of-service parameters such as fast repair times and continuous support.
 - ii) We find some symmetric PON (such as XGS-PON) services offer many of these features. For example, symmetric PON can deliver symmetric download and upload speeds, uncontended capacity and quality of service parameters similar to many point-to-point leased line services. We refer to such services as 'leased line equivalent' (LL-equivalent) services.
 - iii) We acknowledge LL-equivalent services do not replicate every feature of a point-to-point leased line or the full range of leased line bandwidths. As such,

¹²² TAR26 March 2025 Consultation, [Volume 2](#). Paragraphs 5.2.

¹²³ By 'leased line equivalent' we mean services with features such as uncontended capacity, symmetric download and upload speeds, and quality of service parameters similar to point-to-point leased line services (e.g. fast repair times compared to WLA services). These services can be provided over symmetric PONs e.g. XGS-PON with 10Gbit/s capacity in both the downstream and upstream direction. GPON technology, which typically has asymmetric capacity (2.5Gbit/s in downstream and 1.25Gbit/s in upstream direction), is less able to provide 'leased line equivalent' services.

¹²⁴ TAR26 March 2025 Consultation, [Volume 2](#). Paragraphs 5.3.

LL-equivalent services may not be a substitute for point-to-point leased line services for all leased line customers.

- c) Dark fibre is part of the same product market as leased line access services, based on supply-side substitutability.
 - i) Where networks are already connected to an end-user site, the network operator can switch between supplying dark fibre and LLA services quickly and at low cost.
 - ii) Where networks are not already connected, dark fibre providers are equally able to supply leased line access services as any other supplier, as the incentives to extend their networks will be broadly similar for both types of services.
- d) Broadband access services are not part of the LLA market.
 - i) We expect broadband and leased line services to continue to have distinct features. Broadband services cannot offer many of the characteristics of leased lines, as they are asymmetric (meaning the upload speed is much lower than the download speed) and contended (and so capacity is not guaranteed).
 - ii) From a demand-side perspective, those business customers who are already willing to pay the high prices for a leased line are likely to be doing so due to its non-price characteristics, meaning they are unlikely to consider cheaper broadband services as a close substitute.
 - iii) From a supply-side perspective, we considered it unlikely that WLA providers can enter the LLA market at the speed required to constrain a hypothetical monopolist. WLA providers would need to invest in their network and operational capability to be able to offer key features of leased lines such as uncontended capacity and quality of service parameters such as fast repair times. Further, we understand that provider reputation and credibility are important characteristics for winning leased line customers. These may be difficult for a WLA-focused provider to acquire quickly.
 - iv) Wireless services, including FWA services, satellite connectivity and point-to-point wireless links used to provide mobile backhaul are not in the leased line access product market. These technologies cannot reliably offer the higher bandwidths, uncontended capacity, and higher quality of service parameters that leased line customers typically require. There is evidence FWA and satellite services are used as backups (i.e. complements) to their fixed connectivity, rather than as substitutes.
 - v) We find that IEC services are not part of the LLA market. Although IEC services typically provide similar products to those in the LLA market they are not used for access services. Instead, they carry aggregated end-user traffic between specific BT exchanges located in different geographic areas over larger distances.

3.10 The TAR26 March 2025 Consultation provisional product market definition largely maintains the definition used in the Hull WFTMR21 and WFTMR21¹²⁵ where we also found all bandwidths, all customers as well as dark fibre were within the same product market. However, unlike in these previous reviews, the TAR26 March 2025 Consultation proposes

¹²⁵ Ofcom. March 2021. [Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26](#), (WFTMR21).

that due to technical and product innovation LL-equivalent services delivered over symmetric PON are now also part of the product market.

Differences that might affect the product market in the Hull Area

3.11 We have not identified any reasons to consider that the product market in the Hull Area should differ compared to the definition identified in the rest of the UK in our TAR26 March 2025 Consultation.

Our provisional view

3.12 We consider that the types of leased line and LL-equivalent services supplied and demanded in the Hull Area are similar to those in the rest of the UK. As such, we have found no reasons to consider the product market in the Hull Area should differ materially from that in the rest of the UK as provisionally defined in the TAR26 March 2025 Consultation.

