ANTICIPATED JOINT VENTURE BETWEEN VODAFONE GROUP PLC AND CK HUTCHISON HOLDINGS LIMITED CONCERNING VODAFONE LIMITED AND HUTCHISON 3G UK LIMITED

Final report

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CMA

Competition & Markets Authority

Website: www.gov.uk/cma

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The Competition and Markets Authority has excluded from this published version of the final report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is also indicated in square brackets.

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SUMMARY

OVERVIEW

1. The Competition and Markets Authority (**CMA**) has concluded that the anticipated joint venture between Vodafone Group plc (**Vodafone**) and CK Hutchison Holdings Limited (**CK Hutchison**) that would combine their UK telecoms businesses, respectively Vodafone Limited (**VUK**) and Hutchison 3G UK Limited (**3UK**) (the **Merger**), may be expected to result in a substantial lessening of competition (**SLC**) in two markets in the UK. These are the supply of retail mobile telecommunications services to end customers (the **retail market**), and the supply of wholesale mobile telecommunications services (the **wholesale market**).

2. However, we also consider that if VUK and 3UK commit to their proposed network investment programme, the Merger is likely to boost competition in the long term in both markets and result in significant increases in mobile network quality in the UK. To ensure retail and wholesale customers continue to receive good deals while this investment programme is rolled out, short-term protections are also needed. We therefore consider that if VUK and 3UK agree to a specific package of remedies that achieves both these objectives, the Merger should proceed.

3. In what follows, Vodafone and CK Hutchison are together referred to as the **Parties**. For statements relating to the future, the Parties' UK telecoms businesses are together referred to as the **Merged Entity**. The four mobile network operators (**MNOs**) in the UK are VUK, 3UK, BT Group plc (**BTEE**), and VMED O2 UK Limited (**VMO2**). MNOs compete directly in the retail market and provide access to their networks to Mobile Virtual Network Operators (**MVNOs**) such as Sky Mobile, Tesco Mobile, Lyca Mobile, Lebara and iD Mobile who do not own their own networks and so rely on wholesale access to provide their own retail mobile services.

4. To assess the overall impact of the Merger, we first considered the likelihood of an adverse impact on competition in both markets (in the absence of remedial measures). With regards to the retail market, we found that the Merger would lead to price increases or see customers get a reduced service such as smaller data packages in their contracts. These findings are particularly significant given that the Parties collectively have over 27 million subscriptions in the UK. With regards to the wholesale market, we found that by reducing the number of MNOs from four to three, the Merger would make it more difficult for independent MVNOs to secure competitive terms, restricting their ability to offer the best deals to retail customers. This is important because many MVNOs price aggressively, often focusing on value segments of the retail market.

5. Having found these competition concerns, we then considered two potential sources of countervailing efficiencies that might outweigh this adverse impact on competition: those that would result from the Parties' network investment programme, and from their agreement with VMO2 (**Beacon 4.1**).

6. With regard to the potential merger efficiencies from the network investment programme, we found that the Merger, by integrating the VUK and 3UK networks, could improve the quality of mobile networks and bring forward the deployment of next generation 5G services, as claimed. But we consider that the Merged Entity would not have the incentive to follow through fully on this investment programme. Beacon 4.1 involves, among other things, the sale by the Parties of spectrum to VMO2 (conditional on our approval of the Merger). We consider that it would lead to material network quality improvements and an increase in capacity (and lower future costs of capacity) for VMO2, making it a stronger competitor.

7. Overall, we found that while some pro-competitive efficiencies are likely, these are not sufficient to offset the adverse effects on competition (and that there were no other countervailing factors). We therefore considered potential remedies.

8. We found that a legally binding commitment to undertake the network investment programme proposed by the Parties over the next 8 years across the UK (the **Network Commitment**) would ensure that they would follow through fully on the programme. It would be overseen by both Ofcom, the UK telecoms regulator, and the CMA, and result in a significant improvement in the quality of the Merged Entity's mobile network, boosting competition between MNOs in the long term and benefiting millions of consumers and businesses.

9. We have also found that time limited protections would be needed for at least 3 years to protect retail customers and MVNOs during the initial years of the Network Commitment before the competitive benefits of the roll-out are sufficiently evident. For retail customers, the commitment would require the Parties to retain certain existing mobile tariff and data plans, protecting current and future customers (including customers on their sub-brands) from short-term price rises in the early years of the network plan. For MVNOs, the commitment would require the Parties to commit to pre-agreed prices and contract terms to ensure that MVNOs can obtain competitive wholesale deals.

10. Overall, we consider that the Network Commitment and time limited protections described above (the **Network Commitment Package**) would address the SLCs we have identified in the retail and wholesale markets, boosting competition in both these markets.

11. The report and its appendices, which will be published shortly after this summary, constitute our **Final Report**.

ABOUT THE BUSINESSES

12. Vodafone – listed on the London Stock Exchange – is the holding company of a group of companies providing mobile and fixed telecommunication services, principally across Europe and Africa. In the UK, Vodafone supplies retail mobile services to consumers and businesses and wholesale mobile services through its wholly-owned subsidiary VUK. It operates under the Vodafone brand and the VOXI and TalkMobile sub-brands.

13. CK Hutchison – listed on the Stock Exchange of Hong Kong – is a multinational conglomerate operating in over 50 countries across four core businesses: ports and related services, retail, infrastructure and telecommunications. In the UK, CK Hutchison supplies retail mobile services to consumers and businesses and wholesale mobile services through its wholly-owned subsidiary 3UK. It operates under the Three brand and the SMARTY sub-brand.

ABOUT THE UK MOBILE INDUSTRY

14. Mobile services play an integral role in the daily lives of consumers and businesses in the UK. In the last decade, there has been a significant shift towards the use of mobile devices in UK consumers' everyday lives, with mobile internet access becoming an essential service. 97% of UK adults are estimated to have a mobile phone, and 92% a smartphone. In May 2023, UK adults spent on average 2 hours and 47 minutes a day online on their smartphones, with 89% of the time spent via apps. Average monthly data volumes per mobile data user grew to 9.9 gigabytes (**GB**) per month in 2023 from 2.6GB in 2017.

15. Ofcom expects demand for mobile data to continue to grow to meet changing customer needs. Operating a mobile network involves high fixed costs and Ofcom anticipates that significant investment in mobile networks will be required to deploy the capacity needed to carry more mobile traffic, as well as in new technologies, including 5G standalone (**5G SA**).

16. 5G is the latest generation of mobile network technology. Compared to 4G, 5G technology (and in particular 5G SA) is capable of providing faster speeds, greater capacity and very fast response times. These features mean that 5G will allow many more users and devices to access fast internet connections and a large amount of data at the same time. 5G SA also has the potential to enable various 'smart' applications, for example in e-healthcare, smart cities, connected vehicles, and automated technologies. However, most of these new applications are still under development in terms of technology and business cases, and MNOs and other market participants have said that the case for deploying 5G SA is challenging due to the uncertainty over the extent to which they can make a return on their investment.

17. All four MNOs are party to one of two network sharing arrangements: BTEE and 3UK have a network sharing arrangement (**MBNL**), and VUK and VMO2 have a separate network sharing arrangement (**Beacon**). These allow BTEE and 3UK on the one hand, and VMO2 and VUK on the other, to share – to some degree – the costs of rolling out and maintaining their networks while continuing to compete with each other at the retail and wholesale level. Although certain network infrastructure is shared between the parties to each arrangement, other infrastructure is not, and so each of the four MNOs is able to differentiate its network quality to some degree (for example regarding 5G roll-out).

18. In addition to the four MNOs, there are a number of MVNOs active in the supply of retail mobile services in the UK, including Sky Mobile, Tesco Mobile (which is 50% owned by VMO2), Lebara, Lyca Mobile and iD Mobile.

OUR ASSESSMENT

Why are we examining this Merger?

19. On 14 June 2023, Vodafone and CK Hutchison entered into an agreement (the **Contribution Agreement**) to establish a joint venture combining their UK telecom businesses. Under the terms of the Contribution Agreement, CK Hutchison would hold 49% of the issued share capital of Vodafone UK Trading Holdings Limited, the joint venture vehicle which is currently indirectly wholly owned by Vodafone; Vodafone would hold 51% of the issued share capital of this entity; and VUK and 3UK will be wholly-owned subsidiaries of this entity. The Merger is subject to certain regulatory conditions, including merger control clearance from the CMA.

20. We have found that we have jurisdiction to review the Merger: each of Vodafone, CK Hutchison, VUK and 3UK is an enterprise; as a result of the Merger 3UK will cease to be distinct from Vodafone and, conversely, VUK will cease to be distinct from CK Hutchison, and VUK and 3UK together generated more than £70 million turnover in the UK in FY2023.

How have we examined this Merger?

21. In deciding whether a merger may be expected to result in an SLC, the first question we are required to answer is whether there is an expectation—a more than 50% chance—that the merger will result in an SLC within any market or markets in the UK. This includes considering any claims of efficiencies that may prevent an SLC that might otherwise arise as result of the merger (discussed in more detail below).

22. Should we find that a Merger may be expected to result in an SLC, we are also required to decide whether action should be taken to remedy, mitigate or prevent

the SLC or any adverse effect resulting from the SLC, and whether such action should be taken by us or recommended for others. In either case, we must state in our final report the action to be taken and what it is designed to address.

23. To answer both these questions, we have taken a forward-looking approach and considered how competition would have evolved with and without the Merger. We considered a very wide range of evidence in the round. We received a large number of submissions and responses to information requests from the Parties and met with them in person on many occasions to allow them to present their views directly. We gathered data, including on shares of supply, switching by customers, tenders for MVNO contracts, prices, and tariff popularity. We reviewed a large number of internal documents from Vodafone and CK Hutchison to understand their businesses, financial performance, competitive strategies and plans, their considerations in agreeing the Merger and the competitive landscape in which VUK and 3UK operate.

24. We also gathered evidence widely from other interested parties and sector participants, including MNOs and MVNOs, as well as the Parties' retail business customers. Overall, we received evidence from almost sixty third parties across both phases of our investigation. This included internal documents from the other MNOs (BTEE and VMO2) and MVNOs relating to commercial strategy, the current competitive significance of the Parties in both the retail and wholesale markets and the likely impact of the Merger, including whether they considered the Merger efficiencies claimed by the Parties would be realised and the impact of these if so. Finally, we commissioned a survey of the Parties' customers, as well as of the general population, and carried out an econometric analysis of consumer demand for mobile services.

25. Throughout our phase 2 inquiry, in line with our guidance in relation to merger investigations involving regulated sectors, we also engaged closely with Ofcom on a wide range of issues given its sector expertise.

…and how have we considered the Parties' efficiency claims?

26. When announcing the Merger, the Parties made a number of claims about pro-competitive efficiencies and consumer benefits which they said would result from the Merger. For example, they said that within the first 12 months of the Merger closing millions of customers of VUK and 3UK would enjoy a better network experience with greater coverage and reliability at no extra cost. They also said that the combined business would invest £11 billion in the UK to create one of Europe's most advanced 5G SA networks, and that the Merger would create a third mobile operator with scale, levelling the competitive playing field, and thereby increasing competition to the UK's two leading converged operators (BTEE and VMO2). The Parties also claimed Beacon 4.1 would generate further Merger-

specific efficiencies by making VMO2 a more effective competitor in the retail and wholesale markets.

27. The CMA case team worked closely with technical specialists at Ofcom to assist the inquiry group in carefully considering these claims and the models the Parties submitted in support of them.

What did the evidence tell us?

… about the relevant markets?

28. Where the CMA makes an SLC finding, this must be 'within any market or markets in the United Kingdom for goods or services'. We are therefore required to identify the market or markets within which an SLC exists. An SLC can affect the whole or part of a market or markets.

29. We have assessed the impact of the Merger on the supply of retail mobile telecommunications services to end consumers, including both consumers and business customers, and the supply of wholesale mobile telecommunications services, in the UK.

… about the effects on competition in the retail market of the Merger?

In terms of what matters to UK customers

30. At the outset, we sought to understand the factors that matter to UK end customers of retail mobile services, so as to better assess how the Merger (through its impact on competition) would affect their overall user experience. We found that price and quality are the two most important parameters of competition. Customers require a minimum level of quality, and network quality related parameters play an important role in customer decisions, but we found they are currently less important than price. For example, most consumers told us that they would not be willing to pay more for better quality (with 76% unwilling to pay for faster speed, and 59% unwilling to pay more for more reliability).

31. However, at the same time, customers also told us that they would react strongly to a deterioration in network quality: 60% of 3UK customers and 65% of VUK customers said they would switch if the network they were using was 'a bit less reliable'. We also found in our econometric analysis some willingness to pay for aspects of network quality and in particular for faster 4G download speeds.

32. Finally, we recognised the possibility that customer expectations and attitudes may evolve as the mobile industry develops; ie it was possible that a different valuation of price and quality parameters may result over time. We noted that Ofcom had concluded that it expects the quality of mobile services to become more important

as customers' dependence on mobile services grows and their needs evolve. In particular, Ofcom expects demand for mobile data to grow to meet changing customer needs, as greater use is made of data-hungry services (eg streaming, video calling, virtual and augmented reality) meaning that significant investments in mobile networks will be required to increase capacity and provide the network quality required to meet customers' future connectivity needs.

About the market positions of the Parties and their rivals

33. We then considered the position of the Parties and their rivals in the retail market, including how closely they currently compete and what alternative competitive constraints would remain if the Merger took place.

34. VUK and 3UK are the third and fourth largest mobile operators in the supply of retail mobile services by revenue and subscribers. We found that the Parties compete closely in the supply of retail mobile services and that this would continue in the future absent the Merger. In particular we found that most competitors consider each Party to be a strong or very strong competitor to the other, whilst switching and diversion data show the Parties provide a competitive constraint on each other. We further found that the Parties compete particularly closely in some subsegments of the retail market, including in the unlimited data, pre-paid and small office/home office (**SoHo**) subsegments.

35. VUK has historically had the second-best network quality behind BTEE across several third party measures. More recently, due to improvements in 3UK's network, VUK's network quality is considered broadly similar to 3UK's on several third party measures and slightly behind 3UK's on others (notably 5G). On a number of third party measures, VMO2 is now judged to have the lowest network quality of the UK MNOs.

36. Since commencing a network investment programme in 2020 (when it was ranked as the lowest performing network on some third party measures), 3UK has improved its network quality rankings on third party measures relative to other MNOs and is particularly strong in (non-standalone or **NSA**) 5G. 3UK currently has the fastest 5G speeds in the areas where it has rolled this out.

37. We consider that both BTEE and VMO2 compete closely with the Parties, and that this would likely continue in the future, absent the Merger. We found that they both are seen as attractive alternatives by the Parties' customers (as reflected in high switching and diversion rates), and have strong brands, particularly BTEE which has consistently had the highest overall network quality. However, there is also some evidence to suggest that both BTEE and VMO2 compete less aggressively than the Parties in some respects.

38. BTEE positions itself towards the premium end of the market and third parties see it as more expensive than alternative providers. VMO2 operates a dual-brand strategy, using Giffgaff to compete in the value subsegment and O2 in the premium subsegment and is a 50% shareholder in Tesco Mobile, the largest MVNO. Third parties view BTEE as being slow to change and VMO2 as being less innovative. BTEE and VMO2 have also both been losing share by both revenue and subscribers, whilst the Parties have been gaining share by revenue and have had stable shares by subscribers in the 2020 to 2023 period.

39. We found that some independent MVNOs currently exercise some competitive constraint on the Parties, namely Sky Mobile and, especially in the value segment, Lebara and iD Mobile. Overall, however, we consider that the constraint from MVNOs is limited relative to the constraint from MNOs.

40. This is because, firstly, almost all independent MVNOs individually have a very small share of supply and are dependent on wholesale contracts to compete. Most MVNOs are also not considered by third parties to be either a strong or very strong competitor to the Parties. Secondly, MVNOs typically only compete in some segments. Most MVNOs, including Lebara, Lyca Mobile and iD Mobile, appear to generally cater more towards cost-sensitive consumers. A significant exception to this is Sky Mobile, which is the largest of the independent MVNOs (with strong recent growth) and particularly competes in the pay monthly handset segment. However, its share of supply in the overall retail segment is small (less than 5% by subscribers and revenue) and it does not offer pre-paid or business tariffs.

About the effect of the Merger on price

41. Given the importance of price to customers, we sought to quantify the likely impact of the Merger on pricing using a range of economic techniques, and carefully considered the robustness of our results. It is difficult to estimate the impact of a merger on retail pricing with precision in this industry for a range of reasons. We have therefore considered our economic estimates in the round, rather than as a single definitive source of evidence about the likely impact of the Merger.

42. Our quantitative economic analyses consistently show that the Merger is likely to have a material upwards impact on retail prices. Our analysis of the Gross Upwards Pricing Pressure Index (**GUPPI**) suggests significant pricing pressure of between 5-10% and 10-20% for 3UK and between 0-5% and 5-10% for VUK. Our merger simulation predicts that 3UK's prices would rise by 5.5% and VUK's by 2.6% on average following the Merger. This, along with predicted price rises from the other retail providers, would result in a 1.4% decrease in consumer welfare, implying an annual cost of approximately £216 million to UK consumers. Alternative approaches that more closely reflect the value of acquiring a consumer for the Parties in the long run suggest the harm could be materially greater than £216 million annually.

43. We also note that our merger simulation does not account for the impact on the retail market from the loss of competition in the wholesale market. Faced with less competitive wholesale terms, MVNOs would be less able to compete in the retail market, particularly in the low-cost segment where they tend to operate. This would lead to greater price increases than already outlined from the direct loss of retail competition resulting from the Merger.

About the effect of the Merger on network quality

44. Many of the Parties' claimed efficiencies relate to what they described as 'transformational' increases in network quality that they said would result from the integration of their individual networks (and related investments), which they claimed would accelerate the deployment of 5G SA across the UK. The Parties said there would be significant improvements across a range of the different technical dimensions of network quality. The Parties said that without the Merger, they would remain 'sub-scale' compared to the two other UK mobile networks, and therefore unable to invest sufficiently to allow them to compete with them on network quality.

45. We therefore carefully considered, firstly, what network quality was likely to result without the Merger, and in particular whether there was evidence that supported the Parties' claims that they are currently 'sub-scale'. We have found that absent the Merger, both of the Parties' standalone networks are likely to deliver higher network quality than they have claimed. We have reviewed the current business plans of both of VUK and 3UK, which show that they expect to continue to make network investments to improve customer experience. Overall, we consider that – absent the Merger – both Parties would likely continue competing in broadly the same way they do now, including on network quality.

46. Secondly, we assessed what the likely impact on network quality (and therefore competition) would be if the Merger were to take place. Many of the Parties' claims in this regard are based on their 'joint business plan' (**JBP**) which incorporates the 'joint network plan' (**JNP**) they have prepared for the Merged Entity, and which provides for integration and investment over the period up to FY34. We consider that there is likely to be a marked difference between the scale and network quality performance that 3UK and VUK would deliver absent the Merger and that proposed under the JBP. We therefore carefully considered whether the Parties were able, and likely, to deliver this plan, including by consulting Ofcom on this question, particularly in relation to the technical aspects of the plan.

47. We consider that the Parties are likely to have the ability to deliver the JBP (or a plan that is broadly comparable). We consider the JBP to be a credible integration plan, reflecting detailed due diligence by external consultants and significant time and resource investment by the Parties. We also recognise that the network improvement plans in the JNP involve the consolidation and upgrading of existing

mobile sites, to rationalise down rather than scale up the total number of sites held by the Merged Entity. This process contrasts with the identification of locations for and subsequent construction of new sites, which would be required for site footprint expansion by each of the Parties absent the Merger, and which is likely to be significantly more practically challenging.

48. However, we have concluded that the Parties are not likely to deliver the full JBP (in the absence of remedies). In reaching this conclusion, we have carefully considered the detailed financial modelling which they provided to us which they claim demonstrates their commercial incentive to implement the full JBP as opposed to, for example, a less ambitious network integration and investment plan. We found that if we apply a number of alternative assumptions that we consider reasonable, the case for the implementation of the JBP in full becomes substantially less commercially compelling.

49. We consider that, in reality, the commercial strategy of the Merged Entity would respond dynamically to future market circumstances and that the Merged Entity would re-assess (and potentially reduce) the scale of network investment in light of future market circumstances, which may differ from what the Parties project currently in the JBP. In particular, we consider that the Parties may have the commercial incentive to retain a lower number of sites than claimed in the JNP given the cost savings that can be realised through site decommissioning. Ofcom noted that this commercial incentive may be particularly strong in low and mid traffic areas, where the relatively low usage on sites indicates that relatively few customers would face detriment should those sites be removed. In the long run, the Parties could therefore have a commercial incentive to achieve considerable cost savings by decommissioning more of the sites in these areas.

50. However, we do consider that were the Merger to proceed (absent remedies), the Parties have the ability to, and are likely to, deliver some of the claimed network improvement efficiencies. In particular, we consider that based on the evidence we have seen thus far, the Merged Entity would have the ability and incentive to make changes to their networks which would enable 3UK customers to access the VUK network and vice versa (ie MOCN), and to deploy additional spectrum through sharing of the Parties' combined holdings (for example in relation to 1800 MHz spectrum). These measures would result in short term improvements in coverage and some reduction of congestion over a significant part of the UK. In addition, we also consider that some degree of site densification relative to either Party's standalone network is likely, improving geographic coverage, coverage reliability (ie reducing 'patchiness' of coverage) and providing some reduction in network congestion by increasing network capacity in the areas where this takes place.

51. The combination of these factors is likely to result in some improvement in some network quality metrics in ways that affect the consumer experience, but less than the Parties have claimed. We also consider that Beacon 4.1 will lead to material

network quality improvements and an increase in capacity (and lower future costs of capacity) for VMO2, making it a stronger competitor. We consider that these improvements by the Merged Entity and VMO2 would likely elicit a competitive response from BTEE and partially offset the loss of competition across the retail market.

52. We have also carefully considered the Parties' quantitative modelling of the claimed network capacity and quality impacts of the Merger. We have a number of significant concerns about the robustness and predictive value of these models. In particular, we do not put any weight on the Parties' quality-focused merger simulation model or the Parties' claims based on the outputs from that model (which include the claim of a market-wide welfare gain of £1.8 billion per year). Similarly, given the restrictive nature of the model and its stylised approach, we do not believe that the Parties' capacity-focused model is well suited to extrapolate and predict actual firm behaviour or the impact of the Merger on consumer welfare.

About the overall impact on competition in the retail market

53. For the reasons set out below, we do not consider that, by themselves, the efficiencies that are likely to result from the Merger (which are more limited than what would be delivered under the full JBP) would be sufficient to outweigh the adverse competitive effects we have identified. In reaching this conclusion we have had regard to several factors.

54. Firstly, we consider the Merger is likely to lead to price rises for the Parties' 27 million subscriptions, and that prices may also rise across the market as a result (there were approaching 90 million mobile subscriptions in the UK in 2023). We have particular concerns about the impact of the Merger on those customers least able to afford mobile services who are likely to experience the largest reductions in consumer welfare.

55. Secondly, we consider that in the absence of the Merger, both the level of network quality on the VUK and 3UK networks would be higher than the Parties have claimed, and – conversely – that the network investments that the Merged Entity would make, and the impact of those on customer experience, would be more limited than the Parties have claimed. We therefore consider that the benefits of the Merger (in the absence of any remedies) would be significantly less than the Parties claim.

56. For these reasons, we have concluded that the Merger may be expected to result in an SLC in the retail market.

… about the effects on competition in the wholesale market of the Merger?

In terms of what matters to MVNO customers

57. As we did in considering the retail market, we sought to understand the key factors that matter to MVNOs when choosing an MNO, so as to assess how the Merger (through its impact on competition) would affect the commercial terms that they would be able to obtain and, in turn, their offering to retail customers. We found that both price and network quality are important to MVNOs, although there may be some differences between MVNOs in the relative importance they attach to each depending on their own competitive positioning in the retail market.

About the market positions of the Parties and their rivals

58. As there are only four MNOs in the UK, at most four MNOs compete for any given wholesale opportunity. The evidence also suggests that MNOs have incumbency advantages because MVNOs face high switching costs and often prefer to stay with their current network provider, and that the intensity of competition between MNOs has varied over time and by type of MVNO. We therefore consider that there is currently limited competition in the supply of wholesale mobile services.

59. We consider that VUK and 3UK are close competitors in the supply of wholesale mobile services and that both are credible choices for potential MVNOs. 3UK's recent improvements in network quality (particularly in 5G roll out) have been recognised by MVNOs and it is seen by most MVNOs as a credible competitor.

60. Moreover, we found that the Parties competed directly against one another for a number of large MVNO opportunities, including Sky Mobile's most recent tender, by far the largest independent MVNO opportunity, which saw particularly close competition between the Parties. We consider it likely that the Parties would both compete for large MVNO opportunities that may be up for renegotiation in the near future.

61. There are only two alternative suppliers of wholesale mobile services to the Parties in the UK: BTEE and VMO2. It appears that both MNOs exert a competitive constraint on the Parties, although we note that they do not necessarily compete in all opportunities, even when invited to do so.

About the overall impact on competition in the wholesale market

62. We note that the market would be highly concentrated post-Merger with at most only three options for MVNOs. We have also found that MNOs have incumbency advantages and there are significant barriers to switching, and a significant majority of the MVNOs we spoke to considered that the Merger would worsen competition.

63. We consider that the Merged Entity would have a reduced incentive to compete for MVNO opportunities than the Parties individually because the Merger would lead to the removal of the competitive constraint which the Parties currently exert on each other. We also consider that there may be an indirect effect resulting from the fact that the Merged Entity would have an expanded presence in the supply of retail mobile services, which may mean it may have less of an incentive to bid for wholesale business. If the Merged Entity were to act on these incentives by bidding less or offering less competitive terms to MVNOs, its rivals would experience an increase in demand for their wholesale services. This increase in wholesale demand may also provide rivals with incentives to compete less aggressively for MVNO business.

64. In light of these findings, we have carefully considered the impact of those efficiencies which we consider are likely to result from the Merger. A number of the same considerations outlined above in relation to the Parties' claimed efficiencies in the retail market are also applicable to the wholesale market. In particular, we consider that, in light of our conclusions about the overall reduction of rivalry in the wholesale market from the Merger, pricing and contract terms offered to MVNOs are likely to be less competitive, and that while some network quality improvements would result from the Merger these are more limited than is claimed by the Parties, given that we have found the Merged Entity is not likely to deliver the full JBP.

65. For these reasons, we have therefore concluded that the Merger may be expected to result in an SLC in the wholesale market.

… about the competitive impact of the Merged Entity's participation in both network sharing arrangements?

66. We considered the impact of the Merged Entity's participation in both network sharing arrangements on MNOs' collective incentives to invest and compete. In this context, we considered whether sharing of commercially sensitive information (eg data on investments, information on deployment plans) between the Merged Entity and each of BTEE and VMO2, separately, may lead to competition concerns by reducing MNOs' incentives to invest.

67. As noted above, in the absence of the Merger, the Parties are each participants in one of the two network sharing arrangements, MBNL and Beacon. 3UK therefore has access to certain commercially sensitive information pertaining to BTEE through MBNL. Whilst certain teams within VUK have access to commercially sensitive information pertaining to VMO2, this information is ring-fenced from the retail, wholesale and strategy teams.

68. Given there is already a certain level of information sharing pre-Merger between BTEE and 3UK, on the one hand, and VUK and VMO2, on the other hand we have

focused on the potential Merger impact, ie whether the Merged Entity would have an incentive to combine the commercially sensitive information received through MBNL with the commercially sensitive information received through Beacon. Given the Merged Entity would only be able to share VMO2's information with its retail, wholesale and strategy teams by breaching the Beacon information sharing safeguards, we have considered whether post-Merger, the Merged Entity would have the incentive to breach the Beacon safeguards.

69. To assess this, we first considered the nature of the information shared within MBNL. We found that given its position in MBNL, the Merged Entity may have some visibility as to certain types of information relating to BTEE's network, including its current configuration of sites, forecast rollout plans and high-level technology upgrade plans.

70. However, we consider that it is unlikely that this information shared via MBNL would be useful in informing the Merged Entity's investment plans given its limitations (including, for example, how far in advance the information is shared and the scale of information shared). It is therefore unlikely to lead to the Merged Entity reducing or postponing its investments.

71. Therefore, we consider that the potential benefit from combining the information the Merged Entity would receive on MBNL and Beacon is limited. Accordingly, we do not consider that the Merged Entity would have an increased incentive to breach the Beacon information sharing safeguards in order to share VMO2's information with its retail, wholesale and strategy teams compared to VUK's current incentives in the counterfactual.

72. For these reasons, we consider that the Merger does not give rise to an SLC resulting from the sharing of commercially sensitive information via the Merged Entity's participation in both network sharing arrangements.

… about any entry and expansion?

73. We have considered whether entry or expansion by new or existing competitors would offset the reduction in competition caused by the Merger. We have seen no evidence of any scope for entry by MNOs due to the high costs of entry and expansion and limits on the availability of spectrum. As regards MVNOs, we have found that there are barriers to entry and/or expansion for MVNOs, including the high costs involved and challenges with negotiating and obtaining competitive commercial terms from MNOs. In any case, we have not received evidence to indicate that any entry or expansion in response to the Merger would be timely, likely and sufficient to prevent the SLCs from arising.

OUR REMEDIES

What is our preferred remedy for the SLCs identified?

74. We consider that there are two effective remedies that would comprehensively address the SLCs in the retail and wholesale markets outlined. These are prohibition of the Merger, and the Network Commitment Package.

75. Our preferred remedy is the Network Commitment Package, which we consider to be the least costly and the least intrusive of the two remedies. We consider that the Network Commitment Package would address the competition concerns we have identified in the retail and wholesale markets and, in doing so, would also help secure the widespread improvements in network quality - including on network coverage, download speeds and reliability - claimed by the Parties. If the Parties are not willing to offer an Undertaking giving effect to the Network Commitment Package as described in the Final Report, as the only other effective remedy, we would prohibit the Merger.

How does the Network Commitment resolve the retail SLC?

76. We consider that the Network Commitment would, in the longer term, address the SLC we have identified in the retail market for two reasons. First, we consider that the Network Commitment will, in time, and in combination with the impact of Beacon 4.1, lead to a lower incremental cost of capacity due to the increase in mobile network capacity compared to the Parties' and VMO2's expected positions in the counterfactual, and to a longer-term reduction in their unit cost of expanding capacity. Second, we consider that the Network Commitment will, in time, lead to significant and long-lasting quality improvements in a way that positively affects customer experience.

77. With regards to network capacity, we note that the Network Commitment would mean that, in the longer term, the Merged Entity would have more sites and more spectrum than the networks of each Party individually. Because network capacity is a function of the amount of spectrum deployed multiplied by the number of sites, increasing both the number of sites and the amount of spectrum deployed on them will have a 'multiplicative' effect on the Merged Entity's network capacity compared to the sum of two standalone networks, resulting in a significant increase in the Merged Entity's capacity compared to the standalone networks.

78. We note that the Merged Entity's direct increase in capacity from the Network Commitment would be accompanied by Beacon 4.1 increasing VMO2's network capacity, both as a result of the additional spectrum VMO2 acquires and the additional sites it would be able to access from the 3UK network. We would expect that this increase in the capacity of two MNOs would lead to downward pressure

on prices (compared to the situation absent this increase in capacity) as the Merged Entity and VMO2 would have the incentive to fill that capacity by making more attractive offers to customers, and BTEE would likely respond by increasing the attractiveness of its own offers.

79. In the longer term, the multiplicative effect described above will also mean there is a reduction in the unit cost of expanding capacity in response to increased demand as the Merged Entity and VMO2 can deploy more spectrum on their networks (for example through adding more sites or new technology), and therefore achieve a larger capacity uplift for a given spend than in the counterfactual.

80. With regards to network quality, as noted already we consider that, absent the Merger, both parties would likely continue competing on network quality in broadly the same way they do now. However, we consider that there is likely to be a marked difference between the scale and network quality performance that 3UK and VUK would deliver absent the Merger and that proposed under the JBP and Network Commitment. Having consulted with Ofcom, we consider that the Network Commitment would result in quality improvements across a range of different network quality parameters that are otherwise unlikely to be delivered by the market.

81. Ofcom told us that the three primary areas of quality improvement would be from greater coverage reliability, reduced congestion and greater availability of C-band spectrum coverage (which is the spectrum providing the highest levels of network capacity). Cumulatively, these benefits would be significant for customers.

82. With regards to network coverage, we consider that densification (over the longer term) would improve coverage reliability on the Merged Entity's network; in urban areas and indoors there would be reduced patchiness of coverage, and in rural areas, there would be a significant improvement in coverage quality. The combined effect of this would be to boost mobile connectivity with stronger and more consistent mobile reception across the UK. With regards to network speed, we consider that the increase in network capacity relative to demand would result in a large increase in the average speed that customers would experience through, for example, faster download speeds and greater ability to access online content on the move.

83. We also consider that Beacon 4.1 would lead to further material network quality improvements for VMO2, as the additional spectrum acquired, joint upgrade plan, and access to additional 3UK sites are implemented, making it a stronger competitor. Ofcom told us that the Merger (assuming Beacon 4.1 and delivery of the full JBP) would, in the mid-term, result in a notable improvement in VMO2's network quality, likely similar to that which is expected to result for the Merged

Entity, and, in the long term, competitive pressures would be expected to incentivise VMO2 to invest in its network quality.

84. We consider that overall, the changes resulting from the Network Commitment would likely elicit a competitive response from BTEE and VMO2 compared to the counterfactual, for example by way of further network investment, lower pricing or improved customer service. As such, we consider that the Network Commitment is an enabling measure that works with the grain of competition to address the SLC. We consider the Network Commitment does this by stimulating competition through achieving, once fully implemented, the significant and long-lasting quality and capacity improvements we have identified.

85. We also note the link between the retail and wholesale market SLCs. Wholesale competition, which ensures MVNOs can access competitive terms from MNOs, is important in relation to the retail market because many MVNOs price aggressively, often focusing on value segments of the retail market. An effective remedy in relation to the wholesale SLC would provide further protection for competition in the retail market, particularly in relation to price, by ensuring an effective and ongoing role for MVNOs.

How does the Network Commitment resolve the wholesale SLC?

86. We consider that the Network Commitment would, in the longer term, address the SLC we have identified in the wholesale market for broadly the same two reasons as outlined in relation to the retail market.

87. First, we consider that the Network Commitment would, in time, increase network capacity and lead to a lower incremental cost of adding further capacity compared to the Parties' expected positions in the counterfactual. We consider this would be reflected in increased competitiveness of the pricing terms offered to MVNOs. Secondly, for the reasons outlined above, we consider that the Network Commitment would lead to significant and long-lasting network quality improvements in a way that improves the competitiveness of the Merged Entity's offer to MVNOs relative to its remaining MNO competitors in the counterfactual.

88. Although not part of the Network Commitment, we also consider that the network quality and capacity improvements that result from Beacon 4.1 would directly strengthen VMO2's ability and incentive to compete effectively in the wholesale market compared to the situation absent the Merger. We consider that VMO2's increased network quality may lead to it being invited to bid for more MVNO opportunities and to it being more competitive in those tenders in which it participates. We also consider that by virtue of its increased spectrum holdings and therefore network capacity, post-Merger VMO2 would have a stronger incentive to bid more frequently for wholesale contracts and to price competitively when it does so.

Why do you need other remedies as well as the Network Commitment?

89. We consider that investment in mobile networks requires a long-term perspective, particularly with regard to the proposed integration of two of the four mobile networks in the UK, as is the case here. The boost to competitive rivalry in both the retail and wholesale markets that will result from the Network Commitment will grow over time as the investment and integration plan is implemented, resulting in progressive increases in network capacity and quality. The same will be true for the transfer and deployment of spectrum to VMO2 pursuant to Beacon 4.1, which we have considered alongside the impact of the Network Commitment.

90. There is therefore a risk that if the Merger were to proceed only subject to the implementation of the Network Commitment, the SLCs we have identified would not be comprehensively addressed, particularly in the earlier years. As a result, we consider that time limited protections for at least three years are needed to ensure that retail customers and MVNOs can continue to secure good deals before the competitive benefits of the network integration and investment roll-out are sufficiently evident.

91. For retail customers, we would require the Parties to cap the prices for selected plans, protecting current and future VUK and 3UK customers (including customers on their sub-brands) from short-term price rises during the early implementation of the network plan. While we do not consider it necessary or appropriate to cap all the Parties' plans, these caps would preserve a range of popular and competitively priced tariffs which span different data allowances across the Parties' various brands.

92. For MVNOs, we would require the Parties to offer pre-agreed non-discriminatory wholesale terms (including prices), subject to a reasonable limit (ie number of MVNOs or network capacity utilisation). The Parties would also be required to offer to 'roll over' the existing commercial terms agreed with each of their current MVNO customers that come up for renewal during this period.

93. By Year 3 of the Network Commitment, around [40-50]% of the Merged Entity's sites would have been fully integrated with the Merged Entity's spectrum deployed across specified frequency bands. At this stage, significant improvements in the Merged Entity's coverage, reliability and capacity would have been delivered and we would also expect to see competitive responses from BTEE and VMO2. We also expect that there would be a significant impact on VMO2's quality and capacity from the implementation of Beacon 4.1 at this stage. Should the Parties fail to make the agreed progress towards implementation of the Network Commitment by this date, the time limited protections would continue to apply until those milestones were met.

CONCLUSIONS

94. We have concluded that the Merger constitutes arrangements in progress or in contemplation which, if carried into effect, would result in the creation of a relevant merger situation.

95. We have concluded that there is scope for an SLC as a result of the creation of that situation in each of:

(a) the retail market; and

(b) the wholesale market.

96. We have also concluded that the Merger does not result in countervailing factors that would offset the anticompetitive effects in either of these markets and that the Merger may therefore be expected to result in an SLC in each of these markets.

97. We have also concluded that there are two effective remedies that would comprehensively address the SLCs in the retail and wholesale markets. These are:

(a) prohibition of the Merger; and

(b) the Network Commitment Package.

98. Our preferred remedy is the Network Commitment Package, this being the least costly and intrusive effective remedy that is not disproportionate in relation to the SLC and its adverse effects we have identified.

99. If the Parties are not willing to offer an Undertaking giving effect to the Network Commitment Package as described in this Final Report, as the only other effective remedy, we would seek to impose an Order prohibiting the Merger.

FINDINGS

1. THE REFERENCE

1.1 On 4 April 2024, the Competition and Markets Authority (**CMA**) in exercise of its duty under section 33(1) of the Enterprise Act 2002 (the **Act**), referred the anticipated joint venture between Vodafone Group plc (**Vodafone**) and CK Hutchison Holdings Limited (**CK Hutchison**) that will combine their UK telecoms businesses, respectively Vodafone Limited (**VUK**) and Hutchison 3G UK Limited (**3UK**) (the **Merger**) for further investigation and report by a group of CMA panel members (the **Inquiry Group**).[1] Vodafone and CK Hutchison are together referred to as the **Parties**. For statements relating to the future, the Parties' UK telecoms businesses are together referred to as the **Merged Entity**.

1.2 In exercise of its duty under section 36(1) of the Act, the CMA must decide:

(a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation (**RMS**); and

(b) if so, whether the creation of that RMS may be expected to result in a substantial lessening of competition (**SLC**) within any market or markets in the United Kingdom (**UK**) for goods or services.[2]

1.3 In assessing the competitive effects of the Merger, we must decide whether there is an expectation (ie a more than 50% chance) that the Merger will result in an SLC.

1.4 We are required to prepare and publish our final report by 7 December 2024.[3]

1.5 Our terms of reference, along with information on the conduct of the inquiry, are set out in Appendix A and Appendix B respectively.

1.6 This document, together with its appendices, constitutes the CMA's Final Report published and notified to the Parties in line with the CMA's rules of procedure.[4] Further information relevant to this inquiry can be found on the CMA case page.[5]

[1] Section 33(1) of the Act.
[2] Section 36(1) of the Act.
[3] In accordance with section 39(1) of the Act, the CMA shall prepare and publish its final report within a period of 24 weeks beginning with the date of the reference concerned. In accordance with section 39(4) of the Act, the statutory deadline was extended by 24 days as a result of the failure by CK Hutchison to comply with the requirements of a notice issued under section 109 of the Act. The statutory deadline was further extended by eight weeks pursuant to section 39(3) of the Act. For further information, see Appendix B on the conduct of the inquiry.
[4] CMA rules of procedure for merger, market and special reference groups (**CMA 17**), March 2014 (corrected November 2015), Rule 13.
[5] Vodafone/CK Hutchison JV case page.

2. THE PARTIES, THE MERGER AND THE MERGER RATIONALE

2.1 This chapter sets out:

(a) an overview of the Parties;

(b) the Merger; and

(c) the Parties' stated rationale for the Merger.

The Parties

Vodafone

2.2 Vodafone - listed on the London Stock Exchange – is the holding company of a group of companies providing mobile and fixed telecommunications services (such as broadband), principally across Europe and Africa.[6] Vodafone generated global revenues of approximately €37 billion (£32 billion[7]) in the financial year ended 31 March 2024.[8]

2.3 In the UK, Vodafone supplies retail mobile services to consumers and businesses and wholesale mobile services through its wholly-owned subsidiary VUK and operates under the Vodafone brand and the VOXI and Talk Mobile sub-brands. VUK had a UK turnover of approximately €6,837 million (£5,900 million[9]) for the financial year ended 31 March 2024.[10]

CK Hutchison

2.4 CK Hutchison – listed on the Stock Exchange of Hong Kong Limited – is a multinational conglomerate operating in about 50 countries across four core businesses: ports and related services, retail, infrastructure and telecommunications. CK Hutchison generated global revenues of approximately HK$462 billion (£47 billion[11]) in the year ended 31 December 2023, of which 17% were generated in the UK.[12]

2.5 CK Hutchison's telecommunications business consists of its wholly-owned subsidiary CK Hutchison Group Telecoms Holdings Limited. In the UK,

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[6] Parties' Final Merger Notice (**FMN**).
[7] Using the average ECB exchange rate for EUR vs. GBP of 0.86300 for the period from 1 April 2023 to 31 March 2024.
[8] Vodafone 2024 Annual Report, page 21, accessed by the CMA on 2 August 2024.
[9] Using the average ECB exchange rate for EUR vs. GBP of 0.86300 for the period from 1 April 2023 to 31 March 2024.
[10] Vodafone 2024 Annual Report, page 24, accessed by the CMA 2 August 2024.
[11] Using the UK Office for National Statistics' average exchange rate for GBP vs HKD of 9.7342 for the period from 1 January 2023 to 31 December 2023.
[12] CK Hutchison 2023 Annual Report, pages 4 and 6, accessed by the CMA on 2 August 2024.

CK Hutchison supplies retail mobile services to consumers and businesses and wholesale mobile services through its wholly-owned subsidiary 3UK, operating under the Three brand and the SMARTY sub-brand. 3UK, a wholly-owned subsidiary of CK Hutchison, had a UK turnover of £[✂] million for the year ended 31 December 2023.[13]

The Merger

2.6 On 14 June 2023, Vodafone and CK Hutchison entered into a contribution agreement (the **Contribution Agreement**)[14] relating to the establishment of a joint venture.[15] Pursuant to the terms of the Contribution Agreement, on completion, CK Hutchison will hold 49% of the issued share capital of Vodafone UK Trading Holdings Limited, the joint venture vehicle which is currently indirectly wholly owned by Vodafone (the **JV entity**); Vodafone will hold 51% of the issued share capital of the JV entity; and each of VUK and 3UK will sit as a wholly-owned subsidiary of the JV entity.[16]

2.7 Vodafone and CK Hutchison have agreed a put/call framework pursuant to which Vodafone may acquire 100% of the JV entity in the future. After a lock-up period of three full financial years following completion of the Merger, Vodafone may acquire CK Hutchison's 49% stake in the JV entity, and CK Hutchison may sell its 49% stake in the JV entity to Vodafone subject to certain conditions being met, including the fair market value of the Merged Entity reaching a minimum enterprise value of £16.5 billion.[17] If the options were exercised, [✂].[18]

2.8 On 9 May 2024, the Secretary of State approved the Merger, subject to certain conditions pursuant to section 26 of the National Security and Investment Act 2021.[19]

The rationale

2.9 The Parties submitted that the strategic and economic rationale for the Merger is as follows:[20]

(a) the UK currently lags behind other countries in terms of 5G infrastructure, roll out and performance due to a bifurcated market structure, with two strong

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[13] CK Hutchison Group Telecom annual report, page 7, accessed by the CMA on 6 November 2024.
[14] Vodafone internal document.
[15] FMN.
[16] FMN.
[17] The requirement for this minimum threshold to be satisfied falls away in respect of CK Hutchison's put option following the seventh full financial year following completion of the Merger (FMN); Merger of Vodafone UK & Three UK to create one of Europe's leading 5G Networks, 14 June 2023, accessed by the CMA on 13 August 2024.
[18] Vodafone internal document.
[19] Merger between Hutchison 3G UK Holdings Limited and Vodafone Limited: notice of final order, 9 May 2024, accessed by the CMA on 2 August 2024.
[20] FMN.

converged players (BTEE and VMO2) and two weak players (VUK and 3UK).[21] VUK and 3UK are both sub-scale, earning unsustainable returns and at a growing disadvantage to invest and compete against BTEE and VMO2, who face insufficient competitive pressure to invest what would be required for the UK to compete globally on 5G roll-out and network quality;[22]

(b) absent the Merger, VUK's and 3UK's lack of scale will further impede their ability to compete;[23]

(c) VUK and 3UK need greater scale to address the investment challenge posed by the need to deploy Advanced 5G and address explosive growth in data traffic;[24] and

(d) by bringing together the complementary assets (including spectrum and sites) and increasing the investment capacity of VUK and 3UK, the Merger will create a stronger third network operator that will invest in a 'best-in-class' network which will force BTEE and VMO2 to invest more. This will in turn bring significant benefits to customers – consumers, businesses and public sector organisations – to competition and to the wider UK economy.[25]

2.10 Whilst most of the Parties' internal documents discussing the Merger available to us are broadly in line with their stated strategic and economic rationale, we believe that limited weight can be placed on such documents.[26] Discussions in relation to the Merger commenced between the Parties in [✂] and as early as [✂], Vodafone had already worked to build 'a strategic narrative' and a 'targeted external communications plan required to secure UK political and regulatory support' for a potential combination of VUK and 3UK, suggesting that any Merger rationale documents after that date may be influenced by the Parties' regulatory objectives.[27]

[21] FMN.
[22] FMN.
[23] FMN.
[24] FMN.
[25] FMN.
[26] Merger Assessment Guidelines (**CMA129**), March 2021, paragraph 2.29(a).
[27] Vodafone internal documents. CK Hutchison internal documents.

3. RELEVANT MERGER SITUATION

3.1 Section 36 of the Act and our terms of reference require that we investigate and report on two statutory questions:

(a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of an RMS; and

(b) if so, whether the creation of that RMS may be expected to result in an SLC within any market or markets in the UK for goods or services.[28]

3.2 We address the first of the statutory questions in this section.

Enterprises ceasing to be distinct

3.3 The first element of the RMS test is whether the arrangements in progress or in contemplation will, if carried into effect, lead to two or more enterprises ceasing to be distinct.[29]

3.4 The Act defines an 'enterprise' as 'the activities, or part of the activities, of a business'. A 'business' is defined as including any undertaking 'which is carried on for gain or reward or which is an undertaking in the course of which goods or services are supplied otherwise than free of charge'.[30]

3.5 The activities of Vodafone, CK Hutchison, VUK and 3UK are described in Chapter 2, The Parties. In light of those activities, we are satisfied that each of Vodafone, CK Hutchison, VUK and 3UK is an enterprise within the meaning of the Act.

3.6 Section 26 of the Act provides that any two enterprises cease to be distinct if they are brought under common ownership or common control. It distinguishes between three levels of control (in ascending order): material influence, *de facto* control and a controlling interest (also referred to as *de jure* or legal control).