3.13 Based on the analysis set out above, we propose to define a single product market for LLA services at a fixed location which includes:

- a) all wholesale fibre-based Ethernet and WDM services, at all bandwidths;
- b) leased line equivalent services delivered over symmetric PON (e.g. XGS-PON); and
- c) dark fibre used to supply or self-supply leased line services.

3.14 We provisionally conclude that the product market for LLA services excludes:

- a) broadband services; and
- b) wireless technologies (including FWA, satellite and point-to-point wireless links (such as microwave links) used to provide mobile backhaul.

Geographic market definition

Background

3.15 In Hull WFTMR21, we defined a single geographic LLA market in the Hull Area.

Our proposed approach

3.16 The key consideration in defining geographic markets is to identify areas within which competitive conditions are sufficiently similar to enable them to be grouped together as one geographic market.

3.17 Since market reviews look ahead to how competitive conditions may change in the future, we need to sufficiently capture the expected or foreseeable competitive conditions during the next review period.

3.18 There is inherent uncertainty in defining geographic markets over the forward look, particularly during a dynamic period in which network rollout and competition is still developing. We have used our regulatory judgment to assess the evidence we have gathered and to take a view on likely developments over the period of the review (2026-31).

We consider there is one geographic market in the Hull Area

3.19 As in previous reviews, we provisionally conclude that conditions within the Hull Area differ from the conditions in the LLA markets in the rest of the UK, where Openreach has a much

higher-level coverage and take up (and KCOM is not present or has a much lower level of coverage).

- 3.20 Competition in the LLA market relies on the presence of competing networks able to supply a customer who requires a leased line. Competitive conditions in the LLA market are primarily (but not solely) driven by the number of competing networks that are, or plan to be, nearby a demand site.
- 3.21 On a forward-looking basis, we consider that Openreach, CityFibre, MS3 and leased line only operators all are, or have the potential to be, material and sustainable competitors to KCOM in the Hull Area:
- a) MS3 offers both active and passive leased lines, and its volumes have [~~]~~, as set out in the market context section at paragraphs 1.48-1.49.
 - b) In the TAR26 March 2025 Consultation, we found that across the UK, CityFibre is gaining LLA market traction and has well-developed plans to compete and grow its position in the provision of LLA services.¹²⁶ We would not expect this to be materially different in the Hull Area to the rest of the UK.
 - c) Openreach is a large established provider of LLAs across the UK.
 - d) There are also some operators who specialise in leased line provision (i.e. do not supply WLA services) with network in the Hull Area.¹²⁷
- 3.22 We have therefore looked at the potential demand sites across the Hull Area alongside KCOM and competing networks' presence and considered this in the context of our wider understanding of the competitive dynamics in the LLA market.
- 3.23 In particular, we count network presence by identifying a relevant LLA provider as 'within reach' if its network is measured to be within 50m distance of a demand site (in line with the WFTMR21). The purpose of the distance is therefore to capture the distance at which LLA providers can supply – and compete for – customers who require a leased line, thereby informing our assessment of competitive conditions. We consider that a 50m buffer distance is an appropriate proxy for network presence since it captures:
- a) networks with existing connections to a demand site ('fibre-connected'). Where they are already fibre-connected to the customer, rival suppliers can offer the full suite of bandwidths relatively quickly and at little incremental cost.
 - b) networks which need short customer-specific network extensions. This is based on evidence indicating that LLA providers need to dig to install new duct and reach a customer, and that LLA providers typically find it economic to dig only short distances for customer-specific network extensions.
- 3.24 We note that we are currently consulting on whether to extend the 50 metre "buffer distance" used to determine whether a network is 'in reach' of a demand site for our proposed TAR geographic markets for LLA Areas 2 and 3.¹²⁸ This is in response to stakeholder views that in the rest of the UK, PIA makes it less costly and/or easier to connect customers over longer distances. We consider that this issue does not currently affect our assessment of the Hull Area. Under our modified Greenfield approach, we carry

¹²⁶ TAR26 March 2025 Consultation, [Volume 2](#). Paragraph 5.90.

¹²⁷ Based on our December 2023 data, Colt and Neos - LL-only providers – have network within 50m of [~~]~~% and [~~]~~% respectively of leased line demand sites in the Hull Area. No other LL-only providers are within 50m of leased line demand sites in the Hull Area.