3.7 The background to the Merger is described in Chapter 2, The Merger. As a result of the Merger, Vodafone will hold 51% of the issued share capital in the JV Entity, and CK Hutchison will hold the other 49%.[31]

3.8 Regarding levels of control, we consider that:

[28] Section 36 of the Act.
[29] Section 23(1)(a) and Section 24 of the Act.
[30] Section 129(1) and (3) of the Act.
[31] FMN.

(a) Vodafone will have a controlling interest in the JV Entity given it will hold a majority of the voting rights; and

(b) CK Hutchison will be able to exercise at least material influence over the JV Entity. This is on the basis that it will hold 49% of the voting rights, have the ability to appoint half of the directors on the JV Entity's board of directors,[32] and have [✂] rights at the board and shareholder level over a large set of policy matters (including budgeting, finance, branding, and further acquisitions).[33]

3.9 As a result of the acquisition by Vodafone of a controlling interest in the JV Entity, 3UK will cease to be distinct from enterprises controlled by Vodafone. As a result of the acquisition by CK Hutchison of the ability to exercise material influence over the JV Entity, VUK will cease to be distinct from enterprises controlled by CK Hutchison.

3.10 We have therefore found that arrangements are in progress or contemplation which, if carried into effect, will result in the following enterprises ceasing to be distinct under the Act: (i) Vodafone (including VUK) and 3UK; and (ii) CK Hutchison (including 3UK) and VUK.

Turnover test

3.11 The second element of the RMS test seeks to establish whether the Merger has sufficient connection with the UK on the basis of turnover or share of supply.[34]

3.12 The turnover test is satisfied where the value of the turnover in the UK of the enterprise being taken over in its last business year[35] exceeds £70 million.[36] In a situation where two companies form a joint venture, each parent with control is considered as 'taking over' the target business contributed to the joint venture by the other parent. The relevant turnover is the sum of the turnover of each of the contributed businesses.[37]

3.13 The combined UK turnover of the businesses being contributed to the Merged Entity exceeded £70 million in the last financial year, as referred to in Chapter 2, The Parties. We are therefore satisfied that the turnover test in section 23(1)(b) of

[32] Vodafone internal document.
[33] Vodafone internal document.
[34] Section 23 of the Act.
[35] If a merger has not yet taken place, the turnover test applies to the turnover of the acquired enterprise that was generated in relation to customers within the UK in the business year preceding the date of the reference for a phase 2 investigation or such earlier date as the CMA considers appropriate. See Enterprise Act 2002 (Merger Fees and Determination of Turnover) Order 2003, article 11(2).
[36] Section 23(1)(b) of the Act.
[37] Mergers: Guidance on the CMA's jurisdiction and procedure (**CMA2(revised)**), January 2021 (as amended on 4 January 2022), paragraph 4.54(b).

the Act is met. As we have concluded the turnover test is met, there is no need to consider whether the share of supply test is also satisfied.

Conclusion on RMS

3.14 In light of the above, we have found that the Merger constitutes arrangements in progress or in contemplation which, if carried into effect, will result in the creation of an RMS. This means that the CMA has jurisdiction to review the Merger. As a result, we must consider whether the creation of that situation may be expected to result in an SLC within any market or markets in the UK for goods or services.

4. COUNTERFACTUAL

Introduction

4.1 Determining whether there is an SLC in the assessment of a merger involves a comparison of the prospects for competition with the merger against the competitive situation without the merger, which is referred to as the counterfactual.[38]

4.2 This chapter sets out our decision on the appropriate counterfactual to apply in our assessment of the Merger. The chapter covers:

(a) Our framework for the assessment of the counterfactual;

(b) The Parties' submissions on the relevant counterfactual;

(c) Our assessment of the appropriate counterfactual in this case; and

(d) Our decision as to the appropriate counterfactual.

Relevant framework

4.3 The counterfactual may consist of the prevailing conditions of competition, or conditions of competition that involve stronger or weaker competition between the merger firms than under the prevailing conditions of competition. The appropriate counterfactual may increase or reduce the prospects of an SLC finding by the CMA.[39]

4.4 The counterfactual is not intended to be a detailed description of the conditions of competition that would exist absent the merger and, in determining the counterfactual, the depth of our analysis is usually not to the same level as in the competitive assessment.[40] This is because establishing the appropriate counterfactual to assess the merger against is an inherently uncertain exercise, and evidence relating to future developments absent the merger may be difficult to obtain.[41]

4.5 As a result of these limitations, we consider the counterfactual in a broad sense and focus on significant changes to conditions of competition where there are reasons to believe that those changes would materially impact the competitive

[38] CMA129, paragraph 3.1.
[39] CMA129, paragraph 3.2.
[40] CMA129, paragraphs 3.6-3.7.
[41] CMA129, paragraph 3.14.

assessment.[42] These changes may include, for example, entry or expansion by one or both of the merger firms, or market exit by one of the merger firms.[43]

4.6 Our assessment of the counterfactual does not seek to ossify the market at a particular point in time.[44] An assessment based on the prevailing conditions of competition can reflect that, absent the merger, the position of the merging parties and their competitors would have continued to change and evolve in the market over time.

4.7 At phase 2, we make an overall judgement as to whether or not an SLC has occurred or is likely to occur.[45] To help make this assessment, we select the most likely conditions of competition as the counterfactual against which to assess the merger. In some instances, we may need to consider multiple possible scenarios before identifying the relevant counterfactual. In doing this, we will consider whether any of the possible scenarios make a significant difference to the conditions of competition and, if any do, we will find the most likely conditions of competition absent the merger as the counterfactual.[46]

Parties' submissions

4.8 The Parties submitted that they currently do not have the ability or incentive to invest in delivering high quality mobile networks which in turn means BTEE and VMO2 face limited pressure to accelerate their own mobile network investments.[47] The Parties submitted that the relevant counterfactual against which to assess the Merger is one in which the market will become increasingly bifurcated between:

(a) two scaled MNOs (BTEE and VMO2) who will continue to earn returns above their cost of capital, generate the lion's share of the mobile industry's cashflows, and will have the ability (but not the incentive) to make the investments required to innovate, deploy Advanced 5G at scale and meet the growing customer demand for data;[48] and

(b) the Parties, who will each continue to earn insufficient returns and generate a negligible share of mobile cashflows. In the counterfactual, neither Party will be able to deliver the network quality, coverage and capacity that would be required to compete effectively both at the retail and wholesale levels.[49] The

[42] CMA129, paragraph 3.9.
[43] CMA129, paragraph 3.8.
[44] CMA129, paragraph 3.3.
[45] '[It] is not necessary for the [CMA] to isolate each step in the analytical process and to apply the balance of probability separately at each stage [of the SLC assessment]', *BSkyB and Virgin Media v Competition Commission and BERR* [2010] EWCA. Civ 2, paragraph 69.
[46] CMA129, paragraph 3.13.
[47] FMN.
[48] FMN.
[49] FMN.

Parties told us that an inability to invest [✂] limits the Parties' ability to challenge the market leaders.[50]

4.9 The Parties also submitted their views of the UK mobile market, in particular, how it lags behind other nations in 5G roll out, the nature of network investment and the financial challenges that 3UK and VUK face as a result of the dysfunctional structure of the UK market.[51]

4.10 In response to our Provisional Findings the Parties submitted that the prevailing conditions of competition will continue to deliver sub-optimal outcomes for UK customers and businesses, and competition between MNOs will only increasingly weaken in the counterfactual. The Parties submitted that faced with exponential growth in traffic, the competitive strength of 3UK and VUK is likely to deteriorate (in particular, relative to BTEE and VMO2). The Parties submit that they are at a competitive disadvantage to the other MNOs which is growing. The Parties consider that given the future challenges facing the mobile market in the UK, they do not have sufficient scale ([✂]) and do not [✂] today to compete effectively.[52]

4.11 For a full overview of these submissions, please see Chapter 8.

Our assessment

4.12 As noted above, an assessment of the counterfactual is not intended to be a detailed description of the conditions of competition that would prevail absent the Merger. Such descriptions are better considered as part of the competitive assessment. In our appraisal of the counterfactual, we have focused on significant potential changes to the market and its structure that could impact our competitive assessment.

4.13 CMA129 highlights three specific examples of situations where the CMA may use a different counterfactual to the prevailing conditions of competition. These are:[53]

(a) entry or expansion by one of the merger firms;

(b) the exiting firm scenario; and

(c) where there are competing bids.

4.14 The Parties have not made any claims with respect to scenarios (a) and (c) above.

4.15 With respect to (b), the exiting firm scenario, whilst the Parties have made claims that the Parties are 'sub-scale', the exiting firm scenario requires the CMA to see

[50] Parties' initial submission, 1 May 2024, paragraph 1.3 (ii), page 2.
[51] Parties' initial submission, 1 May 2024.
[52] Parties' response to the Provisional Findings, 4 October 2024, paragraph 1.4 (a) and (b).
[53] CMA 129, paragraph 3.16.

evidence that one of the Parties is likely to have exited the market (through failure or otherwise) absent the Merger. The Parties' submissions that they are sub-scale do not amount to an exiting firm scenario.

4.16 Further, in response to the Issues Letter at phase 1, the Parties specifically told the CMA that they are not submitting that 3UK (or VUK) is a failing firm, and submitted that the Parties do not need to be failing firms for the appropriate counterfactual to be weaker conditions of competition going forward.[54] [✂].

4.17 The Parties' submissions on the counterfactual focus on the current and future dynamics of the market, in particular their submission that these dynamics will lead to an increasingly 'bifurcated' market with only two MNOs with the scale to compete effectively and the Parties' position in the market deteriorating over time.

4.18 To determine the appropriate counterfactual we are required to focus on significant market changes and the CMA will generally conclude on the counterfactual conditions of competition broadly.[55] The Parties' submissions on their scale and the state of UK 5G roll-out go beyond an assessment of the counterfactual in a broad sense but seek to describe in detail the Parties' view of current market dynamics. Further, the Parties' submissions do not suggest the structure of the market would be different in the counterfactual. For these reasons, we do not consider the Parties' submissions to be relevant for determining the broad counterfactual against which to assess the Merger.

4.19 It is clear that mobile markets regularly go through significant changes. The UK market is currently going through a number of changes, such as the roll out of NSA-5G, 5G-SA, projected strong growth in mobile data demand,[56] growth in MVNOs and the introduction of e-SIMs, among others. Such changes can alter market dynamics, and new technologies can have a significant impact on levels of investment. We also understand that changes to the competitive landscape can occur over a number of years in the UK mobile market and that an MNO's investment plans are often considered over a significant time horizon.[57] In the context of the UK mobile industry, the prevailing conditions of competition are therefore likely to encompass significant change and evolution over time with the position of individual competitors also changing over time.

4.20 Whilst we cannot determine with certainty how current market wide changes will impact the market, we can take into account such changes in our competitive assessment where there is supporting evidence.

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[54] Parties' response to the phase 1 Issues Letter.
[55] CMA 129, paragraph 3.9.
[56] Meeting future demand for mobile data, 9 February 2022.
[57] 3UK told us that [✂] and VUK told us that [✂]. Parties' response to the CMA's request for information (**RFI**).

4.21 Based on our view that the Parties' submissions are more relevant to the competitive assessment and do not suggest an alternative structure for the market, our decision is that the most appropriate counterfactual against which to compare the Merger is that of prevailing conditions of competition, and we will take account of developments in the market in the competitive assessment where relevant and where supporting evidence exists.

4.22 Our decision that the prevailing conditions of competition is the appropriate benchmark against which to assess the Merger does not dismiss the Parties' submissions with regards to the current state of competition and investment, and how this might affect competition today and going forward. As CMA129 sets out, a conclusion of prevailing conditions does not ossify the market at a particular point in time.[58] We are able to take into account foreseeable changes in the market, which may increase or decrease the likelihood of finding an SLC, in the competitive assessment.

4.23 Our view is therefore that the Parties' submissions on network investment, their weak competitive positions and scale should be taken into account in our competitive assessment (please see the Chapter 8 and in particular, the competitive position section).

[58] CMA129, paragraph 3.3.

5. INDUSTRY BACKGROUND

Introduction

5.1 This chapter sets out background information on the UK mobile telecommunications sector relevant to our assessment of the Merger. The chapter is split into the following subsections:

(a) Overview of mobile services;

(b) Technological developments;

(c) Fixed-mobile convergence and bundling; and

(d) Mobile telecommunications services providers.

Overview of mobile services

5.2 Mobile services play an integral role in the daily lives of consumers and businesses in the UK. The UK telecoms sector generated £32.8 billion in revenue in 2023, with retail mobile services generating £13.7 billion in revenue, and wholesale fixed and mobile services jointly generating £5.1 billion. Mobile services accounted for 49.4% of total retail revenues in 2023, which amounted to £27.7 billion,[59] up from 48.4% in 2022. The total number of mobile subscriptions increased by nearly 3% to almost 90 million in 2023, 84.3 million of which were mobile phone subscriptions and 4.8 million were data only subscriptions.[60]

5.3 Ofcom is the communications regulator in the UK and publishes key data on the telecommunications industry.[61] Based on Ofcom's most recent publications, the telecommunications industry in the UK is a historically well-developed and mature market.[62]

5.4 In the last ten years, there has been a significant shift towards the use of mobile devices in UK consumers' everyday lives, both at home and at work.

(a) 97% of UK adults are estimated to have a mobile phone, and 92% a smartphone.[63]

[59] Retail fixed services made up the remaining £14.0 billion in revenue. See Ofcom Communications Market Report, July 2024, page 4, accessed by the CMA on 1 December 2024.
[60] Ofcom Communications Market Report, 18 July 2024, page 4; Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[61] Recent noteworthy publications include: Ofcom Connected Nations: UK Report 2023,19 December 2023; and Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022.
[62] Similarly, the European Commission found that the UK has traditionally had a well-developed telecommunications sector, Case M.7612 *Hutchison 3G UK/Telefónica UK*, recitals 48 and 54.
[63] Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.

(b) Most calls are now made from mobile phones rather than landlines,[64] with the total volume of outgoing calls from fixed and mobile lines having decreased by 38.3 billion minutes (17%) since 2013.[65]

(c) The use of SMS and MMS messaging has plunged since 2013, by 97 billion messages (75%), driven by the growing use of over-the-top messaging services such as WhatsApp, iMessage and Facebook Messenger.[66]

(d) In May 2023, UK adults spent on average 2 hours and 47 minutes a day online on their smartphones, with 89% of the time spent being via apps.[67]

(e) Average monthly data volumes per mobile data user[68] reached 9.9 gigabytes (**GB**) per month in 2023, up from 2.6GB in 2017.[69]

Mobile services subscriptions

5.5 Traditionally, mobile services subscriptions have either been post- or pre-paid.

(a) Post-paid (pay-monthly or **PAYM**) subscriptions are those for which the customer is billed for the cost of any service after usage. PAYM subscriptions are for a minimum contract period (eg 12 or 24 months).

(b) Pre-paid (pay-as-you-go or **PAYG**) subscriptions are those for which customers pay in advance by topping up their phone with credit, and the charges for use are subtracted from this balance.

5.6 A new form of pre-paid subscription has emerged in recent years with the introduction of **hybrid PAYG tariffs**. As is the case with traditional PAYG services, these tariffs do not involve credit checks, or a minimum contract period and any use outside the inclusive allowance is deducted from a pre-pay credit balance. However, with these tariffs customers may set up a recurring card payment and choose an inclusive allowance of calls, text, and data that refreshes automatically each month, similar to a PAYM subscription. Ofcom recently estimated that of the pre-pay tariffs available in Pure Pricing's September 2023 Monthly Mobile Pricing report, 96% were hybrid PAYG tariffs.[70]

5.7 Mobile services can be offered to customers as:

[64] 88% of call volumes originated on mobile networks in 2023 against 59% in 2013. See Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[65] Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[66] Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[67] Ofcom Online Nation 2023 Report, 28 November 2023, Figure 4 and page 14.
[68] Excluding machine-to-machine.
[69] Ofcom Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[70] Pricing trends for communications services in the UK, 12 December 2023, page 28, accessed by the CMA on 1 December 2024.

(a) SIM-only (**SIMO**) subscriptions, where the customer receives a physical SIM card or eSIM and an inclusive allowance of mobile, data and texts from their mobile provider but not a device (handset) to use them with;[71] or

(b) pay-monthly mobile subscriptions that include airtime and a handset, either in a combined or split contract (**PAYM handset**).

5.8 In 2023, post-pay mobile subscriptions accounted for 80% of all mobile subscriptions.[72] Ofcom observed that the number of pre-pay mobile subscriptions increased in 2022 for the first time in over a decade, due to the growing take-up of hybrid PAYG tariffs.[73] As at the end of Q2 2023, Ofcom estimated that SIMO subscriptions were the most frequently used type of service, representing 41% of total mobile subscriptions,[74] (up three percentage points from 2022), whereas PAYM handset tariffs accounted for 37% (down six percentage points from 2022).[75] Ofcom considers that a key driver of this shift is consumers using their mobile handsets for longer to reduce their mobile spend, meaning that at the end of a combined airtime and handset contract, many customers continue to use the same handset and move to a SIMO subscription.[76]

Mobile data traffic growth

5.9 Mobile internet access has become an essential service for people and businesses and Ofcom expects demand for mobile data to grow to meet changing customer needs, as greater use is made of data-hungry services (eg streaming, video calling, virtual and augmented reality) and as new technologies enable new uses (eg robotics, smart cities and in healthcare with remote monitoring and diagnosis), although the rate of potential growth is uncertain.[77] The uncertainty about the future rate of growth of mobile data itself reflects uncertainty over future applications and technology developments (eg 5G) and the extent to which customers will use national mobile networks, private mobile networks and Wi-Fi to meet their connectivity needs.[78] Notwithstanding, Ofcom noted that significant

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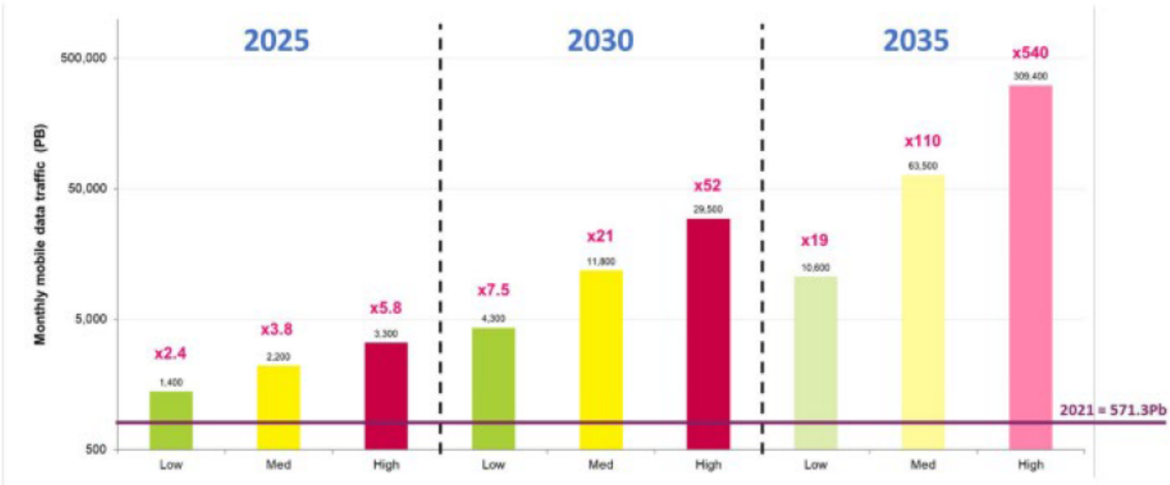
[71] SIMO subscriptions can either be pre-paid (traditional or hybrid) or post-paid, and can also be offered as a data-only packages.
[72] Communications Market Report 2024: Interactive data, 18 July 2024, accessed by the CMA on 9 August 2024.
[73] Communications Market Report, 20 July 2023, page 2, accessed by the CMA on 1 December 2024.
[74] Ofcom pricing trends for communications services in the UK, 12 December 2023, page 26, accessed by the CMA on 1 December 2024. We understand that the 41% figure does not include pre-pay SIMO subscriptions.
[75] Ofcom pricing trends for communications services in the UK, 12 December 2023, page 5, accessed by the CMA on 1 December 2024.
[76] Ofcom pricing trends for communications services in the UK, 12 December 2023, page 26, accessed by the CMA on 1 December 2024.
[77] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraph 1.1, accessed by the CMA on 1 December 2024.
[78] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraph 4.4, accessed by the CMA on 1 December 2024.

investments in mobile networks will be required to increase capacity and provide the network quality needed to meet customers' future connectivity needs.[79]

5.10 In light of the uncertainty highlighted in the previous paragraph, Ofcom considered three different scenarios for growth in mobile traffic up to 2035 (see Figure 5.1 below), noting that these are intended to cover a wide range of possible growth rates to account for the uncertainty in future growth paths, and are neither forecasts nor predictions.[80]

Figure 5.1: Ofcom three estimated scenarios for data traffic growth



Source: Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, Figure 4.1.

5.11 In the same report, Ofcom indicated that data growth in the UK for 2022 fell below the previous year-on-year growth trend of around 40%, and noted that it was too early at that point to assess whether this marked a new trend of lower data growth, but that the growth rates towards the top of Ofcom's range of scenarios seemed less likely in the next few years.[81]

5.12 Recent quarterly telecommunications market data updates released by Ofcom indicate that in the last two years mobile data volumes have continued to increase, albeit at a slower rate, with data volumes growing by 24.1% between 2023 and 2022, compared to 26.4% between 2022 and 2021.[82]

[79] Including through technology upgrades to increase the amount of data that can be carried over a given amount of spectrum and increasing the number of sites in areas where additional capacity is needed (including through the deployment of small cells and millimetre Wave spectrum). See Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraphs 1.8, 4.8 and 4.10, accessed by the CMA on 1 December 2024.
[80] Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraph 4.5 and footnote 54, accessed by the CMA on 1 December 2024.
[81] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraphs 1.1, 1.4, and 4.7, accessed by the CMA on 1 December 2024.
[82] Ofcom's Telecommunications Market Data Update Q4 2023, 25 April 2024, page 14, Table 2; and Telecommunications Market Data Update Q4 2022, 27 April 2023, page 16, Table 2, accessed by the CMA on 1 December 2024.

5.13 Several third parties told the CMA that as data demand continues to grow, the MNOs need to continue to invest to keep up with this demand.[83] However, some third parties also noted that 5G standalone (see section 5G below) is not currently being demanded by a significant proportion of customers and this demand may be some years away.[84]

Technological developments

5G

5.14 5G is the new, fifth generation of mobile network technology. Every generation of new wireless technologies leads to the development of new applications and services that make use of its capabilities. For example, 3G led to the launch of smartphones and 4G enabled video-streaming on mobile devices that was previously impossible on 2G. In the same way, 5G may lead to the development of new applications, as further discussed below.

5.15 In the UK, the roll-out of 5G is primarily led by MNOs who choose when and where they roll out services. 5G infrastructure can also be delivered by neutral hosts (or tower companies) which build passive infrastructure (such as towers and masts) and then lease access to MNOs, but which do not offer mobile services themselves. Private 5G networks can be provided by network operators other than the MNOs.[85]

5.16 MNOs began rolling out 5G in 2019,[86] by deploying non-standalone 5G (**NSA 5G**). Ofcom found that competition between MNOs has been driving investment in 5G and has been initially focused on improving network capacity to meet demand in congested urban areas.[87] NSA 5G uses 5G equipment for the RAN (which transmits wireless signals to user devices such as smart phones using base stations and antennas), radiating both 5G and 4G combined, but relies on 4G legacy infrastructure for the core network (which manages control and signalling

[83] For example, Professor Stephen Temple response to the issues statement, 16 May 2024, page 4; and [✂] meeting slides.
[84] BT response to the issues statement, 16 May 2024, paragraph 2.42; [✂] call note; and [✂] call note.
[85] A private network is a mobile network that has been dedicated to a closed group of people and/or devices, and its features can be configured to meet specific customer needs (eg performance and security) (House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, page 9; Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraphs 1.11, 4.43, 4.55, A3.2, A3.15, accessed by the CMA on 1 December 2024).
[86] EE becomes first network to take 5G to 50% of UK population, 10 May 2022, accessed by the CMA on 5 August 2024; Three UK continues rollout of 5G across the UK, 30 November 2020, accessed by the CMA on 5 August 2024; One year on from 5G launch, Vodafone first to showcase next phase of 5G technology, 3 July 2020, accessed by the CMA on 5 August 2024.
[87] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraph 3.11. This is consistent with the Parties' internal documents which show VUK monitoring the NSA 5G roll-out of 3UK, BTEE and VMO2 (for example, Vodafone internal document). 3UK views its NSA 5G roll-out as [✂] (CK Hutchison internal document).

information, thereby enabling connectivity to the wider internet).[88] NSA 5G delivers improvements to the network, in particular an increase in capacity, which supports the current uses of mobile services such as video streaming, gaming and general web browsing.[89] However, the more advanced use cases envisioned for 5G will require 'standalone' networks.[90]

5.17 5G SA utilises dedicated 5G equipment in all parts of the network (ie a 5G core network and 5G RAN infrastructure).[91] 5G SA can offer broader capabilities than existing NSA 5G networks, including very high responsiveness (ultra-low latency), advanced network slicing functions,[92] and potentially improved coverage. These capabilities, in particular very high responsiveness, may be required to enable certain new applications over mobile, such as advanced augmented reality or virtual reality and robotic applications over mobile networks (although they can also be delivered by other technologies such as Wi-Fi).[93]

5.18 As of December 2023, 4G continues to provide the backbone of consumers' mobile experience in the UK.[94] Notwithstanding, Ofcom reported that 5G availability (almost all of which is delivered using NSA 5G technology) is gathering pace though it varies by MNO and by geography,[95] and that it is now beginning to see the transition to mobile 5G SA rollouts, with around 2,000 5G SA sites deployed commercially in 2023.[96] VUK has started deploying a limited 5G SA network focused on urban areas in London, Manchester, Glasgow and Cardiff under 'Vodafone 5G Ultra' and has plans to [✂] absent the Merger.[97] 3UK has [✂] absent the Merger.[98]

5.19 5G technology is expected to have three main differences compared to 4G: faster speeds, greater capacity (the ability to connect very large numbers of devices in a small area, at one time) and low latency (ie the time between instructing a wireless

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88 Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, A1 Glossary; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, page 8, accessed by the CMA on 1 December 2024.
89 Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, footnote 98, accessed by the CMA on 1 December 2024.
90 Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraph 4.8; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, page 8, accessed by the CMA on 1 December 2024.
91 Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, A1 Glossary; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, page 4, accessed by the CMA on 1 December 2024.
92 Network slicing is a feature of 5G SA networks that allows an MNO to create multiple virtual networks (slices) on top of its common shared physical infrastructure. The virtual networks are then customised to operate with specific quality of service and meet the specific needs of applications, services, devices, customers or operators.
93 Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, paragraph 4.8, accessed by the CMA on 1 December 2024.
94 Ofcom Connected Nations 2023: UK report, December 2023, page 35, accessed by the CMA on 1 December 2024.
95 Ofcom estimated that 3UK has the most extensive outside premises coverage of 78% and BTEE has the most coverage overall of 63% (Ofcom Connected Nations 2023: UK report, December 2023, page 35). Noting that for 3UK's coverage this is for the range covering Very High and High Confidence levels and for BTEE is for Very High Confidence levels, both of which are explained on page 36 of the same report.
96 Ofcom Connected Nations 2023: UK report, December 2023, page 37, accessed by the CMA on 1 December 2024.
97 FMN.
98 FMN.

device to perform an action and that action being completed) which means that 5G is also more responsive.[99] These features mean that 5G has the potential to support a variety of uses, including 'smart' applications, beyond mobile broadband, for example in e-healthcare, smart cities, connected vehicles, and automated manufacturing.

5.20 Some of the available literature relating to 5G refers to the notion of 'advanced 5G', although this is not a term used in Ofcom's conclusions paper on future approach to mobile markets and spectrum.[100] The UK Government's April 2023 UK Wireless Infrastructure Strategy (the **Wireless Infrastructure Strategy**) reports that advanced 5G, building on 5G SA, will likely include use of artificial intelligence and machine learning techniques to further optimise network performance and support for extended reality applications.[101] In their submissions, the Parties noted that advanced 5G is a 5G network with enhanced capabilities beyond connectivity and achieved through a combination of (i) 5G SA, (ii) widespread deployment of C-band spectrum, (iii) high-bandwidth backhaul, and (iv) a low latency network architecture.[102]

5.21 5G use cases can be grouped into three broad categories which are illustrated in Figure 5.2 and discussed in more detail below:

(a) Enhanced mobile broadband (more data): this means an evolution of the 4G services already used, including improved consumer experience (such as a more reliable service), more connected devices and faster connection speeds. 5G may also be used for wireless home broadband (**FWA**) and could support virtual and augmented reality technology;

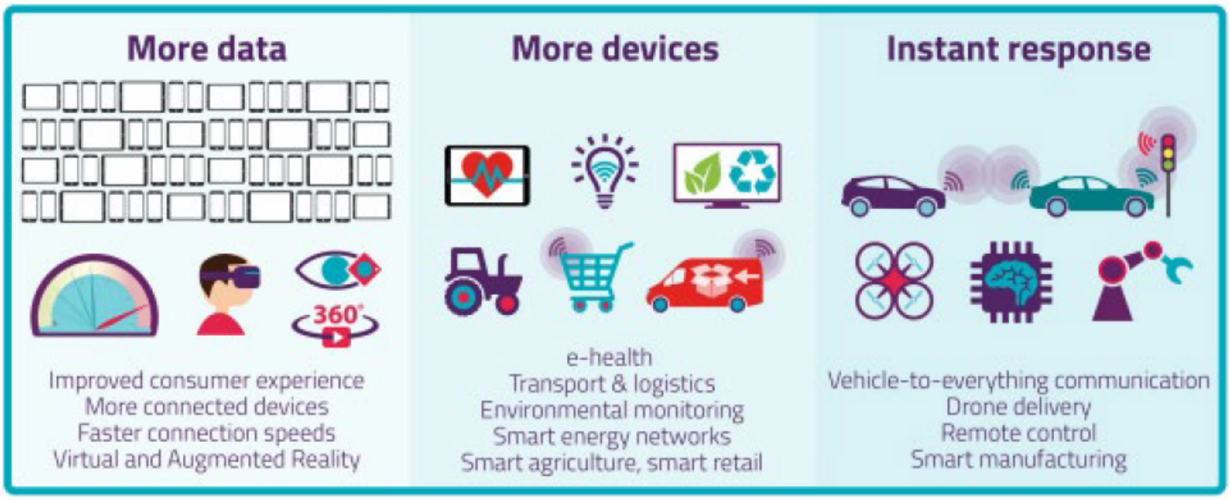
(b) Massive machine type communications (more devices) – this means that 5G is expected to support many internet-connected devices and applications (Internet of Things or **IoT**).[103] 5G is expected to be the networking technology that supports the IoT in the future, due to its low latency and capacity to support many devices at any one time. Examples of possible uses include smart energy meters and thermostats, remote health monitoring, vehicle

[99] Ofcom, What is 5G?, 16 June 2023, accessed by the CMA on 5 August 2024; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, page 6, accessed by the CMA on 1 December 2024. 5G networks have enabled access to increased bandwidth and more efficient use of radio spectrum, resulting in faster download speeds and lower latency. Due to their use of higher frequency spectrum bands, 5G networks also make greater use of mMIMO antenna technology, which enhances network capacity, signal quality and energy efficiency by simultaneously serving multiple users and accurately directing signals (FMN).
[100] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, 6 December 2022, accessed by the CMA on 1 December 2024.
[101] DSIT, Policy paper, UK Wireless Infrastructure Strategy, April 2023, Table 2, accessed by the CMA on 1 December 2024.
[102] The Parties further submitted that while advanced 5G can, in theory, be deployed using a range of different spectrum bands, the widespread use of C-band spectrum is an essential prerequisite to support advanced use cases (FMN).
[103] The IoT refers to a network of connected devices that talk directly to each other without needing to interact with human beings.

tracking, smart bins that send warnings when they are full, smart fridges that can tell how much food is left or order replacement items that have run out.

(c) Ultra-reliable low-latency communications (instant response): this means that 5G will be able to support near real-time communications applications with high reliability, including tactile internet, remote control and autonomous vehicles. Applications may include driverless vehicles, drone delivery, smart manufacturing, remote surgeries, wireless robots and machinery, and emergency response and management.[104]

Figure 5.2: Expected 5G use cases



Source: Ofcom, Enabling 5G in the UK, March 2018, Figure 1.

5.22 Most of these applications are still developing in terms of technology and business cases supported, for example, by government funding.[105] While the societal and economic impact of 5G is difficult to predict, a study by Analysys Mason, commissioned by the Department for Science, Innovation and Technology (**DSIT**) projected a cumulative gross value added (**GVA**) ranging between £41 billion and £243 billion over 2021 to 2035 depending on how widely 5G is adopted.[106]

5.23 The Wireless Infrastructure Strategy sets an ambition of 'nationwide coverage of standalone 5G to all populated areas of the UK by 2030',[107] and it is widely

[104] Ofcom, Enabling 5G in the UK, March 2018, section 3 'Benefits of 5G'; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, section 1.2 'What can 5G be used for?'. The UK Telecoms Innovation Network has webpages discussing 5G applications in key sectors including healthcare, manufacturing and agriculture (UKTIN, How To Deploy Advanced Connectivity Solutions, accessed by the CMA on 16 August 2024).
[105] In 2017, the UK Government initiated the 5G Testbeds and Trials programme, a £200 million nationally coordinated programme of investment in 5G. To date, the programme has invested in a wide range of projects from testing healthcare applications in Liverpool to delivering the world's first 5G music lessons, connecting musicians in Bristol and London to play together (DSIT, Policy paper, UK Wireless Infrastructure Strategy, April 2023), accessed by the CMA on 1 December 2024.
[106] Analysys Mason, Realising the benefits of 5G, August 2021, chapter 8.2. £243 billion is the GVA of £159 billion in the 'general purpose technology' scenario, where around 70% of firms adopt 5G, plus up to £84 billion from addressing market barriers. £40.7 billion is the GVA for the 'advanced technology' scenario where adoption is lower.
[107] DSIT, Policy paper, UK Wireless Infrastructure Strategy, April 2023. Populated areas include villages and rural communities, accessed by the CMA on 1 December 2024.

recognised that 5G deployment will require significant investment, including from MNOs.[108]

5.24 However, there is uncertainty around 5G use cases and adoption rates, creating what the UK Government refers to as the 'chicken and egg problem': mobile operators need to see clear demand from consumers and enterprises for 5G services in order to invest, but without real-world evidence of 5G use cases in practice, potential users of 5G may be unable to see its potential and the benefit of investing in it.[109] Similarly, MNOs have said to Ofcom that the case for deploying 5G is challenging, with considerable uncertainty over the extent to which they can make a return on their investment. This is, in particular, due to:

(a) the prospect of monetising 5G mobile services by charging consumers higher prices for 5G compared to 4G being limited, at least for the time being; and

(b) the investment needed to deliver 5G SA being greater than for previous generations, and with 5G SA requiring a greater level of capex which may make scale more important.[110]

5.25 The Parties submitted that 5G SA and advanced 5G may not be required to address future growth in data traffic from the existing consumer applications such as video streaming, web browsing, social media and from other consumer applications with throughput and latency requirements that can be met with 4G and NSA 5G.[111] This is broadly consistent with third party feedback on 5G SA we have received which suggests that this remains a nascent technology that has yet to develop widespread use cases.[112] Ofcom also reported that the strength of the business case relies on the demand for new types of uses enabled by 5G SA but that these new uses are either still under development or not yet proven.[113]

5.26 Further, Ofcom commented that MNOs may have lower incentives at present to invest in 5G technology, since in the absence of 5G SA, NSA 5G delivers a similar service to 4G and customers may not be prepared to pay a premium for 5G (as discussed further in Efficiencies).[114] We have found evidence of this in the Parties' internal documents[115] and third party evidence suggests that there is currently not

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[108] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraphs 1.8 and 4.8; DSIT, Policy paper, UK Wireless Infrastructure Strategy, April 2023; House of Commons Library, Research Briefing, 5G in the UK, 8 March 2024, section 3.1 'Investment uncertainty'.
[109] DSIT, Policy paper, UK Wireless Infrastructure Strategy, April 2023, Chapter 6, accessed by the CMA on 1 December 2024.
[110] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 4.18. This is consistent with the Parties' submissions to the CMA throughout this inquiry. The Parties refer to this as the 'investment challenge' (FMN).
[111] However, the Parties also submitted that future customer needs mean that it would not make economic and commercial sense to expand capacity with older 5G technology (FMN).
[112] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; and [✂].
[113] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 4.18.
[114] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 4.19.
[115] For example, CK Hutchison internal document suggests demonstrating to consumers [✂] and states that '[✂]'.

significant consumer demand for or understanding of 5G services,[116] and that consumers may not be able to distinguish between 4G and NSA 5G or 5G SA.[117]

5.27 Notwithstanding, Ofcom reported that while there is currently uncertainty about future demand for new use cases enabled by 5G SA, (including uncertainty over how much of that demand MNOs will capture), this uncertainty is likely to reduce over time. As evidence of demand emerges, this will inform the need for, and benefit from, further investment and reduce uncertainty for MNOs.[118]

eSIM

5.28 In its conclusions paper on its future approach to mobile markets and spectrum, Ofcom indicated that it expects to see a range of changes across the mobile value chain over the next five to ten years, many of which will be facilitated by technological developments, such as deployment of 5G standalone (discussed in the previous section), and embedded-SIMs (**eSIMs**).[119] An eSIM is a form of programmable SIM that is embedded directly into a device, thereby removing the need for a physical SIM card.[120]

5.29 When customers switch mobile operators, they will typically need to physically insert a new SIM card (ie from the operator they are switching to) into their mobile device. By contrast, an eSIM is embedded into the device and not tied to one specific network. Customers therefore have the ability to switch provider directly on their device, by updating the eSIM wirelessly.[121] In addition, eSIMs can hold multiple profiles (eg mobile airtime or data plans), enabling customers to take services from different providers at the same time. Ofcom considers that customer awareness of eSIMs is likely to be low at present and providers have not yet sought to actively promote eSIM use among consumers. Ofcom nevertheless expects that, within the next five to ten years, most consumers will be using eSIMs instead of physical SIMs, with physical SIMs eventually phased out.[122] At present, the benefits of eSIMs have mostly been highlighted in relation to international roaming, as a potentially more cost effective alternative to using roaming add-ons.[123]

5.30 eSIM-enabled devices (ie devices that accept both a physical SIM and an e-SIM) have been available since 2017 in the UK.[124] While in the US Apple moved to eSIM-only handsets for its iPhone 14 devices in September 2022, eSIM-only

[116] Responses to the CMA's questionnaire from: [✂]; and [✂].
[117] Responses to the CMA's questionnaire from: [✂]; [✂]; and [✂].
[118] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 4.19.
[119] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 4.42.
[120] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, footnote 106.
[121] This is done either through an app or scanning a QR code.
[122] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, Box A3.
[123] MoneySavingExpert, What is an eSim?, 31 July 2024, accessed by the CMA on 5 August 2024; Which?, Mobile phone eSims explained: what is an eSim and how does it work?, 14 May 2024, accessed by the CMA on 6 August 2024.
[124] See for example The Verge, Google's Pixel 2 phones are the first to use built-in eSIM technology, October 2017.

handsets are yet to be introduced in the UK. Several mobile operators now offer eSIMs, including the four MNOs, although some providers (including BTEE, Giffgaff, Sky Mobile, Tesco Mobile) appear to require consumers to order a physical SIM first and eSIMs are not currently widely available on PAYG tariffs.[125]

5.31 The Parties submitted that the adoption of eSIMs will increase the competitive constraint on MNOs, in particular by (i) disintermediating the mobile operators and weakening their relationship with end consumers, and (ii) further reducing barriers to entry and switching for end customers.[126] This is due, according to the Parties, to:

(a) increased consumer churn as eSIMs remove the need for a customer to obtain a new physical SIM when switching operator, and therefore make the switching experience more seamless and attractive for consumers;[127]

(b) the increased threat of entry by hyperscalers (defined in section the Hyperscalers & system integrators below to include [✂]) in retail mobile or as a distribution channel [✂], through offering consumers who purchase eSIM-enabled devices that use their mobile operating system the ability to change mobile operator at any time;[128] and

(c) the increased strength of MVNOs, as fully digital eSIMs reduce barriers to entry for new MVNOs and to switch host MNOs.[129]

5.32 In response to the Phase 1 Decision, Vodafone submitted that VUK's internal documents illustrate how eSIMs [✂], which is capable of intensifying competition both at the retail and wholesale level.[130]

5.33 Ofcom has noted that the deployment of eSIMs could enable Apple and Google to enter into the distribution of mobile services. In particular, Apple and Google could use their mobile operating systems to offer platforms on which customers can choose their mobile provider, for example, by setting up a 'choice screen' accessible through the settings menu or an app.

5.34 Ofcom has suggested that a choice screen or app provided by Apple or Google could offer consumers an easy and convenient way to compare providers across a number of different factors (such as quality), which could in turn lead to MNOs being more incentivised to invest and compete more intensely on aspects of quality, but that this could give rise to some risks too (for example as a result of Apple and/or Google leveraging their market power into the distribution of mobile

[125] MoneySavingExpert, What is an eSim?, 31 July 2024, accessed by the CMA on 5 August 2024.
[126] FMN.
[127] FMN.
[128] FMN; and Parties' initial submission, 1 May 2024, paragraph 1.6.
[129] FMN; and Parties' initial submission, 1 May 2024, paragraphs 1.8(iii)(b),1.9(iv), 4.1(iii)(c), and 4.14(v).
[130] Annex to Parties' initial submission.

services).[131] At the same time, Ofcom recognised that there is still uncertainty for now as to how the deployment of eSIMs will unfold in practice.[132]

5.35 In the course of the Merger inquiry, we have sought views from mobile operators regarding whether they expect any material developments to take place in the UK retail mobile sector in the near future (ie the next two to three years). Most respondents that expected material developments to take place referred to eSIMs.[133] We summarise below qualitative comments made in this context:

(a) One MNO shared the Parties' view that eSIMs gaining momentum could result in disintermediation of MNOs, thereby impacting their ability to connect with customers and continue to invest in the infrastructure necessary to provide quality of service and coverage for all customers.[134]

(b) Another MNO commented that as eSIM technology and eSIM-enabled handsets become more widespread, different customer offerings and business models may start to emerge eg 'try before you buy' offers, different inbound and outbound roaming offers, eSIM driven tariff aggregation ie different providers for different parts of the bundle voice vs data vs roaming. The increasing prevalence of eSIM capability means that more MVNOs will be able to offer mobile services with different business models with recent eSIM entrants focused on roaming solutions eg Airalo, EasySIM.[135]

(c) One business MVNO noted that as eSIM penetration increases, the disruption caused by the SIM swap process will diminish somewhat and this may limit the volume of churn suffered during the migration process, although even with eSIMs available, migration between networks will remain far from seamless.[136]

(d) Another MVNO told us that eSIM is a significant development expected in the next few years with all devices transitioning and that this will increase the technical load required for both MNOs and MVNOs, which requires significant investment.[137]

5.36 The vast majority of the Parties' internal documents[138] convey a degree of uncertainty as to how the deployment of eSIM will unfold as its use becomes more

[131] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, Annex 3, paragraphs A3.21-A3.23.
[132] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, Annex 3, paragraph A3.25.
[133] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].
[134] [✂] response to the CMA's questionnaire.
[135] [✂] response to the CMA's questionnaire.
[136] [✂] response to the CMA's questionnaire.
[137] [✂] response to the CMA's questionnaire.
[138] Annex to Parties' initial submission, 1 May 2024; and Vodafone internal documents.

widespread.[139] This is consistent with eSIM not having been a strong feature of the mobile industry to date, despite eSIM-enabled devices having been available since 2017 in the UK. The Parties' internal documents tend to consider a range of scenarios in terms of what could change, with varying degrees of likelihood and impact.[140] For example, while a June 2023 Vodafone board paper on '[✂]' notes that in a worst case scenario [✂] could '[✂]' this is immediately nuanced noting that '[✂]'.[141]

5.37 While the Parties' internal documents identify some disintermediation risks associated with the adoption of eSIMs they also identify ways to mitigate these as well as potential opportunities they could bring about. For example:

(a) While eSIM is described as a [✂], the relevant taskforce also indicates [✂]. In terms of opportunities to capture new propositions, VUK identifies [✂].[142]

(b) In relation to [✂] eSIM [✂], the same document notes that [✂].[143] As of the date of this document, [✂].[144]

(c) Another VUK document from [✂] notes [✂].[145]

(d) In a report from June 2023, 3UK notes that [✂], and notes that [✂].[146] In the same document, [✂].[147] The document also [✂].[148]

(e) In a presentation from October 2023, 3UK discusses [✂].[149] [✂].[150]

5.38 The internal documents submitted by Vodafone on the impact of eSIM on its business segment [✂].[151]

5.39 Finally, the Parties have only provided very limited evidence from their internal documents in support of their argument that eSIM will reduce barriers to entry for new MVNOs and to switch host MNOs.[152]

5.40 Taken in the round, the evidence we have seen suggests that although the increased penetration of eSIMs – the timing of which remains uncertain – could

[139] For example, an internal paper to Vodafone's executive committee from March 2023 on '[✂]' (Vodafone internal document).
[140] For example, Vodafone, internal documents.
[141] Vodafone internal document.
[142] Vodafone internal document. Also, Vodafone internal document.
[143] Vodafone internal document.
[144] Vodafone internal document.
[145] Vodafone internal document.
[146] CK Hutchison internal document.
[147] CK Hutchison internal document.
[148] CK Hutchison internal document.
[149] CK Hutchison internal document.
[150] CK Hutchison internal document.
[151] Vodafone internal documents.
[152] Vodafone internal document. While Vodafone referenced additional documents in its initial phase 2 submission (Annex to Parties' initial submission, 1 May 2024), these did not relate to this point.

bring about disintermediation risks for MNOs, they have ways to mitigate these and this could also create new opportunities for MNOs.