¹²⁸ Ofcom. November 2025. [Further consultation on leased line market analysis and various pricing issues](#).

out our assessment in the absence of regulation in the LLA market, meaning our assessment assumes there is no regulated PIA product in place. In any event, we note that PIA is still relatively new in the Hull Area, and as such, the relevance of evidence on its impact from the rest of the UK to the Hull Area is uncertain.

- 3.25 Based on data gathered for TAR26, reflecting LLA coverage in December 2023, we find that KCOM is the only LLA provider within reach of the majority of demand sites in the Hull Area:¹²⁹
- a) The Hull Area is a relatively small geographic area and contains less than 1% of the number of potential demand sites found in the rest of the UK. Demand is spread across the Hull Area.
 - b) KCOM maintains existing infrastructure within 50m of almost all (90-100%) [3<] potential demand sites in the Hull Area.
 - c) By comparison, infrastructure belonging to at least one competing network provider is located within 50m of only 41% of potential demand sites in the Hull Area. This means that most (59%) potential demand sites have no alternative available. Of those that do, most (76%) only have one available, and a very small proportion (24%) have two available.

Table 3.1: Share of potential LLA demand sites in the Hull Area, December 2023

| Network operator | % demand sites within 50m of network |
|--------------------------|--------------------------------------|
| KCOM deployed build | 90-100 [3<] |
| CityFibre deployed build | 20-30 [3<] |
| MS3 deployed build | 20-30 [3<] |
| Openreach deployed build | 0-10 [3<] |

Source: Ofcom analysis of the TAR Network Reach dataset.

- 3.26 The number of networks in reach of leased line demand sites in the Hull Area will likely have increased since this data was collected. Since December 2023, MS3 and CityFibre have expanded their network coverage, as set out in Section 1. This expansion will likely have increased these providers' coverage of leased line demand sites, even if doing so was not the primary objective of their network build.
- 3.27 Looking forward, we expect that over the next review period coverage of leased line demand sites in the Hull Area will increase. However, we have received no information on the potential locations of further network expansion in the Hull Area, so we are unable now to identify any subset of leased line demand sites in the Hull Area where competition is unlikely to develop.
- 3.28 We note that there are demand sites in the Hull Area where multiple networks are within reach. However, the number of these sites is small in relative and absolute terms. We consider that competition remains nascent across the Hull Area and there are no areas

¹²⁹ This analysis is described in more detail in Annex 7.

where competition is sufficiently well established such that competitive conditions are demonstrably different in those areas than in the rest of the Hull Area.

- 3.29 As such, our provisional conclusion is that for the purpose of the SMP assessment, the constraint on KCOM across the Hull Area is sufficiently similar, such that it represents a single geographic market.
- 3.30 We note that there is no requirement for competitive conditions to be perfectly homogeneous across a geographic market; rather, we should assess whether the level of competition faced by KCOM is likely to be sufficiently similar across a given market.
- 3.31 We also consider that the competitive conditions within the Hull Area differ significantly from those in the rest of the UK, for the reasons set out above.
- 3.32 As such, we have provisionally concluded that the relevant geographic market is the Hull Area. We propose to retain the boundaries of the Hull Area as delineated in Hull WFTMR21.
- 3.33 We plan to take account of updated LLA data on network infrastructure (up to June 2025) and LLA demand sites (up to August 2025) for our final Statement.

Application of the three criteria test

- 3.34 In this subsection, we consider whether the three criteria set out in section 79(2B) of the Act are met in relation to the LLA market.

High and non-transitory barriers to entry

- 3.35 The LLA market is characterised by high barriers to entry and to expansion. This is because there are significant economies of scale in building a LLA network, and also because there are barriers to gaining customers once a network is built. We discuss both these factors further as part of our SMP assessment below.

A market which does not tend towards effective competition

- 3.36 We assess competitive conditions in the LLA market below. In summary, KCOM retains a high market share across the LLA market in the Hull Area. Its position did not materially change compared to the start of the current review period and as further discussed as part of the SMP assessment, it is likely to remain so over the next review period.
- 3.37 While there has been investment in the networks that provide leased lines alongside broadband, LLA providers have only seen modest increases in take up. To become sustainable competitors to KCOM these providers will require further investment. The extent to which take up will increase remains uncertain, and the potential for sustainable competition is assisted by the existence of continued LLA regulation.
- 3.38 Accordingly, we do not consider the market will tend towards effective competition in the absence of regulation.