Fixed-mobile convergence and bundling

5.41 Fixed-mobile convergence (**FMC**) is a trend in telecommunications towards removing differences between fixed and mobile networks, and comprises two aspects: one related to changes in technology (technological convergence), and the other to the ability of operators to offer both mobile and fixed services to retail customers (retail convergence).[153]

5.42 The Parties submitted that, following the mergers of BT with EE in 2016 and Virgin Media with O2 in 2021, together with the entry of Sky Mobile in 2017, converged operators pose an increased competitive constraint through their ability to cross-sell mobile services to their fixed bases and that the uptake of fixed-mobile bundles in the UK is increasing.[154]

5.43 Fixed-mobile bundles (also known as multi-play offers) are a combination of mobile telecommunications services and one or more fixed telecommunications services, such as fixed telephony, fixed broadband internet or pay TV purchased from the same provider, regardless of whether they are under the same contract, purchased at the same time, or sold with connected discounts.[155] The services may be, but are not necessarily, packaged together into a retail bundle (ie a retail offer in which there is some form of integration between the services offered in a bundle, for example through converged billing) or they may be offered as a result of cross-selling to an existing customer base.[156]

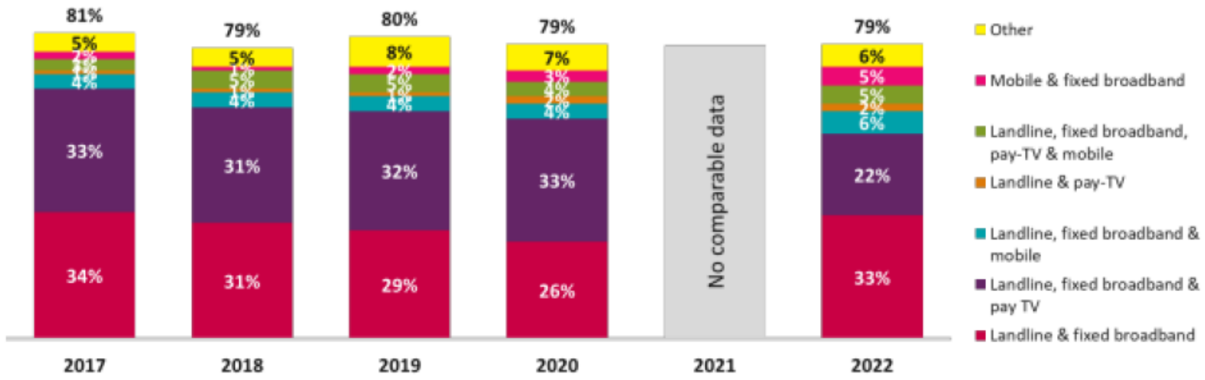
5.44 Ofcom stated that most users tend to purchase mobile services on a standalone basis, and the purchase of fixed-mobile bundles has not been a strong feature of the UK market to date.[157] By comparison, the take-up of such bundles has been much higher in a number of other European countries, ranging from 37% in France to 66% in Spain.[158]

5.45 In December 2022, Ofcom published a report showing that approximately 80% of UK households purchased two or more communications services from the same

[153] Case M.7612 *Hutchison 3G UK/Telefónica UK*, recital 63. The Parties have not put forward arguments regarding technological convergence and this point is therefore not further discussed.
[154] FMN; FMN; Parties' initial submission, 1 May 2024, paragraphs 3.18(iv) and 3.18(v); and Annex 1 to the Parties' response to the AIS and working papers.
[155] Case M.7612 *Hutchison 3G UK/Telefónica UK*, recital 69; CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, Appendix H, paragraph 2.
[156] CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, paragraphs 5.6(c) and 5.11.
[157] Ofcom's discussion paper on future approach to mobile markets, February 2022, paragraphs 5.64-5.65.
[158] Ofcom's discussion paper on future approach to mobile markets, February 2022, paragraphs 5.64-5.65; Case M.7612 *Hutchison 3G UK/Telefónica UK*, recitals 72-73; CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, Appendix H (paragraph 3); E-Communications in the Single Market, June 2021, Special Eurobarometer 510.

service provider as part of a bundle in 2022, but that only 16% included a mobile element (Figure 5.3 below).[159]

Figure 5.3: Take-up of bundled services, by bundle type



Source: Ofcom Technology Tracker 2022.
QL4.Which of these is your main supplier for your landline? QM4. Which mobile network do you use most often? QE8. Which internet service provider (ISP) does your household currently use as its main supplier at home? QT3. Which – if any – of these TV services are used in your household to watch programmes, shows or films?
Base: All respondents.
Note: Comparable data is not available for 2021 due to a change in research methodology as a result of the Covid-19 pandemic.

Source: Ofcom pricing trends for communications services in the UK, December 2022, Figure 18.

5.46 A May 2022 report by Enders Analysis suggests that there is no evidence that fixed-mobile convergence delivers value to the operators in spite of it being a 'major strategic lynchpin' for many European operators over the past decade, and in spite of the fact that it has been the justification for M&A activity in the sector.[160] In a more recent report from December 2023, Enders Analysis also noted that it sees little evidence of convergence reducing churn.[161]

5.47 Consistent with these reports, only 7% of respondents to the CMA's general population survey cited other services that formed part of a bundle as a reason for choosing their current provider (see Chapter 8, CMA surveys).

5.48 We set out further evidence on fixed-mobile convergence and our related analysis in Chapter 8, Third party evidence.

[159] Ofcom pricing trends for communications services in the UK, December 2022, pages 29-30.
[160] Vodafone internal document.
[161] FMN.

Mobile telecommunications services providers in the UK

MNOs

5.49 There are four MNOs in the UK: VUK, 3UK, BTEE and VMO2. There are two key inputs required to operate as an MNO: authorisation to use spectrum bands for mobile telecommunications and a mobile network.

VUK

5.50 VUK was the first MNO to enter the UK in 1985. It offers retail mobile services to consumers and business customers in the UK under the Vodafone brand and the VOXI and Talk Mobile sub-brands. VUK is also active in the resale of fixed voice and broadband services in the UK.

5.51 VUK had 16.8 million mobile subscribers in Q4 2023.[162]

5.52 VUK has a network sharing arrangement with VMO2. This is described in more detail in the CTIL/Beacon section.

3UK

5.53 3UK entered the UK retail mobile industry in 2003. 3UK offers retail mobile services in the UK under the Three brand and the SMARTY sub-brand. 3UK does not have any fixed-line offerings, but offers FWA using its 5G network marketed as 'broadband without landline'.[163]

5.54 3UK had 10.6 million mobile subscribers in Q4 2023.[164]

5.55 3UK has a network sharing agreement with BTEE. This is described in more detail in the MBNL section.

BTEE

5.56 Everything Everywhere was created as a joint venture by the merger of T-Mobile (UK) Limited (**T-Mobile**) and Orange UK in 2010 and was ultimately owned by Deutsche Telekom and France Télécom until its acquisition by BT Group in January 2016. Since then, EE has operated as a brand under the BT Group.

5.57 In addition to EE, BTEE owns a number of sub-brands that supply retail mobile services, including Plusnet and BT Mobile. However, BTEE has announced that it

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[162] Vodafone internal document.
[163] Broadband without Landline | Broadband Only Deals | Three, accessed by the CMA on 23 August 2024.
[164] CK Hutchison response to the CMA's s109 notice.

plans to focus on EE as its primary brand for consumers, and has closed both its Plusnet and BT mobile brands.[165]

5.58 BTEE operates exclusively in the UK and offers both fixed and mobile communications services to consumers and businesses.

5.59 BTEE had [✂] million mobile subscribers in Q4 2023.[166]

5.60 As described above, BTEE is in a network sharing agreement with 3UK.

VMO2

5.61 O2 UK was formed in 1985 as Cellnet, a 60:40 joint venture between BT Group and Securicor. In 1999 BT Group acquired Securicor's share of Cellnet. The O2 UK brand was formed as part of a de-merger from the BT Group in 2002 and O2 UK was subsequently purchased by Telefónica in 2006. VMO2 was formed in 2021 following the merger of O2 UK and Virgin Media.

5.62 VMO2 launched its sub-brand Giffgaff in 2009 and is a 50% shareholder in Tesco Mobile, the largest MVNO in the UK.

5.63 VMO2 offers a fixed cable and fibre business alongside its mobile business.

5.64 VMO2 had 23.7 million subscribers in Q4 2023.[167]

5.65 As mentioned above, VMO2 has a network sharing arrangement with VUK.

Spectrum and respective spectrum holdings

5.66 Mobile phones and other devices use radio frequencies in the electromagnetic spectrum to connect to MNOs' networks via local masts. Radio spectrum is a finite resource, for which there are a large and growing number of competing potential uses and users.[168] Ofcom is responsible for spectrum management in the UK, including the award of mobile spectrum licences to MNOs, and as part of this responsibility, it must have regard to, among other things, the promotion of competition.[169]

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[165] See Plusnet Mobile has closed | Plusnet Mobile, accessed by the CMA on 22 August 2024 and FMN.
[166] BTEE response to the CMA's RFI.
[167] VMO2 response to the CMA's RFI.
[168] Review of Ofcom's market-based approach to mobile spectrum management, Response to Government, January 2024, paragraph 2.2.
[169] Ofcom has a number of duties under the Communications Act 2003 and the Wireless Telegraphy Act 2006 which are relevant to its spectrum management functions. Under these duties, Ofcom is required to secure, among other things, the optimal use for wireless telegraphy of the electro-magnetic spectrum and the availability of a wide range of electronic communications services throughout the UK. In performing its duties, Ofcom also has to have regard to a number of factors as it appears relevant in the circumstances, including the desirability of promoting competition and encouraging investment and innovation in relevant markets and the interests of everyone who may wish to use the spectrum for wireless telegraphy. See for example, paragraphs 2.17-2.23 of Consultation: Exploring future use of the unpaired 2100MHz (1900-1920MHz) spectrum, March 2023.

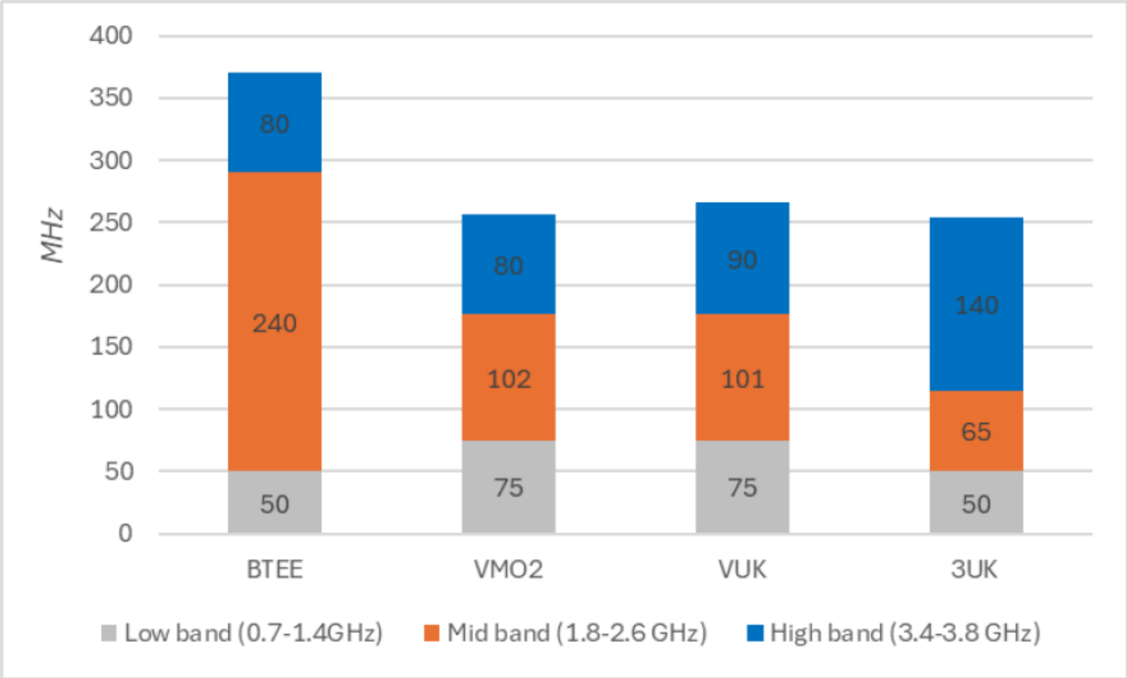
5.67 Spectrum is essential to deliver mobile services and MNOs require a balance of spectrum holdings to provide coverage and capacity, and to meet demand for different services in different locations. In general, lower frequencies are best for delivering wider coverage and carrying signals deeper indoors, while higher frequencies have greater capacity to carry data, enabling more applications, but are less able to provide wide coverage.[170]

5.68 In its conclusions paper on its future approach to mobile markets and spectrum, Ofcom indicated that future MNO spectrum needs will depend on several factors, including the growth rate of data traffic and the ways in which networks evolve to satisfy this demand, including through the spectral efficiency that can be achieved.[171] In the same paper, Ofcom reported that while MNOs consider that providing additional spectrum to mobile would be a more cost-effective solution to meet future demand than densification of macro cells and small cells using millimetre wave (**mmWave**[172]), it takes time for new spectrum to be made available (five years or more). As such, if there is continued data growth, other options to satisfy growing demand will be needed towards the end of the decade and Ofcom expects a shift in how MNOs deploy their network to meet this demand.[173] In 2023, Ofcom announced its decision to make a large amount of spectrum in the 26 GHz and 40 GHz bands (ie mmWave spectrum) available for new services including 5G, noting that making this spectrum available for new uses has the potential to deliver significant benefits by enabling large increases in wireless data capacity and speeds.[174]

5.69 Figure 5.4 provides an overview of the current allocation of spectrum. In order to supply 5G, the optimal spectrum band is the 3.4-3.8 GHz band (also referred to as C-band spectrum).[175] C-band spectrum would play an important role in delivering advanced 5G use cases in conjunction with 'massive MIMO' (**mMIMO**) radio access network (**RAN**) equipment.

[170] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 3.6.
[171] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraphs 5.8-5.9.
[172] This is the range of spectrum above 24 GHz but below 100 GHz.
[173] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraphs 5.36-5.47. Relatedly, Ofcom published in May 2024 a paper setting out a vision of how shared use of the upper 6 GHz spectrum band (6425-7125MHz) could enable both Wi-Fi and commercial mobile services, while also continuing to serve the band's existing users as much as possible (Ofcom, Vision for sharing upper 6 GHz spectrum between Wi-Fi and mobile, 21 May 2024, accessed by the CMA on 16 August 2024).
[174] Ofcom, Enabling mmWave spectrum for new uses, accessed by the CMA on 16 August 2024.
[175] The larger bandwidths available mean that deployment of C-band can deliver a transformative boost in network capacity and allow MNOs to offer speeds multiple times higher than what 4G is capable of. C-band is typically deployed using mMIMO technology, which maximises the capacity delivered and also enhances coverage.

Figure 5.4: Mobile spectrum holdings in the UK



Source: CMA analysis of Ofcom's [Frequency allocations: mobile and wireless Broadband below 5 GHz](#).
Notes: We have not included 3UK's holdings in the 3,800-4,200 MHz band *as it is not usable for mobile services (FMN), [✂]MHz of VUK [✂] spectrum as it is not suitable for telecommunications (Parties' response to the CMA's RFI), and allocations expiring on 15 October 2024 and 31 December 2025.*

5.70 As is evident from Figure 5.4 above, 3UK has by far the most C-band spectrum of the four MNOs, with around 1.75 times the current holdings of either BTEE or VMO2. As shown in Figure 5.5 below, after the Merger – and in the absence of any spectrum trade – the Merged Entity would own 46% of total spectrum, BTEE would hold 32% and VMO2 would hold 22%, of which the biggest asymmetry would be in C-band spectrum (the Merged Entity would have 59%).

Figure 5.5: Post-Merger mobile spectrum holdings in the UK (in the absence of spectrum trade)

[✂]

Source: CMA analysis of Ofcom's [Frequency allocations: mobile and wireless Broadband below 5 GHz](#).
Notes: We have not included 3UK's holdings in the 3,800-4,200 MHz band as it is not usable for mobile services (FMN), [✂]MHz of VUK [✂] spectrum as it is not suitable for telecommunications (Parties' response to the CMA's RFI), and allocations expiring on 15 October 2024 and 31 December 2025.

5.71 On 3 July 2024, VUK and VMO2 announced they had extended their current network sharing agreement and that they had also agreed that VMO2 will acquire spectrum from VUK subject to completion of the Merger (**Beacon 4.1**).[176] As shown in Figure 5.6, after the Merger and with this spectrum trade, the Merged

[176] [Vodafone and Virgin Media O2 announce new, long-term network sharing agreement](#), 3 July 2024, accessed by the CMA on 30 July 2024.

Entity would own [✂]% of total spectrum, BTEE would hold [✂]% and VMO2 would hold [✂]%. This is discussed further in the section CTIL/Beacon below.

Figure 5.6: Post-Merger mobile spectrum holdings in the UK with spectrum trade

[✂]

Source: CMA analysis of Ofcom's [Frequency allocations: mobile and wireless Broadband below 5 GHz] and Parties response to the CMA's RFI.
Notes: We have not included 3UK's holdings in the 3,800-4,200 MHz band as it is not usable for mobile services (FMN), [✂]MHz of VUK [✂] spectrum as it is not suitable for telecommunications (Parties' response to the CMA's RFI),and allocations expiring on 15 October 2024 and 31 December 2025.

Network sharing arrangements

Background to network sharing

5.72 A mobile network consists of four principal components:[177]

(a) a RAN which consists of antennas and transceiver station equipment. The RAN uses radio frequencies to provide wireless connectivity to individual end-user devices through radio base station sites, each with a mast on which there are antennas, and a base transceiver station system;

(b) the mobile backhaul, which links radio base station sites to core sites (which interconnect between different radio base station sites). This backhaul network is gradually changing from microwave (wireless) to fibre cables;

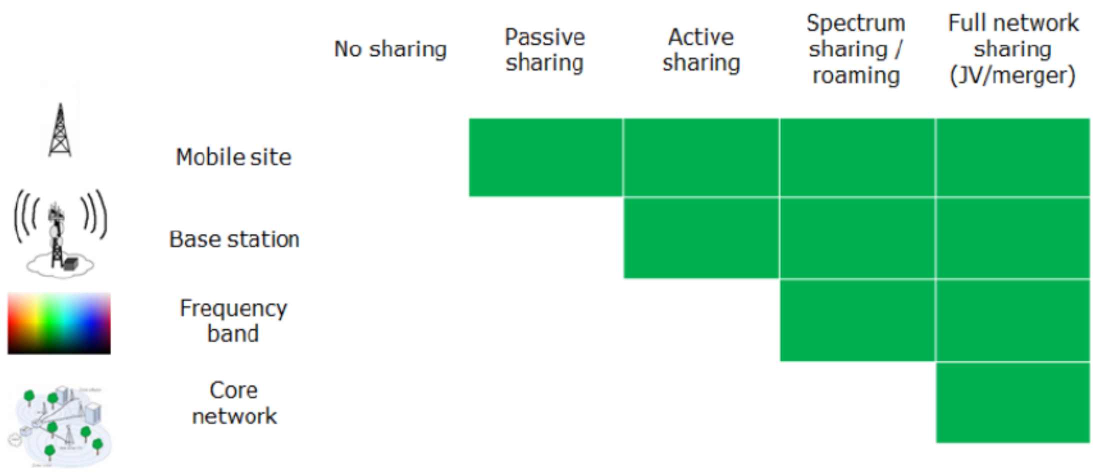
(c) transport aggregates traffic from multiple radio sites and connects with network functions and to the core; and

(d) virtualised core services provide mobile services such as voice, data and messaging.

5.73 In a network sharing arrangement, MNOs agree to share some of the network elements in order to reduce costs and increase coverage and capacity. As depicted in Figure 5.6, MNOs can choose to share the site infrastructure[178] (passive sharing) or also the active radio equipment (active sharing). For both their shared network and unilateral sites, MNOs use the infrastructure of independent providers in some cases.

[177] Parties' phase 1 teach-in slides.
[178] This includes the masts, cabins and sometimes antennas and power supplies (capex) as well as the cost of the site itself, such as rent and rates (opex).

Figure 5.7: Extent of sharing under different network sharing arrangements



Source: Case M.7612 Hutchison 3G UK/Telefónica UK, figure 10.

5.74 It is also possible for MNOs to integrate further and share spectrum under a multi-operator core network (**MOCN**) arrangement. There are no MOCN arrangements in the UK.

5.75 There are two network sharing arrangements in the UK:

(a) MBNL (defined in paragraph 5.78) which includes primarily passive network sharing between 3UK and BTEE;[179] and

(b) CTIL/Beacon (defined in paragraph 5.88) which includes passive and active network sharing between VUK and VMO2.

5.76 Some MNOs also deploy and operate a proportion of their passive site infrastructure and/or RAN independently of the network sharing arrangements.

MBNL

5.77 BTEE, then T-Mobile, and 3UK established Mobile Broadband Network Limited (**MBNL**) as a 50/50 joint venture in December 2007. The core objective when MBNL was established was to create a shared 3G RAN with a larger site footprint and in a significantly faster timescale than either shareholder could achieve on its own, delivering improved geographic coverage at lower network cost.[180]

5.78 To this end, T-Mobile and 3UK entered into [✂] (together, the **MBNL Agreements**). Pursuant to the MBNL Agreements, the MBNL joint venture was incorporated with a term until 31 December 2031 ([✂]). The shared sites that sit in

[179] [✂].
[180] FMN.

MBNL consist of approximately [✂] sites, which represent approximately [80-90]% of 3UK's sites.[181]

5.79 On 10 November 2022, Cellnex completed the acquisition of the passive infrastructure assets of CK Hutchison and its subsidiaries in the UK (including 3UK) (the **Cellnex Transaction**).[182] The Parties submitted that [✂].[183] Upon termination of MBNL, [✂] sites [✂] 3UK will be transferred to Cellnex in accordance with the provisions of the agreements between 3UK and Cellnex. The Parties submitted that [✂].[184]

5.80 The Parties submitted that MBNL has evolved over time from active sharing (where BTEE and 3UK shared passive infrastructure and active equipment, and also carried out site upgrades jointly) to a largely passive sharing agreement.[185] The Parties submitted that MBNL now operates as an estates company that manages the existing passive infrastructure and joint sites on behalf of BTEE and 3UK.[186] MBNL also has ongoing responsibilities on behalf of both BTEE and 3UK to support the management of the passive infrastructure, including [✂].[187] We understand that [✂].[188] However, these works were cancelled after Q1 2021.[189]

5.81 The most recent iteration of the MBNL Agreements came into effect in April 2023 (known as the [✂]). Its stated core principles include:[190]

(a) transition to a simplified operating model for MBNL as a provider of cost-efficient services to the shareholders, focussed primarily on estates management; and

(b) facilitate, and continue to facilitate, the shareholders' ability to pursue their separate technical and operational objectives for their networks, independently of each other.

5.82 As part of this, BTEE and 3UK have ceased jointly upgrading sites through MBNL and now perform all upgrades independently of each other and predominantly at their own, rather than shared, expense. 3UK considers [✂].[191] This process and our assessment of the impact of the Merger on the competitive constraint posed by BTEE through the Merged Entity's participation in MBNL is discussed in Chapter 11.

181 [✂]. Calculated using information from FMN.
182 FMN.
183 FMN.
184 FMN.
185 Active sharing is now limited to sharing 3G equipment in rural areas.
186 FMN.
187 FMN.
188 CK Hutchison, meeting slides.
189 MBNL call note.
190 CK Hutchison internal document.
191 FMN.

5.83 BTEE and 3UK are each [✂] under the MBNL Agreements to [✂].[192] [✂]. On [✂], the MBNL Board ratified a new MBNL Business Plan agreed by BTEE and 3UK covering MBNL's funding from [✂].[193] This is discussed in greater detail in Chapter 11, Background to MBNL.

5.84 We understand that [✂]. [✂].[194]

5.85 [✂].[195]

5.86 We understand that [✂].[196] Therefore, [✂]. There are a number of exceptions to this which we discuss in Chapter 11, Background to MBNL.

CTIL/Beacon

5.87 Cornerstone Telecommunications Infrastructure Ltd is a joint venture concerning passive infrastructure between Vodafone (through its subsidiary Vantage Towers) and VMO2 (**CTIL**).[197]

5.88 There are three types of sites currently used by VUK:

(a) [✂];

(b) [✂]; and

(c) [✂].[198]

5.89 Through the Beacon network sharing arrangement, VUK and VMO2 also share active infrastructure ([✂] 5G multi-operator radio access network (**MORAN**) infrastructure). The objective of the Beacon agreement when it was entered into was to create a combined grid to rapidly increase the network coverage of VUK and VMO2 throughout the UK [✂].[199]

5.90 The original Beacon agreement envisaged completion of a single grid with VUK as 'host' operator (ie the operator with the responsibility for providing active RAN services and deploying each operator's spectrum on that RAN) in the West of the

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[192] [✂].
[193] BTEE email.
[194] FMN; and CK Hutchison internal document.
[195] CK Hutchison internal document.
[196] CK Hutchison internal document.
[197] FMN. We note that over time VMO2 has sold some of its share of Cornerstone but continues to hold a 25.01% share – see Virgin Media O2 sells minority stake in Cornerstone to GLIL Infrastructure, 31 October 2023, accessed by the CMA on 19 August 2024 and Virgin Media O2 sells additional stake in Cornerstone to Equitix - Virgin Media O2, 30 October 2024, accessed by the CMA on 19 November 2024.
[198] FMN. For completeness, [✂].
[199] FMN. For the avoidance of doubt, references to CTIL refer to passive sharing only, references to Beacon refer to active sharing only and references to CTIL/Beacon refer to the combination of passive and active sharing.

UK and South London and VMO2 as host in the East of the UK, including Scotland and North London.[200]

5.91 In 2017, VUK and VMO2 agreed to unwind active sharing in certain areas, meaning they no longer rely on each other for the provision of active network services. This was initially done for all active sharing in London (known as Beacon 2) and then in 2019, VUK and VMO2 agreed to unwind all active sharing in the major population centres in the UK (known as Beacon 3). The Beacon parties continued acting as 'host' in the rest of the UK, with VUK hosting MORAN in the West and VMO2 hosting MORAN in the East.[201]

5.92 On 5 June 2024, VUK and Telefónica UK Limited, VMO2's parent company, entered into the Beacon 4.1 Long Form Amendments[202] and a Spectrum Transfer Agreement pursuant to which VUK has agreed to transfer spectrum assets to VMO2. This is the latest iteration of the Beacon arrangements (together, the **Beacon 4.1 Agreements**).

5.93 The Beacon 4.1 Agreements include: (i) provisions that are unrelated to the Merger, ie 'business as usual' amendments which came into effect upon execution; and (ii) provisions that are related to and, in most part, conditional on the completion of the Merger.

5.94 The 'business as usual' amendments include:

(a) the extension of the Beacon term to [✂];

(b) changes to the ways in which the arrangements deal with emerging technologies;

(c) provisions relating to the shut-down of 2G and 3G technology in the Beacon network; and

(d) modifications to the ongoing unwind processes in London and the Unwind Polygons.[203]

5.95 The provisions that are related to and mostly conditional on the Merger include:

(a) various provisions related to the delivery of the Merged Entity's joint network and its integration within the Beacon grid:

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[200] FMN.
[201] FMN.
[202] [✂].
[203] VUK and VMO2 have unwound active sharing in London and 22 other major cities in the UK (the **Unwind Polygons**). They continue sharing passive infrastructure in these areas.

(i) the consolidation of the Merged Entity's and VMO2's respective requirements into a single delivery plan;

(ii) waivers of geographic exclusivity provisions provided by VMO2 to allow the Merged Entity to integrate 3UK sites into the Beacon grid;

(iii) planning, testing and deployment of the MOCN (multi-operator core network) solution, which will allow 3UK customers to access the VUK network (and vice versa) before the VUK and 3UK networks are fully integrated;

(iv) [✂] to secure rights from third parties for VMO2 to access 3UK sites integrated into the Beacon grid; and

(b) the transfer of [✂] of spectrum from VUK to VMO2.[204]

5.96 The Beacon 4.1 Agreements and our assessment of their impact on competitive constraints are discussed in Chapter 10.

MVNOs

5.97 MVNOs offer retail mobile services without owning all the mobile infrastructure required to provide those services. Instead, an MVNO enters into a wholesale agreement with an MNO enabling it to use the MNO's network as an input to provide retail mobile services.

5.98 MVNOs can be either 'full' or 'light'.[205]

(a) Full MVNOs are dependent on MNOs for the radio network (ie RAN equipment and backhaul) that delivers connectivity. However, they build their own core network and as such are responsible for their own SIMs and routing their own network traffic (and arranging interconnect deals with other telecom operators). Full MVNOs take a more active role in managing network infrastructure than light MVNOs. Only a few MVNOs are full MVNOs: Sky Mobile, Tesco Mobile, Lyca Mobile and Truphone,[206] however full MVNOs supply [80-90]% of all subscribers supplied by MVNOs.[207]

(b) Light MVNOs use the MNO's core network, SIMs and radio network. They delegate operational management of the core and radio network to the MNO,

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204 This excludes [✂] of '[✂]' spectrum transferred to VMO2 but which is not suitable for mobile telecommunication services and therefore has been excluded from our analysis (Parties response to the CMA's RFI.

205 CMA, *Liberty Global/Telefónica*, Final Report, paragraph 2.30. It is also possible to be a 'hybrid' MVNO, that is a light MVNO which use some of their own IT platforms eg for rating and billing of traffic. Gamma is an example of a hybrid MVNO (FMN, paragraph 15.409 and footnote 556).

206 As of 2023, [✂] (FMN).

207 Vodafone response to the CMA's s109 notice ([✂]); [✂] response to the CMA's RFI; and [✂] response to the CMA's RFI. We note that [✂] told us that it has 'invested very significantly' into its [✂] and for completeness we note that, including [✂], full MVNOs supply [80-90]% of all subscribers supplied by MVNOs.

enabling them to focus on commercial activities such as customer relations, sales and marketing. The majority of MVNOs are light MVNOs, however light MVNOs only supply [10-20]% of all subscribers supplied by MVNOs.[208]

5.99 In addition to giving them greater control over their network infrastructure, an MVNO may choose to transition from a light to full MVNO model in order to increase commercial freedom and make it easier to switch MNO host (this is because there is no need for a physical SIM swap as full MVNOs are responsible for their own SIMs). One full MVNO told us switching MNO hosts is easier and quicker as a full MVNO, but still rated the difficulty of switching MNO host as very difficult.[209] However, switching from a light to a full MVNO requires substantial investment, due to full MVNOs needing to invest in their own core network.[210]

5.100 Table 5.1 shows the ten largest MVNOs in the UK by number of subscribers. Each of these is discussed in turn below.

Table 5.1: Ten largest MVNOs in the UK by number of subscribers

MVNO	*Network*	*Launch*	*Full/Light*	*Number of subscribers (as of 2023)*
Tesco Mobile*	VMO2	2003	Full	[✂]
Sky Mobile	VMO2	2017	Full	[✂]
Lebara	VUK	2007	Light	[✂]
Lyca Mobile	BTEE	2006	Full	1.7 million
iD Mobile	3UK	2015	Light	[✂]
Utility Warehouse	BTEE	2002	Light	450,000
Asda Mobile	VUK	2007	Light	[✂]
Gamma	3UK/BTEE	2001	Light	[✂]
TalkTalk	VUK	2003	Light	[✂]
Superdrug**	3UK	2018	Light	**[✂]**

Sources: Vodafone response to the CMA's s109 notice; CK Hutchison response to the CMA's s109 notice; Tesco Mobile response to the CMA's RFI; and Sky Mobile response to the CMA's RFI.
** Joint venture between Tesco and VMO2.*
*** Superdrug is an MVNO hosted on 3UK's network and is a sister company within the CK Hutchison group.*

Tesco Mobile

5.101 Tesco Mobile is a joint venture between VMO2 and Tesco. Tesco Mobile launched in the UK on the O2 UK network in May 2003, marketing its products under the Tesco brand. Tesco Mobile is the largest MVNO in the UK, with an estimated subscriber base of over five million subscribers as of 2023. It offers a wide range of post-paid and pre-paid plans.[211]

[208] Vodafone response to the CMA's s109 notice ([✂]).
[209] [✂] response to the CMA's questionnaire; and [✂] call note.
[210] FMN. See Chapter 9, MNO's competitive strategies.
[211] Mobile Phones, Phone Contracts & SIM Only Deals | Tesco Mobile, accessed by the CMA on 25 July 2024.

5.102 The Parties submitted that Tesco Mobile operates entirely independently of VMO2, and should therefore be treated as a separate strategic rival that will constrain the Merged Entity.[212]

5.103 Consistent with previous decisions and based on the evidence we have seen, we consider for the purpose of the competitive assessment in relation to retail mobile services that VMO2 and Tesco Mobile cannot be treated as fully independent competitors given VMO2's 50% shareholding in Tesco Mobile, and associated rights to appoint [✂] of the board directors and to approve certain strategic decisions, which we consider confer material influence to VMO2 over Tesco Mobile and gives it a significant economic interest in its commercial performance.[213] We therefore aggregated Tesco Mobile's share of supply in retail mobile services with that of VMO2.[214] Notwithstanding this, we have sought to reflect, where appropriate, the evidence gathered on the competitive constraint attributable to Tesco Mobile.

Sky Mobile

5.104 Sky is a media and entertainment company that was acquired by Comcast Corporation in 2018.[215] Sky Mobile is Sky Group's mobile communications services brand. Sky Mobile launched in January 2017 and has since grown rapidly, leveraging a strong brand in fixed broadband and entertainment services to grow its subscriber base to over three million as of 2023.[216] It is, by some margin, the largest fully independent MVNO in the UK. Sky Mobile is hosted on VMO2's network.

Lebara

5.105 Lebara Group, trading as Lebara, is present as an MVNO in the UK, across Europe, Saudi Arabia, and Australia.[217] Lebara is hosted on VUK's network and

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212 This position is on the basis that Tesco Mobile has a different management team, a distinct brand, and a different and differentiated commercial, pricing and marketing strategy to VMO2. Further, the Parties submitted that Tesco Mobile operates separately from VMO2, with ring-fenced employees and no visibility over VMO2's mobile propositions (Parties' initial submission, 1 May 2024, paragraph 3.21(v) and footnote 94 and Annex 1 to the Parties' response to the AIS and working papers). The Parties further submitted that all of Tesco's mobile channels are operated through Tesco, it is a Tesco-led business and Tesco will require Tesco Mobile's prices to be set to maximise its competitiveness and profitability. Parties' response to the Provisional Findings, 4 October 2024 Annex 1, paragraph 3.9(a).

213 CMA, Anticipated joint venture between Liberty Global Plc and Telefónica S.A., Final report, May 2021, paragraph 9.38 and Table 9-2. This is also consistent with Case M.7612 *Hutchison 3G UK/Telefónica UK*, recital 112. Deed of Amendment and Restatement dated 4 January 2024 relating to a shareholder's agreement dated 31 January 2014 as amended on 19 October 2015 as further amended on 1 August 2016 and as further amended on 13 August 2019 between Telefonica UK Limited, O2 Communications Limited, Tesco Holdings Limited, Tesco Mobile Services Limited, Tesco Mobile Communications Limited, and Tesco Mobile Limited (VMO2 response to the CMA's RFI; VMO2 email confirming that the response provided to the CMA's RFI, remains accurate following the entry into the revised shareholder's agreement on 4 January 2024; and Tesco Mobile call note.

214 Nevertheless, in Chapter 8 we have presented shares of supply for VMO2 and Tesco Mobile both combined and separately.

215 Comcast is now the majority owner of Sky, 9 October 2018, accessed by the CMA on 30 July 2024.

216 Brits are £260 million out of pocket every month due to unused mobile phone data, 24 November 2022, accessed by the CMA on 30 July 2024.

217 About Us (lebara.co.uk), accessed by the CMA on 25 July 2024.

has been since its UK launch in 2007.[218] As of 2023, Lebara had approximately [✂] million subscribers. In its latest company accounts, Lebara indicates that it is active in prepaid mobile telecommunication services and offers 'low cost international calling, domestic calling, messaging and data services'.[219] Lebara has transitioned to a full MVNO model in Germany and France and [✂].[220]

Lyca Mobile

5.106 Lyca Mobile was established in 2006 as an international MVNO with a focus on low-cost inter-country telecoms services.[221] It entered the UK market in 2007. As of 2023, Lyca Mobile had a subscriber base of approximately 1.7 million. Lyca Mobile is a full MVNO and was formerly hosted on the VMO2 network. In June 2023, Lyca Mobile switched to the BTEE network and is in the process of migrating its customers.[222] In 2023, Lyca Mobile announced the launch of post-paid SIMO plans (starting from £4 a month), complementing its existing pre-paid SIMO offering.[223]

iD Mobile

5.107 iD Mobile is a UK-based MVNO founded in 2015 with approximately [✂] million subscribers in the UK as of 2023. iD Mobile is a wholly owned subsidiary of Currys plc, which was known as Dixons Carphone plc until September 2021. iD Mobile has been hosted on 3UK's network since its launch in 2015. Its handset and SIMO offers are distributed through Currys' own stores and online.[224] iD Mobile has grown its subscriber base by 34% in the period 30 April 2023 to 27 April 2024, to 1.8 million subscribers and has a target of more than 2 million subscribers before the end of 2024/25 year end.[225]

Utility Warehouse

5.108 Telecoms Plus Plc, trading as Utility Warehouse, is a UK fully integrated multiservice retailer that offers customers a range of home services bundled into one monthly bill, including energy, broadband, home insurance and mobile services.[226] As of 2023, Utility Warehouse had approximately 450,000 mobile

[218] Vodafone partners new Sim-only service aimed at immigrants | Technology | The Guardian, 31 October 2007; Lebara extends MVNO partnership with Vodafone, 8 June 2021, accessed by the CMA on 30 July 2024.
[219] Lebara Mobile Limited. Full accounts made up to 31 December 2023, page 4, accessed by the CMA on 30 July 2024.
[220] FMN.
[221] Lyca Mobile - Leading Mobile Virtual Network Operator, accessed by the CMA on 25 July 2024.
[222] Lyca Mobile partners with BT Wholesale, levelling up connectivity, speed, and coverage for customers, 27 June 2023, accessed by the CMA on 25 July 2024.
[223] Introducing Lyca Mobile Pay Monthly: enjoy more peace of mind with prices frozen until 2026, 17 November 2023, accessed by the CMA on 30 July 2024.
[224] FMN.
[225] Currys Annual Report and Accounts 2023/24, 25 July 2024, accessed by the CMA on 30 July 2024.
[226] UW and BT agree new mobile deal, 1 September 2020, accessed by the CMA on 30 July 2024.

customers. Utility Warehouse announced in September 2020 an extension to its agreement with host network BTEE, which has been in place for over 20 years.[227]

Asda Mobile

5.109 Asda Mobile is a UK MVNO, with approximately [✂] subscribers as of 2023. Asda Mobile launched in 2007 and has been hosted on VUK's network since entry.[228] Asda Mobile offers smaller data allowances, with its cheapest bundle starting at £5 for 3GB of data and unlimited minutes and texts.[229]

Gamma

5.110 Gamma is an MVNO which offers mobile services primarily to businesses (in addition to its business broadband services). 3UK hosts approximately [✂]% of Gamma's subscriber base, [✂].[230] As of 2023, Gamma had approximately [✂] mobile subscribers with 3UK.

TalkTalk

5.111 TalkTalk is currently hosted on VUK's network and had approximately [✂] mobile subscribers, as of 2023. It is also the fourth largest broadband provider in the UK. [✂].[231]

Superdrug

5.112 Superdrug is an MVNO hosted on 3UK's network and is a sister company within the CK Hutchison Group.232 It had approximately [□] mobile subscribers as of 2023.

Other players in the market

MVNEs and MVNAs

5.113 As an alternative to negotiating wholesale access to a mobile network directly with an MNO, MVNOs can access networks through a mobile virtual network enabler (**MVNE**) or a mobile virtual network aggregator (**MVNA**).

(a) An MVNE platform provides a package of network infrastructure and operational services to MVNOs. These operational services can include

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[227] UW and BT agree new mobile deal, 1 September 2020, accessed by the CMA on 30 July 2024.
[228] Asda signs with Vodafone for MVNO, 4 June 2007, accessed by the CMA on 24 July 2024.
[229] Asda Mobile SIM Bundle Deals (From £5 a month) - Asda Mobile, accessed by the CMA on 24 July 2024.
[230] FMN.
[231] FMN.
[232] FMN.

network subsystems, business support systems, provisioning and administration services. These platforms can provide a full end-to-end experience including functionality such as e-commerce, online self-care and customer apps that would otherwise be supplied by the MVNO. An MNO that has integrated with an MVNE can support the launch of a new MVNO in reduced timescales with minimal upfront and ongoing investment required from the MVNO. For example, VUK currently has an MVNE agreement with Digitalk.[233] 3UK launched its own multi-tenant platform Lifecycle MVNE technical platform, with [✂] in January 2024, and [✂].[234] [✂].[235]

(b) MVNAs (such as Transatel[236]) are resellers of wholesale services, whereby the MVNA purchases mobile airtime in bulk from the MNO and wholesales this airtime to MVNOs. The benefits of an MVNA for an MVNO is that, in addition to purchasing airtime through the MVNA, an MVNO can use the MVNA's master wholesale access agreement with all the necessary infrastructure and hosted systems (ie the functionality of an MVNE platform), such that it can set up an MVNO offering in a much shorter time.

5.114 MVNEs and MVNAs are not mobile operators in the sense that they do not have direct relationships with mobile customers and do not compete in the supply of retail mobile services. However, they are relevant to the supply of wholesale mobile services as suppliers of network enablement platforms and/or intermediary wholesale access services, particularly for smaller MVNOs seeking to enter the market.

5.115 Third-party feedback suggests MVNAs play a limited role in supplying wholesale mobile services in the UK. Most of the ten largest MVNOs (as mentioned in Table 5.1) that responded to the CMA's third party phase 1 questionnaire were not in a position to comment or had limited views on MVNAs, suggesting a low level of engagement between MVNOs and MVNAs.[237] One MVNO stated they were not aware of any MVNAs in the UK.[238] Another MVNO suggested that their presence is very limited in the UK and that MVNOs tend to have a direct relationship with an MNO.[239]

5.116 Third-party feedback suggests that there are advantages and disadvantages to MVNOs from working with MVNAs. A number of MVNOs suggested that MVNAs can reduce the barriers to entry, however they can also make a sustainable business model for an MVNO more difficult to achieve. This is due to an MVNO's

[233] FMN.
[234] Parties' response to the CMA's RFI.
[235] FMN.
[236] FMN.
[237] We received responses from nine out of the 10 largest MVNOs. We did not send a questionnaire to Superdrug, given they are a CK Hutchison subsidiary. Responses to the CMA's questionnaire, question 19, from: Tesco Mobile, Sky Mobile, Lebara, Lyca Mobile, iD Mobile, Utility Warehouse, Asda Mobile, Gamma and TalkTalk.
[238] [✂] response to the CMA's questionnaire.
[239] [✂] response to the CMA's questionnaire.

margins being reduced as a result of the MVNA applying a mark-up to the MNO pricing.[240] One new entrant, which plans to help launch MVNEs, stated that there are a handful of MVNEs and not all MNOs host a good selection of MVNEs.[241]

Hyperscalers & system integrators

5.117 The Parties submitted that system integrators (**Sis**) and hyperscalers have a role in the supply of retail mobile services to business customers. They submitted that Sis, such as Accenture, Atos, Infosys, TCS and others, supply business communication products by repackaging services from other providers and supply a single solution that meets a specific customer's needs.[242] Similarly, they submitted that hyperscalers or tech platforms, such as Microsoft, have been diversifying their business communication offerings and can either partner with an MNO that provides the underlying base for their applications or can operate a mobile private network.[243,244]

5.118 Third-party evidence suggests that hyperscalers and Sis currently operate in different, but complementary product categories to business mobile services[245] and as such do not currently compete with MNOs or MVNOs in the provision of retail mobile services to business customers.[246] Instead, hyperscalers and Sis procure from or partner with existing MNOs for mobile connectivity services, which they then combine with their own products/services to offer a suite of services to their customers.[247]

5.119 Third parties also suggested that hyperscalers and Sis have not been able to build a substantive presence in the supply of retail mobile telecommunications services to business customers due to: (i) the high costs involved in securing spectrum licences and building a national radio network;[248] and (ii) the cost of compliance in a heavily regulated market.[249]

5.120 Third parties indicated that they expect the number of hyperscalers to grow over the coming years[250] and Sis and hyperscalers to continue to drive substantial increase in utilisation and demand, but that they do not anticipate they will build their own infrastructure.[251] One third party MNO indicated that it expects continued innovation and product development from hyperscalers within the value-added

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240 Responses to the CMA's questionnaire from: [✂]; and [✂].
241 Vitrifi (YCorp) response to the CMA's questionnaire.
242 FMN.
243 FMN.
244 Mobile private networks are dedicated mobile networks operated in a limited geographical area (eg, a large building) for the benefit of a specific (enterprise) client (FMN).
245 [✂] response to the CMA's questionnaire.
246 Responses to the CMA questionnaire from: [✂] and [✂].
247 [✂] response to the CMA's questionnaire.
248 [✂] response to the CMA's questionnaire.
249 [✂] response to the CMA's questionnaire.
250 [✂] response to the CMA's questionnaire.
251 [✂] response to the CMA's questionnaire.

mobile services category and assumes [✂],[252] whereas another third party MNO indicated that it could not comment on whether the position of hyperscalers and Sis would change in the coming years and that while there has been speculation about entry into retail mobile services, this has not materialised to date.[253]

Resellers

5.121 Resellers, such as Currys Business and Bytes Digital, act as retail intermediaries and enable businesses to compare price and network quality across MNOs and MVNOs.[254]

252 [✂] response to the CMA's questionnaire.
253 [✂] response to the CMA's questionnaire.
254 FMN.

6. MARKET DEFINITION

Framework of assessment

6.1 Where the CMA makes an SLC finding, this must be 'within any market or markets in the United Kingdom for goods or services'.[255] An SLC can affect the whole or part of a market or markets.

6.2 Market definition provides a framework for assessing the competitive effects of a merger. The assessment of the relevant market is an analytical tool that forms part of the analysis of the competitive effects of the merger and should not be viewed as a separate exercise.[256] The boundaries of the market do not determine the outcome of our analysis of the competitive effects of the merger in a mechanistic way. We may, for example, take into account constraints outside the relevant market, segmentations within the market, or other ways in which some constraints are more important than others. In many cases, especially those involving differentiated products, there is often no 'bright line' that can or should be drawn.[257]

6.3 The Parties overlap both in the supply of retail mobile telecommunications services to end consumers and in the supply of wholesale mobile services. This has formed the starting point of our assessment. We consider each of these in turn.

Retail mobile telecommunications services

6.4 We firstly consider the Parties' submissions and previous CMA and European Commission decisions, before presenting our assessment.

Parties' submissions

6.5 The Parties submitted that:

(a) Consistent with the approach followed by both the CMA and the European Commission in previous cases – the relevant market is the overall retail supply of mobile telecommunications services to end consumers, and that further subsegments are not appropriate and in any event do not constitute separate markets.[258]

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255 Section 35(1)(b) of the Act.
256 CMA129, March 2021, paragraph 9.1.
257 CMA129, paragraph 9.4.
258 FMN.

(b) In particular, there should be no distinction between business customers and consumers.[259] This is because there are sufficient levels of supply-side substitutability and the products required by business customers – devices and airtime contracts – are the same as those required by consumers and form part of the same economic group supply-side.[260] As an example, the Parties submitted that there is evidence of both pricing interactions and switching between the SoHo subsegment and the broader consumer segment.[261] The Parties also submitted that while business customers do have some distinct requirements, for example with regards to price negotiation and dedicated customer support, these do not necessitate segmenting business customers and consumers into separate markets.[262]

(c) Consistent with the approach followed by both the CMA and European Commission in previous cases – the relevant geographic market is the UK.[263] Further, the Parties submitted that targets set by both Ofcom and the UK Government (such as the Shared Rural Network and Wireless Infrastructure Strategy) aim to level competitive conditions across different geographic areas and encourage mobile operators to provide even coverage across the UK.[264]

Previous CMA and European Commission decisions

6.6 The CMA found in *BT/EE* that there was a single national (UK) market for the supply of retail mobile telecommunications services. However, the CMA also noted that the competitive constraints may vary within certain market subsegments, including fixed-mobile bundles vs stand-alone mobile services, businesses vs consumers and packages including high speeds and generous data allowances relative to less generous packages, and therefore considered those factors in the competitive assessment, where appropriate.[265]

6.7 The CMA did not find it necessary to conclude in that case on whether the business and consumer segments constituted separate markets, because it did not make a difference to the outcome of its competitive assessment. The CMA therefore took account of differences between business and consumer customers where appropriate within its competitive assessment.[266]

6.8 In past decisions, the European Commission has identified an overall retail market for mobile telecommunications services, distinct from retail fixed

[259] FMN.
[260] FMN.
[261] FMN.
[262] FMN.
[263] FMN.
[264] FMN.
[265] CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, paragraph 10.49.
[266] CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, paragraph 10.29.

telecommunications services. The European Commission has considered that the retail mobile telecommunications market should not be further segmented based on the type of service (voice calls, SMS, MMS, data services), or the type of network technology (2G, 3G, 4G). The European Commission has considered a number of possible segmentations of the overall retail market (pre-paid vs post-paid services; consumers vs business customers; high-value vs low-value customers; SIMO and handset subscriptions; different distribution channels; fixed-mobile bundles and stand-alone mobile services) and has taken the view that they do not constitute separate product markets but rather segments of the same market.[267] In *Hutchison 3G UK/Telefónica UK*, the European Commission found that the market for the retail supply of mobile telecommunications services was national in scope (ie limited to the UK).[268]

Our assessment

Product scope

6.9 We have considered whether the market should be segmented according to types of customers, types of products (pre-paid vs post-paid services, SIMO vs handset subscriptions, fixed-mobile bundles vs stand-alone mobile services), distribution channels, the type of service (eg voice, SMS and data vs data only), and the type of network technology.