Insufficiency of competition law

- 3.39 We set out our competition concerns arising from KCOM's SMP in LLA markets in more detail below. In summary, absent regulation, KCOM's SMP would give it the incentive and ability to engage in forms of conduct that could distort competition and/or harm consumers.
- 3.40 Competition law, in particular the rules prohibiting the abuse of a dominant position, is an important part of the legal framework with which KCOM needs to comply. Given its position

of SMP (which equates to the competition law concept of dominance) KCOM has a special responsibility not to allow its actions on the market (where conditions of competition are weak) to distort or impair competition.

- 3.41 However, we consider that competition law remedies would be insufficient to address the identified competition concerns on their own in this context.
- a) First, competition law would focus on tackling the abuse of a dominant position and would not be as effective as ex ante regulation in promoting and protecting competition from rival networks in the LLA market and in downstream retail markets.
 - b) Second, regulation must remain effective for the review period, and ex ante regulation better enables us to do this as it can be tailored to the particular circumstances in the markets and services provided.
 - c) Third, competition law does not provide enough regulatory certainty, which itself can undermine competition – and regulatory certainty is important in encouraging long-term investment in competing networks. In contrast, a benefit of ex ante regulation is that all industry stakeholders are clear in advance on the regulation that will apply.
 - d) Fourth, ex ante regulation can facilitate more timely enforcement due to the greater certainty and specificity provided. Although significant fines can be levied for breaches of competition law, which do have some reputational and commercial implications, cases often take considerable time, by which point the damage to competition may be irreversible.
- 3.42 On that basis, while competition law enforcement may be used in appropriate circumstances, we do not consider that it would be sufficient to rely on it alone and so consider that *ex ante* regulation is required.

Provisional conclusion on LLA market definition and three criteria test

- 3.43 We provisionally consider that the three criteria test set out in section 79(2B) of the Act is met.
- 3.44 We therefore propose to identify the following market for the purposes of making a market power determination: a single market for leased line local access services provided at a fixed location in the Hull Area.

SMP assessment

Background

- 3.45 In Hull WFTMR21, we concluded KCOM had market power in the LLA market in the Hull Area. We found that KCOM accounted for a high proportion of new connections in the market for LLA and that most business sites had limited alternative options for LLA.

Proposed approach and evidence considered

- 3.46 Our SMP assessment analyses the competitive conditions within the Hull Area and therefore determines whether KCOM has a position of SMP in the LLA market.
- 3.47 To conduct this assessment, we ultimately need to evaluate the extent to which over the review period - absent regulation in the LLA market - KCOM would have the power to

behave to an appreciable extent independently of competitors, its own customers and ultimately consumers.

3.48 The subsection is structured as follows:

- a) First, we set out what different types of evidence indicate about the competitive conditions in the Hull Area.
- b) We then draw this analysis together to set out our provisional SMP finding.

Market shares and take up

3.49 KCOM accounts for a persistently high share of leased line circuits provided in the Hull Area. This indicates that it faces limited competition from rival network presence.

3.50 KCOM accounted for most (71-80%) [redacted]% new leased line connections installed in the Hull Area between January 2020 and December 2023. Although variable year on year, in each of these years KCOM accounted for at least 61-70% [redacted]% of new connections.¹³⁰ This is a similarly high share to that found for the 2017 to 2019 period in Hull WFTMR21.¹³¹

3.51 KCOM total circuit volumes are an order of magnitude higher than those of its competitors and were rising during the current review period.

- a) In March 2025, KCOM supplied [redacted] circuits in the Hull Area, up from [redacted] in March 2022.¹³² Over the review period KCOM's customer base remained very stable, with only small variations in the number of circuits purchased by its largest customers. All KCOM's circuits were active.¹³³
- b) MS3 supplied [redacted] circuits, up from [redacted] in January 2022.¹³⁴
- c) In August 2025 CityFibre provided [redacted] active circuits in the Hull Area.¹³⁵ [redacted] purchased [redacted] circuits in the Hull Area from CityFibre, all of which were passive dark fibre.¹³⁶
- d) Leased line-only operators supplied [redacted] circuits between 2020-23.