6.10 The available evidence indicates that there may be differences between the services provided depending on the type of customer, for example consumers and business customers, and by type of business customer (for example corporate customers vs SMEs).

(a) In their internal documents, each of VUK and 3UK report separately on the business and consumer retail segments, and those segments constitute separate divisions within the Parties' respective organisational structures.

(b) From a demand-side perspective, the Parties recognise that customer requirements vary along a spectrum of complexity with larger businesses (for example corporate and public sector customers) requiring additional services by comparison to smaller business customers or consumers.[269] This has been confirmed by third parties in the course of our Merger investigation.[270] However, the Parties have also provided data showing that (i) within 3UK, business customers have switched from 3UK's consumer to business tariffs, and (ii) SoHo customers on business tariffs port out to and from MVNOs

[267] Case M.10515 – *ILIAD/UPC POLSKA*, recital 14; Case M. 8792 – T-Mobile NL/Tele2 NL, recitals 160, 197, 202, 206, 210, 214, 220.
[268] Case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 289 and 293.
[269] FMN.
[270] Responses to the CMA's questionnaire from: [✂] and [✂].

(even though most do not have business-specific tariffs).[271] Some business customer respondents also indicated that their mobile requirements could be met by using consumer tariffs.[272]

(c) From a supply-side perspective, our share of supply estimates suggest that the current conditions of competition vary to an extent across the business and consumer retail segments, with the MNOs having different shares and strengths across each segment. In particular, VUK's share of supply in the consumer retail segment by number of subscribers was [10-20]% as of in 2023, whereas in the business retail segment it was [30-40]%. These variations in shares of supply also exist for other MNOs (as reflected at Chapter 8, Customer bases). Shares of supply by subscribers also point towards MNOs having different shares and strengths within the business retail segment itself, with VUK's share of supply in the corporate and public sector subsegments being significantly higher than in the SoHo, small SME and medium SME subsegments, whereas by contrast 3UK has a much larger share of SoHo customers than other types of business customers. This is consistent with third party responses to our Merger investigation (see Chapter 8, Evidence from MNOs and MVNOs). Based on information provided by the Parties, we also observe that MVNOs active in the consumer retail segment, such as Sky Mobile and Tesco Mobile, do not appear to serve business customers to any meaningful extent and MVNOs on the whole account for a materially smaller share of supply in the business retail segment than the consumer retail segment (as reflected at section Chapter 8, Customer bases). This is consistent with third party responses.

6.11 We have also found some evidence indicating that there may be some differences in competitive constraints for customers in the value segment as compared to more premium segments. For example, as outlined in Chapter 8, evidence from the Parties' and third parties' internal documents and third party views suggest that several MVNOs predominantly target consumers in the value segment.

6.12 The available evidence also suggests that competitive constraints may vary to some degree across different types of mobile service products (for example, pre-paid vs post-paid, SIMO vs handset, mobile bundles vs standalone). For example, as outlined in Chapter 8, some operators only offer certain types of services, and there are differences in the shares of supply across types of services. However, we note that the Parties submitted switching data indicating that some customers move between types of contracts.[273]

[271] FMN.
[272] Responses to the CMA's questionnaire from: [✂] and [✂].
[273] FMN.

6.13 We have found no evidence that retail mobile telecommunications services should be segmented according to distribution channels, the type of service (eg voice, SMS and data vs data only), or the type of network technology.

6.14 Taking the available evidence in the round, we conclude that the appropriate product market is the overall supply of retail mobile telecommunications services to end consumers. We note, however, that competitive constraints may vary within certain subsegments, including in particular business vs consumer customers. Accordingly, all meaningful variations between customer groups that are relevant to our assessment, are considered in the competitive assessment, where appropriate.

Geographical scope

6.15 Evidence available to us does not point towards a geographic market narrower than national. We note that despite some limited local differences in the Parties' (and other MNOs') mobile coverage[274] and retail footprint, both Parties and their main competitors are national, large-scale mobile operators with nationally recognised brands, as well as integrated and centralised operations. Importantly, the Parties submitted that their prices are set [✂].[275] [✂], the Parties' sales, advertising and marketing strategies are determined [✂].[276] The Parties' internal documents show that competitive performance is monitored [✂].

Our view

6.16 We conclude that there is a national (UK) market for the supply of retail mobile telecommunications services (**retail market**). We note that competitive constraints may vary within certain market subsegments and have therefore considered those factors in the competitive assessment, where appropriate.

Wholesale mobile services

6.17 We firstly consider the Parties' submissions and previous CMA and European Commission decisions, before presenting our assessment.

Parties' submissions

6.18 The Parties have submitted that:

(a) Consistent with the approach followed by both the CMA and European Commission in previous cases – the relevant market is the wholesale supply

[274] See Ofcom Connected Nations; UK Report 2023, December 2023, Figure 3.6 'Differences in 4G geographic coverage in England, Northern Ireland, Scotland and Wales', accessed by the CMA on 1 December 2024.
[275] FMN.
[276] FMN.

of network access and call origination on public mobile telephone networks (ie the supply of wholesale mobile services),[277] and the relevant geographic market is the UK.[278]

(b) This market should not be further segmented according to the access provided to different types of MVNOs, as from a supply-side perspective each MNO can supply the access required by each type of non-MNO.[279]

Previous CMA and European Commission decisions

6.19 In past decisions, the European Commission has consistently found that there is a single product market for the wholesale supply of network access and call origination. Both network access and call origination were considered 'key elements required […] to provide retail mobile communications services' and are typically supplied together by an MNO.[280]

6.20 The European Commission has previously found that:

(a) Services provided may vary by type of access seeker (ie between a full MVNO or light MVNO). However, it concluded that differences in the access imply only differences in the activities related to the provision of retail mobile services by MVNOs and that all MNOs in the UK have the technical ability to perform such activities.[281]

(b) The wholesale market corresponds to the dimension of the MNOs' networks, which are limited to national borders, given that the licences to mobile operators are granted on a national basis.[282]

6.21 The CMA found in:

(a) *Liberty Global plc/Telefónica SA* that the relevant market was the wholesale supply by MNOs to MVNOs of network access and call origination on public mobile telephone networks in the UK;[283] and

(b) *BT/EE* that the relevant market was no broader than the wholesale market for network access and call origination on public mobile telephone networks in the UK.[284]

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[277] FMN.
[278] FMN.
[279] FMN.
[280] Case M. 7018 – *Telefónica Deutschland/E-Plus*, recital 77.
[281] Case M. 7612 *Hutchison 3G UK/Telefónica UK*, recital 299.
[282] Case M.7612 – *Hutchison 3G UK/Telefónica UK*, recital 304.
[283] CMA Final Report on the anticipated joint venture between Liberty Global Plc and Telefónica SA, paragraph 9.19.
[284] CMA Final Report on the anticipated acquisition by BT Group plc of EE Limited, paragraph 13.10.

Our assessment

6.22 We have considered the extent to which the market should be segmented according to the access provided to different types of MVNOs.

6.23 We have broadly found that MNOs compete for all types of MVNOs. However, there is some evidence that the competitive position of individual MNOs may differ to some degree across types of MVNOs. For example, according to our analysis presented in Chapter 9, MVNO opportunity data, BTEE has been particularly successful in winning smaller MVNO opportunities. In addition, we have seen some evidence suggesting that 3UK [✂] (see Chapter 9).[285] Taking the evidence in the round, we consider that it is not appropriate to segment the market according to type of MVNO. However, we will consider any meaningful variations between types of MVNOs within the competitive assessment, where appropriate.

6.24 We note that there are some limited local differences in the Parties' (and other MNOs') mobile coverage[286] and we received a submission from a third party MVNO that suggests that competition in the supply of wholesale mobile services may vary depending on regional considerations.[287] However, we note that the available evidence does not point to the Parties (or other MNOs) taking a regionalised approach to the supply of wholesale mobile services. In particular, the Parties' internal documents show that the Parties monitor MVNO customers in the UK and, in the case of 3UK's internal documents, refer to 3UK [✂].[288] Further wholesale contracts are for national coverage and most MVNOs are active nationally.

Our view

6.25 We conclude that there is a national (UK) market for the supply of wholesale mobile telecommunication services (**Wholesale Market**).

[285] We note that there are [✂]. Parties' response to the CMA's RFI.
[286] See paragraph 6.15 above.
[287] [✂] response to the CMA's 11 October 2023 preliminary invitation to comment.
[288] For example, CK Hutchison internal documents.

7. INTRODUCTION TO COMPETITIVE ASSESSMENT

7.1 This chapter sets out some aspects of our treatment of the evidence considered in our assessment of the potential competitive effects of the Merger, including a summary of the evidence base itself. It then sets out the overall framework for our competitive assessment, including the interplay between the theories of harm and our assessment of the efficiencies that the Parties claim the Merger would bring about. In the first section below, we briefly set out some of the sources of evidence we have gathered during our investigation. We then set out some aspects of our approach to the assessment of certain types of evidence.

Treatment of evidence

Evidence gathered in this investigation

7.2 In assessing the impact of the Merger, we have looked at a wide range of evidence that we considered in the round to reach our decision. The evidence we have gathered has been tested rigorously, and we considered the context in which the evidence was produced when deciding how much weight to place on it. The evidence we have taken into account includes:

(a) Submissions from the Parties: the Parties had multiple opportunities to make submissions and comment on our emerging thinking throughout the investigation, including a number of in-person meetings with the inquiry group. In May 2024, the Parties submitted a response to the CMA's Phase 1 Decision. We held an in-person teach-in and site visit with each of the Parties, where their senior business staff gave us several presentations on the evolution of the mobile sector and the strategic and economic rationale for the Merger, and answered our questions relating to our investigation. We subsequently produced working papers and an annotated Issues Statement with our emerging thinking, and the Parties submitted their views, in writing, on those materials. We held formal hearings (in-person) with each of the Parties, in which we spoke to the Parties' senior management about topics that we were exploring in our investigation. The inquiry group also met in-person with the Parties to further discuss the rivalry-enhancing efficiencies they claim will result from the Merger. In addition, the Parties made a number of other submissions, including technical materials in support of their submissions regarding rivalry-enhancing efficiencies (**REEs**).[289] In October 2024, the Parties submitted a response to our Provisional Findings, and we subsequently held formal response hearings (in person) with each of them.

[289] This includes a Joint Business Plan and Joint Network Plan for the Merged Entity underpinned by detailed economic modelling, together with submissions regarding the Merged Entity's ability and incentive to realise efficiencies (in particular, the Parties' Merger simulations and sensitivity analysis) and incremental cost of adding capacity. The Parties have also submitted evidence from their own customer survey and analysis of diversion ratios.

The inquiry group also met with the Parties to further discuss the relevant customer benefits (**RCBs**) they claim will result from the Merger. The Parties made a number of other submissions following the response hearings including further comments on our econometric analysis.

(b) Internal documents: we received a significant volume of evidence from the Parties. In response to targeted information requests, we received over 50,000 internal business documents from Vodafone and CK Hutchison, including strategy documents, board presentations, and email communications among senior staff. These documents which, for the most part, were created in the ordinary course of business, set out the Parties' views of the Retail and Wholesale Markets, as well as their future financial, network and commercial strategy.

(c) Shares of supply and other quantitative data: in addition to qualitative evidence we gathered quantitative evidence, including data to estimate shares of supply, business and customer data (including opportunity and customer switching data, along with data on gross adds, net adds and churn), data used to assess the quality of the Parties' 4G and 5G networks, as well as pricing data. We also used both Ofcom and third party (Pure Pricing and Opensignal) data sets to perform a detailed econometric analysis of consumer demand.

(d) Evidence from other market participants: we gathered evidence from other MNOs and MVNOs. We sent over 20 requests for information, held several calls and meetings, and gathered hundreds of internal documents from these third parties. In our calls we spoke to senior staff and business experts across the industry to get a better understanding of the competitive landscape and potential impact of the Merger.

(e) Evidence from Ofcom: we worked closely with Ofcom given its industry expertise as the sectoral regulator overseeing communications services, including mobile services.[290] While we have carefully considered Ofcom's views, it is ultimately for the inquiry group to decide whether the Merger gives rise to an SLC.

(f) Evidence from other third parties: we also sought views from other interested third parties. In response to our Issues Statement of 2 May 2024 and our Provisional Findings of 13 September 2024 we received a number of submissions containing views on the Merger. We considered those views and published third party responses on the case page.

[290] CMA2 revised, paragraph 17.2.

(g) Evidence from customer surveys: we engaged an independent market research company to undertake two separate online surveys aimed primarily at understanding drivers of customer choice and customers' next best alternatives. One was a general population survey and the second polled a random sample of VUK and 3UK customers (the **CMA surveys**).

Internal documents

7.3 Internal documents can be a useful source of information in merger investigations. Documents produced in the ordinary course of business provide evidence on the perspectives of market participants beyond their direct submissions to the CMA, often before the merger under investigation was in contemplation. In some cases, they speak directly to questions we seek to answer in our investigations, including for example questions on what businesses can do, what businesses may find it in their interest to do, sources of competition that businesses monitor or react to, or industry trends that provide context for our analysis.

7.4 In our review of internal documents, whether from the Parties or third parties, we took care to interpret them in their context. In deciding what weight to attach to them we considered information such as the identity and role of the person that prepared, sent or received them. In line with our guidance (CMA129), where internal documents support claims being made by merger firms or third parties, we considered whether those documents were generated prior to the period in which the Parties were contemplating the Merger, and the period in which third parties were aware of the Merger.[291] On this point, we observe that a combination between VUK and 3UK was in contemplation for a significant period of time prior to the announcement of the Merger in June 2023, with the vast majority of contemporaneous internal documents which we rely on having been generated over the same period. This may impact the overall evidentiary weight that we are able to attach to such documents as we consider that, particularly for those generated at the board and senior management level, the contemplation of a Merger between VUK and 3UK may have affected both the content and the way these were drafted.

7.5 The weight we attach to different pieces of evidence – both quantitative and qualitative – also depends on the relative quality of such evidence. When considering the weight to place on documentary evidence we considered that evidence alongside all the available evidence.[292]

7.6 Where we received submissions suggesting that our interpretation of documents was incorrect, we assessed those claims. We applied our judgement to the credibility of those claims, accounting for the nature of the statements made in the

[291] CMA129, paragraph 2.29(a).
[292] CMA129, paragraphs 2.25 and 2.30.

documents, the interests of the relevant party in suggesting an alternative interpretation, and the consistency of any alternative interpretations with other documents and evidence.

Views of market participants

7.7 Views of market participants are an important source of evidence in CMA merger investigations. That said, the outcomes of a merger investigation can have a direct financial or strategic impact on market participants, and therefore – as with internal documents – we considered the interests and incentives of the Parties, market participants that oppose the Merger (or support it) and other third parties, as well as the extent to which any claims made by market participants are consistent with other evidence, when assessing what weight to attach to those views.

7.8 In addition to views provided by firms, we also heard from the public directly throughout the investigation, both through the CMA surveys, and communications received from members of the public (including Members of Parliament). Details of the CMA surveys are provided in Chapter 8. The CMA surveys were commissioned by an independent specialist agency under controlled conditions, with questions specifically tailored to bring out objective responses, and accounting for comments provided by the Parties and by Ofcom. We consider that the CMA surveys have been designed, conducted and analysed robustly in accordance with good survey practice.

7.9 We also considered evidence from Ofcom, including through seeking its technical input on the Parties' claimed post-Merger plans.

Role of quantitative evidence

7.10 Economic modelling and quantitative evidence – including shares of supply, financial modelling, and econometric analysis – can be helpful in assessing a range of questions relevant to merger investigations.

7.11 Quantitative analysis has strengths but can also have limitations. On the one hand, attempting to quantify certain variables can help by giving a sense of degree when an aspect of the investigation is not clear cut – for example: the cross-price elasticity of demand between two firms (indicative of how closely they compete), the willingness to pay for specific product characteristics, or the profitability of a strategy. On the other hand, quantitative evidence can vary depending on the assumptions applied in the methodology. Quantifications do not capture all relevant considerations. Shares of supply may not capture the extent to which firms may be closer (or less close) alternatives to each other because of product differentiation. Financial data may fail to capture economic gains that are not typically captured in accounting terms but are nevertheless implicitly or explicitly accorded weight by senior management, such as increased future opportunities, greater strategic flexibility, long-run payoffs in terms of scale or network effects, etc.

7.12 In our assessment, we have considered a range of both quantitative and qualitative evidence, and also considered carefully the relative weight to attach to each. Where both types of evidence have been available, we have sought to interpret quantitative evidence alongside qualitative evidence.

Framework for assessment

7.13 We have assessed the competitive effects of the Merger with reference to 'theories of harm'. Theories of harm describe the possible ways in which an SLC may be expected to result from a merger and provide a framework for assessing the competitive effects of a merger.[293]

7.14 We have considered three theories of harm (see Chapters 8 to 12). Two of these focus on horizontal unilateral effects. Horizontal mergers combine firms that are currently active, or absent the merger would be active in the future, at the same level of the supply chain and compete to supply products that are substitutable for each other.[294] The third theory of harm focuses on anti-competitive effects arising from the sharing of commercially sensitive information through the Merged Entity's participation in both network sharing arrangements. We have set out at the beginning of each of Chapters 8 to 12 the framework we have applied in assessing each of these theories of harm and key questions we have tested in the course of our investigation.

7.15 As reflected in our Issues Statement of 2 May 2024 and our Provisional Findings of 13 September 2024, the Parties have publicly claimed that the Merger will result in extensive efficiencies which they say will provide improved network quality for their customers and, in turn, stimulate more intensive competition in the relevant markets, particularly with regard to mobile network quality.[295]

7.16 We have analysed these efficiency claims using the CMA's established framework, which distinguishes between:[296]

(a) **REEs**: efficiencies that change the incentives of the merger firms and induce them to act as stronger competitors to their rivals, for example, by reducing their marginal costs giving them the incentive to provide lower prices or a better quality, range or service. These go towards the finding of whether or not there is an SLC.

[293] CMA129, paragraph 2.11.
[294] CMA129, paragraph 2.15.
[295] CMA, Issues Statement, 2 May 2024, paragraph 45.
[296] CMA129, paragraph 8.3.

(b) **RCBs**: benefits to UK customers that may result from a merger – for example, greater levels of innovation resulting from the combination of unique assets of the merger firms applying to products other than those where the firms compete. These do not go towards the finding of whether or not there is an SLC, but may influence the nature of any remedy imposed in response to any SLC that is found. We consider these further in the Remedies Notice published alongside our Provisional Findings.

7.17 In assessing the Parties' claimed REEs, we have first considered the potential adverse effect on competition from the Merger (ie whether there is scope for an SLC) (Chapters 8 to 12) and then considered whether any claimed REEs would likely enhance rivalry in a way that offsets any anticompetitive effects identified to prevent an SLC (Chapter 14).[297] We have carried out our assessment in the round, with reference to the available quantitative and qualitative evidence, to weigh any REEs against anti-competitive effects in each market where we have considered there to be scope for an SLC to arise absent any REEs.[298] We have not, however, sought to quantify precisely the extent of any potential SLC and any claimed REEs.[299]

7.18 Our assessment of mergers is forward-looking, and we have considered the effects of the Merger both now, and in the future.[300] Merger assessments may involve assessing the likely development of markets years into the future and, as a result, some aspects of our assessment may be subject to a large degree of uncertainty. Whilst the degree of uncertainty has been carefully weighted in our assessment of whether the relevant standard of proof is met, the presence of some uncertainty does not in itself preclude us from concluding that the SLC test is met on the basis of all the available evidence.[301] Accordingly, we have sought to account for the future evolution of competitive conditions when assessing both theories of harm and REEs, including considering how competition would evolve with and without the Merger bearing in mind the role of network quality, future network investments and the fact that investment horizons in this sector are long-term in nature. Our assessment also recognises that some effects may take more time than others to materialise, for example short-run effects on price may materialise whereas effects on quality from a multi-year investment programme may take longer to arise.

[297] CMA129, paragraph 8.4.
[298] CMA129, paragraphs 2.22, 2.25 and 2.28.
[299] CMA129, paragraphs 2.7, 2.21 and 2.22; and *Tobii v CMA* [2020] CAT 1, paragraph 393.
[300] CMA129, paragraph 2.14.
[301] CMA129, paragraph 2.27.

8. TOH1: HORIZONTAL UNILATERAL EFFECTS IN THE SUPPLY OF RETAIL MOBILE SERVICES

Introduction

8.1 This chapter sets out our assessment of horizontal unilateral effects in the supply of retail mobile services in the UK.

8.2 Horizontal unilateral effects may arise in a horizontal merger when one firm merges with a competitor that would otherwise provide a competitive constraint, allowing the merged entity profitably to raise prices or degrade non-price aspects of its competitive offering (such as quality, range, service and innovation) on its own and without needing to coordinate with its rivals.[302]

8.3 We firstly outline the Parties' main submissions, then present our assessment of the evidence, before presenting our overall conclusions on the theory of harm.

Parties' main submissions

8.4 The Parties submitted that the Merger will not give rise to an SLC in the supply of retail mobile services due to horizontal unilateral effects.[303] This is because:

(a) Neither Party is a significant competitive force in retail and neither exerts a strong competitive constraint.[304] 3UK's share of supply has stagnated at its low, sub-scale level for many years,[305] and although it 'has made some [✂] in the SoHo segment, [✂].[306] 3UK continues to have the highest churn of all MNOs.[307]

(b) The Parties are not each other's closest competitors.[308]

(c) BTEE and VMO2 are the market leaders, acting as strong competitive constraints on the Parties,[309] and that they are the two largest suppliers in the overall retail mobile market by revenue and subscriber share.[310]

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[302] CMA129, paragraph 4.1.
[303] Parties' initial submission, 1 May 2024, paragraph 3 and Parties' response to the Provisional Findings, 4 October 2024, Anex 1 paragraph 10.2.
[304] Parties' initial submission, 1 May 2024, paragraph 3.1.(i).
[305] Parties' initial submission, 1 May 2024, paragraph 3.4(iv).
[306] Parties' initial submission, 1 May 2024, paragraph 3.4(viii).
[307] Parties' initial submission, 1 May 2024, paragraph 3.4(ii).
[308] Parties' initial submission, 1 May 2024, paragraph 3.1.(ii) and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraphs 6.1-6.13.
[309] Parties' initial submission, 1 May 2024, paragraph 3.1.(iii)(a) and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraphs 7.1-7.8.
[310] Parties' initial submission, 1 May 2024, paragraph 3.18(i).