3.52 We expect that KCOM's share could reduce over the next review period although the extent of any reduction is uncertain. CityFibre [redacted].¹³⁷ MS3's 2025 budget forecast [redacted].¹³⁸ [redacted].

Competition from existing presence of network infrastructure

3.53 Where KCOM has network presence, it has a significant competitive advantage as it will be able to service customers quickly and at a significantly lower cost.

3.54 We consider competitive constraints from rival networks are likely to be strongest where networks are already connected or very close to demand sites (such that they only require very short network extensions). This reflects the fact that the costs and time to supply will be lower, meaning they are better able to compete for LLA customers. Therefore, a greater

¹³⁰ Ofcom analysis of the leased line provisions dataset.

¹³¹ Hull WFTMR21. [Volume 2](#), paragraph 4.26. The data used was new connections between 2017-2019.

¹³² KCOM WPTR 2025.

¹³³ Ofcom analysis of KCOM WPTRs 2022-2025.

¹³⁴ MS3 response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹³⁵ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹³⁶ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted]; [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹³⁷ CityFibre response dated [redacted] to s135 notice dated [redacted], question [redacted].

¹³⁸ [redacted] response dated [redacted] to s135 notice dated [redacted], question [redacted].

number of competing networks already connected to, or very close to, demand sites is likely to lead to a greater competitive constraint on KCOM.

- 3.55 We have assessed various infrastructure indicators which show that existing infrastructure which is already connected or very close to demand sites is more limited for rival networks than KCOM in the majority of the Hull Area (as set out in our geographic market definition subsection above). This is likely to give KCOM significant cost and time advantages, reducing the competitive pressure from rival infrastructure.
- 3.56 Even when KCOM is not already connected and digs a new duct, the dig length required tends to be significantly shorter than for competing providers. Based on new connections between 2020 and 2023, KCOM's median dig distance was 0-10m [3<]m compared with 21-30m [3<]m for CityFibre and 31-40m [3<]m for Openreach. [3<].¹³⁹ Therefore, KCOM is still likely to have a speed and cost advantage over rival networks in winning a new connection, even when both need to dig from existing infrastructure in order to supply the customer.
- 3.57 KCOM's incumbency advantage, described in more detail in the next subsection will likely continue to act as a barrier to other networks' ability to compete in the Hull Area to some extent over this review period.

Barriers to entry and expansion

- 3.58 Building a network has very high fixed costs and takes time, absent access to an effective PIA product, which constitutes a barrier to entry to the market. Even where it is technically possible to use network built for WLA purposes to provide LLA services, demand for these different types of services may not overlap. For example, [3<].¹⁴⁰
- 3.59 Once an entrant has built a network, KCOM will likely continue to have a significant cost and time advantage for retaining existing LLA connections as well as winning new LLA connections given its network is already connected to virtually all demand sites across the Hull Area. It is more likely that competing networks will have to dig to a site they are not already connected to, which will take additional time, and they will likely incur additional costs, depending on how far their network is from the demand site. We expect this barrier to persist, to some extent, for this review period.
- 3.60 Outside of the high costs of building a network and connecting customers, there are other barriers to entry and expansion in the LLA market. These include the importance of a track record of service, reliability and various costs in being able to offer the continuity of service that is important to LLA customers. Although not insurmountable, these barriers take time and significant investment to overcome and so will affect the competitive constraints from rival networks in this review period.
- 3.61 Major buyers of leased lines acknowledge the barriers to switching leased line supplier in the Hull Area, as set out at paragraph 1.51 above.
- 3.62 Further, a KCOM LLA customer considering switching existing circuits to an alternative provider will likely face switching costs, which may act as a barrier to switching. These switching costs might include early termination fees, dual payment while circuits are switched, excess construction charges (ECCs) if the alternative provider must dig to the demand site, as well as new connection charges.

¹³⁹ Ofcom analysis of the leased line provisions dataset.

¹⁴⁰ [3<] response dated [3<] to s135 notice dated [3<], question [3<].

Countervailing buyer power

- 3.63 We do not consider there to be sufficient countervailing buyer power to constrain KCOM's position in the Hull Area. In many locations customers have no alternative to KCOM. Even where customers have an alternative provider to KCOM, there are significant barriers to switching and limited alternatives, as discussed above.
- 3.64 We therefore do not expect countervailing buyer power to be a material constraint on KCOM in the Hull Area.

Provisional findings

- 3.65 Based on the preceding analysis, we provisionally conclude that KCOM will have SMP in the LLA market in the Hull Area for the duration of the review period.

Consultation questions

Question 2.3: Do you agree with our proposed market definition for LLA? Please set out your reasons and supporting evidence for your response.

Question 2.4: Do you agree with our provisional conclusion that KCOM holds SMP in the supply of LLA products in the Hull Area? Please set out your reasons and supporting evidence for your response.

4. Competition concerns

- 4.1 This section sets out the competition concerns arising from our proposed findings that KCOM has SMP in the WLA and LLA markets in the Hull Area.
- 4.2 Absent regulation, KCOM's SMP would give it the ability and incentive to engage in various forms of conduct in the WLA and LLA markets that could distort competition and/or harm consumers.
- 4.3 Conduct that could distort competition and/or harm consumers fall broadly into two categories:
- a) **Exclusionary** behaviour by KCOM to prevent competitors from competing in the relevant market(s) or prevent them from gaining market share.
 - b) **Exploitative** behaviour by KCOM at the expense of its wholesale access customers in the relevant market(s), ultimately harming consumers in the downstream markets.
- 4.4 Although our concerns vary according to whether the behaviour is exclusionary or exploitative, both ultimately lead to poorer outcomes for consumers.
- 4.5 In terms of **exclusionary behaviour**, our concerns include that KCOM may undermine competition from:
- a) competing networks in the relevant wholesale access markets, including by preventing them from gaining market share, thereby protecting KCOM's market position.
 - b) telecoms providers reliant on access to KCOM's network to provide products and services in competition with KCOM in the relevant downstream markets.
- 4.6 Such **exclusionary** behaviour could take several forms, including that KCOM could:
- a) refuse to supply access and thus, restrict competition in the provision of products and services in downstream markets.
 - b) engage in price squeeze behaviour whether between wholesale products at different levels of the value chain and/or between wholesale and retail services.
 - c) provide access to its services to others on less favourable terms than to itself, to the detriment of its competitors in the relevant wholesale and retail markets, by both price and non-price discrimination.
 - d) target price reductions or adopt other commercial terms in relation to access to its network in order to undermine the development of material and sustainable network competition.
- 4.7 **Exploitative** behaviour we are concerned about includes that KCOM:
- a) sets excessively high prices.
 - b) may not have sufficient incentives to continuously deliver an adequate level of service quality in relation to network access.

WLA and LLA markets

- 4.8 As discussed in Volume 3, Section 1, we anticipate that access to KCOM's physical infrastructure will be an important enabler of further rollout of competing networks in the Hull Area. As a vertically integrated network operator, KCOM's access to its ubiquitous physical infrastructure provides it with a significant commercial advantage in the provision of telecoms services in the Hull Area.

- 4.9 In the absence of regulation, KCOM could engage in the general exclusionary or exploitative behaviours set out above, in relation to access to its physical infrastructure. In particular:
- a) KCOM's refusal or restriction to supply access to its physical infrastructure could deter further investment in competing networks and/or limit competition from altnets, potentially reinforcing KCOM's SMP, leading to poorer outcomes for consumers over time.
 - b) KCOM's provision of access to its physical infrastructure to others on less favourable terms compared to itself, or setting excessive wholesale charges for access to its physical infrastructure, or engaging in price squeeze behaviour, could have the same impact of deterring investment and limiting competition.
- 4.10 While network competition develops, or in areas where it ultimately does not emerge, KCOM will remain a key provider of wholesale access services. KCOM's wholesale access services enable retail providers to offer competing services to end-users in the downstream markets. In the absence of regulation, our general concerns about exclusionary and exploitative behaviours as set out above would apply in relation to the provision of wholesale access services across the WLA and LLA markets.
- 4.11 For example, KCOM could refuse to supply its wholesale access services to providers in the downstream markets and/or offer those on unfavourable terms, including high prices, which would harm end-users. KCOM could also set prices at a level which leaves insufficient margin for competitors, undermining the development of competition.
- 4.12 We consider in Volume 3, how to address these competition concerns for the WLA and LLA markets.

Consultation question

Question 2.5: Do you agree with our assessment of the competition concerns arising from our provisional findings of SMP in the markets we have identified? Please set out your reasons and supporting evidence for your response.