(d) MVNOs exert a strong and growing competitive constraint.[311] MVNOs are the 'fastest growing players in the retail mobile market, exerting strong and growing competitive pressure',[312] and they 'compete aggressively on price'.[313] They also submitted that MVNOs also compete on non-network parameters (such as customer service and brand) and that in the consumer retail market MVNOs are the fastest growing players across a range of metrics.[314]

(e) The Parties' lack of scale constrains their ability to compete, due to their inability to fund sustainable investments to [✂].[315]

Our assessment

8.5 In differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors or where their products are close substitutes. The merger firms need not, however, be each other's closest competitors for unilateral effects to arise. It is sufficient that the merger firms compete closely and that the remaining competitive constraints are not sufficient to offset the loss of competition between them resulting from the merger.[316]

8.6 The concept of close competition is not limited to products or services that have similar characteristics. A firm may be a close competitor if it represents a significant competitive force or exerts a strong constraint on other firms. For example, a firm that has a particular reputation or incentive to compete aggressively may represent a close competitor to other firms, even if their respective offerings are quite different.[317]

8.7 The CMA will consider the overall closeness of competition between the merger firms in the context of other constraints that would remain post-merger. Where the CMA finds evidence that competition mainly takes place among few firms, any two of them would normally be sufficiently close competitors that the elimination of competition between them would raise competition concerns, subject to evidence to the contrary. The smaller the number of significant players, the stronger the prima facie expectation that any two firms are close competitors. In such a scenario, the CMA will require persuasive evidence that the merger firms are not close competitors in order to allay any competition concerns.[318]

[311] Parties' initial submission, 1 May 2024, paragraph 3.1.(iii)(b).
[312] Parties' initial submission, 1 May 2024, paragraph 3.21.
[313] Parties' initial submission, 1 May 2024, paragraph 3.22.
[314] Parties' initial submission, 1 May 2024, paragraph 3.1(iii)(b), 3.21(i), 3.21(iii), 3.22, 3.21(iv) and Figure 3.5; and Annex 1 to the Parties' response to the AIS and working papers.
[315] Parties' initial submission, 1 May 2024, paragraph 3.1.(iv)(a); and Annex 1 to the Parties' response to the AIS and working papers.
[316] CMA129, paragraph 4.8.
[317] CMA129, paragraph 4.9.
[318] CMA129, paragraph 4.10.

8.8 Therefore, the key questions we have tested are:

(a) the significance of the competitive constraint eliminated by the Merger and whether there would be sufficient remaining good alternatives that customers could switch to post-Merger;

(b) whether the Merged Entity would have lower incentives to compete strongly compared to each Party on a standalone basis, and exert less of a constraint on other mobile operators; and

(c) in turn, whether this would allow the Merged Entity – and its competitors – to profitably increase prices or degrade non-price aspects of their competitive offerings (such as investing less in network quality).

8.9 The evidence which we have used to assess these key questions is split into the following groups and assessed in turn below:

(a) parameters of competition – evidence on customer choice factors;

(b) customer bases – evidence on market shares and customer churn;

(c) the Parties' competitive position – evidence on the competitive positions, incentives, and strategies of the Parties, including in relation to both pricing and network investment;

(d) closeness of competition and competitive constraints – evidence on how closely the Parties compete and the constraint they face from rivals; and

(e) post-Merger constraints – evidence on how the Merger may affect any competitive constraint from MNOs and MVNOs and quantitative evidence on the impact of the Merger on prices, excluding consideration of any efficiencies.

Parameters of competition

8.10 This section provides our assessment of the importance of price and non-price factors (such as network quality and fixed-mobile convergence) on the competitiveness of operators in the UK retail mobile services market.

8.11 The Parties submitted that all operators compete across multiple dimensions with both non-price and price factors playing a significant role in the competitiveness of an operator's offer.[319] The Parties further submitted that the main elements of non-

[319] FMN.

price competition are network quality, brand, quality of customer service and supplementary factors, such as handset range.[320]

8.12 Overall, the Parties submitted that price and network quality are key parameters of competition in the retail market.[321]

(a) In relation to price competition, the Parties submitted that customer preference and engagement mean that operators need to offer competitive propositions to acquire and retain customers, and that variations in competitive strategies have resulted in a pricing landscape that is very heterogenous and differentiated and which offers consumers a wide range of choice and flexibility.[322]

(b) In respect of network quality, the Parties submitted that there are multiple dimensions.[323] Of these dimensions the Parties submitted that coverage (in terms of population and land area, both indoors and outdoors), reliability and consistency (in particular by reference to download and upload speeds) are important parameters,[324] as well as network capacity (ie networks need to be sized to cope with the customer base and their demands) and speeds,[325] access to 5G SA, and the ability to support new use cases.[326] The Parties submitted that network quality plays a significant role in customer switching decisions and that many UK customers are not willing to accept a network that is perceived to be of lower quality.[327] VUK also said that it looks to compete through a balance between price and network quality. It considers that the '[network] service needs to be there to start with' and, if it is, customers would 'think of the price if they are happy with the service'.[328]

8.13 Further, the Parties submitted that 'the importance of network quality as a parameter of competition will only increase as demand for data continues to grow'.[329] This is because customer requirements are continually changing with ever increasing demand for mobile data, which has grown significantly in recent years and may grow faster in future. This requires MNOs to continue to invest in their networks in order to compete effectively.[330]

8.14 The Parties also submitted an analysis of customer churn linked to poor network performance. The analysis shows [✂]. The Parties submitted that this data shows

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320 FMN; and Parties' initial submission, 1 May 2024, paragraphs 3.4(viii), 3.18(ii) and 3,26.
321 Parties' initial submission, 1 May 2024, paragraphs 3.15 and 3.31.
322 FMN.
323 FMN.
324 Parties' initial submission, 1 May 2024, paragraph 3.18(iii)(b); and FMN.
325 Parties' initial submission, 1 May 2024, paragraph 1.15.
326 Parties' initial submission, 1 May 2024, paragraph 6.5; and FMN.
327 FMN.
328 Vodafone Main Party Hearing transcript.
329 Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 2.9.
330 Parties' initial submission, 1 May 2024, paragraphs 2.3 and 2.4; and Annex 1 to the Parties' response to the AIS and working papers.

that 'customers' poor network experience is a key driver of churn'.[331] We note that [✂]. Therefore, although the analysis [✂], it does not account for the majority of the customer churn. In response to our Provisional Findings, the Parties submitted that this is not surprising as '[✂]', but did not provide any further evidence to support this.[332] Further, the Parties' analysis does not control for other factors that may affect the churn rates in a given area, such as targeted marketing by competitors.

8.15 The Parties also provided an analysis of the difference between customers terminating their contracts citing [✂]. This showed that in this period non-upgraded sites had a higher churn rate than those that were upgraded.[333] However, as above, this analysis does not control for other factors that may affect the churn rates in a given area, such as targeted marketing by competitors.

8.16 The Parties also submitted that converged operators pose an increased competitive constraint through their ability to cross-sell mobile services to their fixed bases and that the uptake of converged offers in the UK is increasing.[334] The Parties submitted that the share of FMC household penetration is around 25%, and pointed to the forecast by Analysys Mason which predicts that this penetration will grow in the next few years, reaching 40% by 2028.[335] However, this is inconsistent with a [✂] prepared by VUK [✂].[336] We note that, based on [✂].[337] We note that the Parties' submissions are also inconsistent with the Ofcom data presented at Chapter 5, Fixed-mobile convergence and bundling. Further, 3UK told us that the 'jury is out on the converged service' proposition and that customers are not currently buying into it. This is because customers are weighing up being tied into a broad offer including multiple products compared to having the flexibility to be able to pick and choose the best options for them.[338]

8.17 We have assessed evidence from:

(a) surveys;

(b) econometric analysis; and

(c) third parties.

331 Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the CMA's RFI.
332 Parties' response to the Provisional Findings.
333 Annex 1 to the Parties' response to the AIS and working papers.
334 Parties' initial submission, 1 May 2024, paragraphs 3.18(iv) and 3.18(v).
335 FMN.
336 Vodafone internal document.
337 Vodafone internal documents.
338 3UK site visit recording.

Surveys

8.18 We have considered evidence from the following surveys:

(a) CMA surveys;

(b) GfK survey; and

(c) The Parties' survey.

CMA surveys

8.19 We commissioned the market research agency DJS Research to undertake two separate surveys:

(a) a UK general population survey (**CMA UK population survey**) weighted to be representative of the UK adult population.[339] We received 800 responses to this survey, which was aimed primarily at understanding drivers of customer choice; and

(b) a survey of the Parties' customers (**CMA customer survey**). We received 1,527 responses to this survey, which was aimed primarily at understanding customers' next best alternatives, including for the purpose of calculating diversion ratios. The analysis of the CMA customer survey presented here is an analysis of the data weighted to be representative of the stock of the Parties' customers.[340]

8.20 The Parties submitted that the CMA customer survey is skewed towards pre-paid customers due to the higher response rate amongst customers of the Parties' sub-brands relative to their main brands and therefore the results 'understate customer preferences for network quality'.[341] However, as explained above our analysis of the CMA customer survey presented here is of the data weighted to be representative of the stock of the Parties' customers.

8.21 As part of the CMA UK population survey, we asked respondents the reasons they chose their current provider over the alternatives (with respondents able to select multiple reasons). The survey results show that price is a key parameter of choice, with 84% citing price or a price related factor as a reason for choosing their current

[339] All results from the CMA UK population survey that are presented in this working paper are weighted. The weighting scheme used is as follows: a single weight based on iterative rim weighting to the following (non-interlocking) marginal totals: age and sex (6 categories - young male, young female, middle-aged male, middle-aged female, older male, older female), Region (12 categories – nine English regions plus three other home nations), Index of Multiple Deprivation quintiles (five categories) and urban/rural (two categories).
[340] Results from the CMA customer survey that are presented in this working paper are weighted. The weighting scheme used is as follows: a single weight based on cell weighting to two interlocking cell totals: brand and segment. For VUK 'brand' took three categories – Vodafone, VOXI and Talkmobile; for 3UK it took two categories – Three and SMARTY. For both Parties, 'segment' took two categories – PAYM and PAYG.
[341] Annex 1 to the Parties' response to the AIS and working papers.

provider.[342] 51% of respondents cited at least one network quality attribute as a reason for choosing their current provider,[343] with network coverage (41%) being the most commonly cited. Good previous experience with the provider (36%) and brand reputation (24%), were given as reasons by fewer respondents. Only 7% of respondents cited other services that formed part of the bundle as a reason for choosing their current provider.

Table 8.1: CMA UK population survey – reasons for choosing current provider

	%
Response option	*Proportion of respondents*
Price	68
Network coverage	41
Good previous experience with provider	36
Generous data allowance	32
Unlimited or high volume of texts	25
Brand reputation	24
Free roaming in the EU	24
Network reliability for voice calls	21
Contract length	21
Customer service of the provider	18
Network speed	17
Network reliability for uploading/downloading data	16
Having unlimited data	16
Handset make/type/version	14
Perks/rewards/discounts/offers	14
Handset upgrade or availability	12
Roaming costs	12
Other services that formed part of the bundle	7
Network response speeds for gaming	2
Other	2
Price and price related factors	84
At least one aspect of network quality	51

Source: CMA UK population survey
Base size: n = 773
Note : CMA analysis of responses to question 10 of the CMA UK population survey. The question asked was 'Thinking back to when you took out your mobile phone package with your current provider or when you last renewed your mobile phone package with them, which of the following were reasons for choosing your current provider, rather than any other alternative mobile network providers? (Tick all that apply)'.

8.22 We also asked respondents which factor was most important in choosing their current provider, as well as which factor would be their main consideration if they had to choose a new mobile network provider in the next month. Table 8.2 shows that for 44% of respondents price was the main reason for choosing their current provider and for 53% it would be the main reason for choosing a new provider. Price and price related factors were the main reason for 57% choosing their current provider and 68% for choosing a new provider. The highest network quality parameter (network coverage) was identified as the main reason by 10% for choosing their current provider and by 12% for choosing a new provider. 13% of respondents cited an aspect of network quality as the main reason for choosing their current provider, and 18% for choosing a new provider. Good previous

[342] Price related factors include: generous data allowances, having unlimited data, perks/rewards/discounts/offers, free roaming in the EU, unlimited or high volume of texts, and roaming costs.
[343] Network quality attributes include: network coverage, network speed, network reliability for voice calls, network reliability for uploading and downloading data, and network response speed for gaming.

experience with their provider was cited by 13% of respondents as the main reason for choosing their current provider, while brand reputation (3% for choosing their current provider and 3% for choosing a new provider), and other services that formed part of the bundle (2% for choosing their current provider and 1% for choosing a new provider) were given as reasons by few respondents.

Table 8.2: CMA UK population survey results – main reason for choosing provider

		%
Response option	*For current provider*	*For new provider*
Price	44	53
Good experience with provider	13	N/A
Network coverage	10	12
Generous data allowances	4	4
Free roaming in the EU	3	5
Having unlimited data	3	4
Brand reputation	3	3
Handset make/type/version	3	1
Handset upgrade or availability	2	2
Network reliability for voice calls	2	4
Perks/rewards/discounts/offers	2	2
Customer service of the provider	2	3
Other services that formed part of the bundle	2	1
Contract length	1	1
Network speed	1	2
Network reliability for uploading/downloading data	1	1
Roaming costs	1	1
Unlimited or high volume of texts	0	0
Other	3	0
Don't Know/Can't Remember	2	2
Price and price related factors	57	68
Any aspect of network quality	13	18

Source: CMA UK population survey
Base sizes: current provider: n = 718; new provider: n = 745
Note : CMA analysis of responses to questions 11 and 12 of the CMA UK population survey. Question 11 asked 'And which of these was the single main reason for choosing your current provider?' while question 12 asked 'Which of the following would be your main consideration if you had to choose a new mobile network provider in the next month?'.

8.23 As part of the CMA customer survey, we asked respondents for the reasons they chose their current provider over the alternatives (with respondents able to select multiple reasons). The results show that price is a key parameter of competition, with 70% of 3UK's customers and 59% of VUK's customers indicating it was a reason for choosing their current provider. Price and price related factors were cited by 88% of 3UK and 79% of VUK customers respectively.[344] 54% of 3UK's and 61% of VUK's customers identified at least one network quality attribute as a reason, with network coverage being the most regularly chosen by both Parties' customers.

[344] Price related factors include: generous data allowances, having unlimited data, perks/rewards/discounts/offers, free roaming in the EU, unlimited or high volume of texts, and roaming costs.

Table 8.3: CMA customer survey results – reason for choosing current provider

%

Response option	*Proportion of 3UK respondents*	*Proportion of VUK respondents*
Price	**70**	**59**
Network coverage	**37**	**43**
Generous data allowance	**36**	**34**
Network speed	**28**	**26**
Good previous experience with supplier	**20**	**32**
Brand reputation	**22**	**30**
Network reliability for voice calls	**20**	**25**
Customer service	**20**	**24**
Unlimited or high volume of texts	**21**	**20**
Network reliability for uploading or downloading data	**18**	**24**
Unlimited data	**25**	**19**
Contract length	**24**	**18**
Perks/rewards/discounts	**16**	**18**
Free roaming in the EU (and possibly elsewhere)	**18**	**13**
Handset upgrade/availability	**14**	**13**
Roaming costs	**15**	**10**
Handset make/type/version	**11**	**12**
Other services that formed part of the bundle	**7**	**10**
Network response speed for gaming	**8**	**6**
Other	**2**	**5**
Price and price related factors	**88**	**79**
At least one aspect of network quality	**54**	**61**

Source: CMA customer survey

Base sizes: 3UK: n = 792; VUK n = 700

Note: CMA analysis of responses to question 7 of the CMA customer survey. The question asked was 'Thinking back to when you took out your mobile phone package with <PROVIDER>, which of the following were reasons for choosing <PROVIDER>, rather than any other provider? Tick all that apply'.

8.24 We also asked respondents which factor was the main reason for choosing their provider. Table 8.4 shows that for 38% of 3UK's customers and 26% of VUK's customers price was the main reason for choosing their provider. Price and price related factors were the main reason for 62% of 3UK's customers and 45% of VUK's customers choosing their provider. The highest network quality parameter, network coverage, was identified as the main reason by 8% of 3UK's customers and 13% of VUK's customers. Overall, network quality attributes accounted for 15% of 3UK's customers' and 23% of VUK's customers' main reason to choose their provider.

Table 8.4: CMA customer survey results – main reason for choosing provider

%

Response option	*Proportion of 3UK respondents*	*Proportion of VUK respondents*
Price	**38**	**26**
Good previous experience with supplier	**8**	**12**
Network coverage	**8**	**13**
Generous data allowance	**7**	**6**
Unlimited data	**8**	**6**
Brand reputation	**4**	**6**
Free roaming in the EU	**4**	**1**
Network speed	**3**	**3**
Customer service	**3**	**4**
Handset upgrade/availability	**3**	**3**
Perks/rewards/discounts/offers	**3**	**4**
Network reliability for voice calls	**2**	**3**
Contract length	**2**	**1**
Roaming costs	**2**	**1**
Unlimited/high volume of texts	**2**	**1**
Network reliability for uploading/downloading data	**2**	**4**
Handset make/type/version	**1**	**2**
Network response speed for gaming	**1**	**0**
Other services that formed part of the bundle	**0**	**2**
Price and price related factors	**62**	**45**
At least one aspect of network quality	**15**	**23**

Source: CMA customer survey
Base sizes: 3UK: n = 792; VUK n = 700
Note: CMA analysis of responses to question 8 of the CMA customer survey. The question asked was 'And which of these was the single main reason for choosing <PROVIDER>?'.

8.25 We also note that there were some variations between responses from 3UK and VUK customers to the CMA customer survey:

(a) although price was the most commonly selected factor by both Parties' customers, a higher proportion of 3UK's customers considered it a reason for choosing their provider (70% vs 59%) and also a higher proportion (38% vs 26%) considered it the main reason for choosing their provider, compared to VUK's customers; and

(b) a higher proportion of VUK's customers considered at least one network quality attribute a reason for choosing their provider (61% vs 54%) and also a higher proportion (23% vs 15%) considered it the main reason for choosing their provider, compared to 3UK's customers.

8.26 As part of the CMA UK population survey, we also asked respondents whether they would be willing to pay more than they do now for a faster network or a more reliable network. The results showed that 76% of respondents said that they were unwilling to pay more for a faster network (15% willing),[345] while 59% of

[345] CMA analysis of responses to question 14 of the CMA UK population survey (weighted). The question asked was 'When you next make a decision about choosing a mobile network provider, would you be willing to pay more than you do now for a faster network connection?'.

respondents said that they were unwilling to pay more for a more reliable network (33% willing).[346]

8.27 The Parties submitted that no weight should be given to this evidence as the questions posed to consumers did not clearly explain the size of the quality improvement and how much they would have to pay, to elicit meaningful responses.[347] Given the inherent complexity of describing precise network quality improvements in a way which consumers understand, we designed this question to test a general sentiment among customers and have used this evidence alongside other evidence to understand how consumers value network quality. We have not sought to use these questions to quantitatively estimate the monetary value of network quality.

8.28 Further, as discussed below, as part of the CMA customer survey we asked the Parties' customers what they would do if there was a 10% price increase in the tariffs they are currently purchasing and if the network they were using was a bit less reliable. These results showed that 26% of both 3UK and VUK customers were price-marginal (ie they would switch if prices rose by 10%).[348] The results also showed that 60% of 3UK customers were quality-marginal (ie they would switch if the network they were using was a bit less reliable) while 65% of VUK customers were quality-marginal.[349] We consider that these responses are broadly consistent with price being an important parameter of competition and network quality also being important. The markedly higher proportion of survey respondents that were quality marginal (ie, would switch if the network they were using was a bit less reliable) compared to the proportion that were willing to pay for an increase in quality, suggests, albeit based on differently worded questions, that most customers view their current level of network quality as meeting their needs at present.

8.29 The Parties submitted that the higher proportion of quality-marginal customers compared to price-marginal customers demonstrates that network quality is very important to the Parties' customers.[350] Our interpretation is the more nuanced one that having a network performance at least as good as their current service is important to many customers.

8.30 We undertook further analysis of any differences in the importance of choice factors according to the CMA UK population survey between (a) area levels of the

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[346] CMA analysis of responses to question 15 (weighted). The question asked was 'And would you be willing to pay more for a more reliable network connection?'.
[347] Parties' response to the Provisional Findings, 4 October 2024, Annex 1, paragraph 2.2(a).
[348] CMA analysis of responses to questions 10 and 11 of the CMA customer survey. Figures weighted by customer weights (weighted to be representative of the number of subscribers on each of the Parties' brands and segment).
[349] CMA analysis of responses to question 12 of the CMA customer survey. Figures weighted by customer weights. Note that for the quality-marginal question, the reduction in quality was not precisely defined. Instead, respondents were asked what they would do if the network was 'a bit less reliable'.
[350] Annex 1 to the Parties' response to the AIS and working papers.

Index of Multiple Deprivation (**IMD**), (b) age groups, and (c) rural and urban respondents.

8.31 In relation to different IMD areas we did not find a relationship between IMD and respondents' propensity to mention either price and price related factors or network related attributes. For age we found that younger respondents generally tended to mention price and price related factors more often than older respondents.[351]

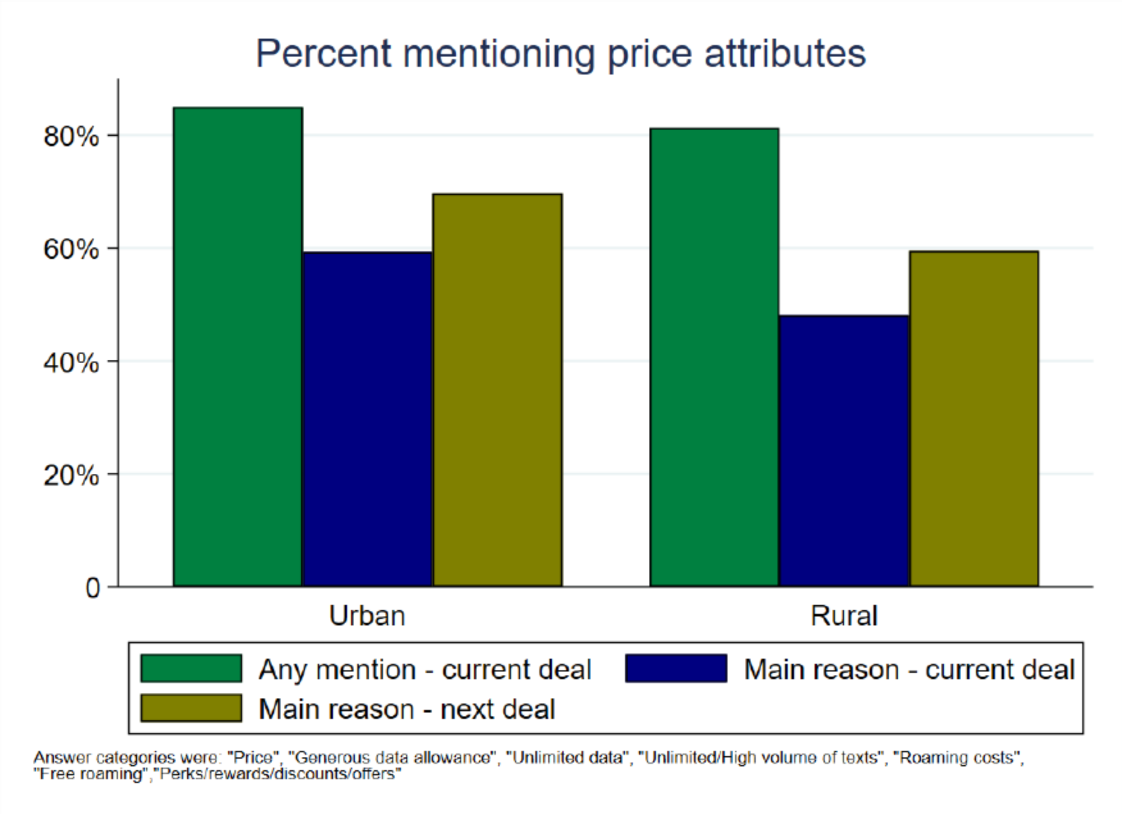
8.32 With regards to rural and urban respondents, we found that urban respondents were relatively more concerned with price and price related factors compared to their rural counterparts (Figure 8.1), while rural respondents were relatively more concerned with network related attributes (Figure 8.2).

(a) 85% of urban respondents mentioned price and price related factors as a reason for choosing their current provider (compared to 81% of rural respondents), while 59% of urban respondents mentioned it as the main reason for choosing their current provider (compared to 48% of rural respondents) and 70% as their main consideration for choosing their next provider (compared to 59% of rural respondents).

(b) 61% of rural respondents mentioned network related attributes as a reason for choosing their current provider (compared to 48% of urban respondents), while 24% of rural respondents mentioned it as the main reason for choosing their current provider (compared to 11%) and 27% as their main consideration for choosing their next provider (compared to 16%).

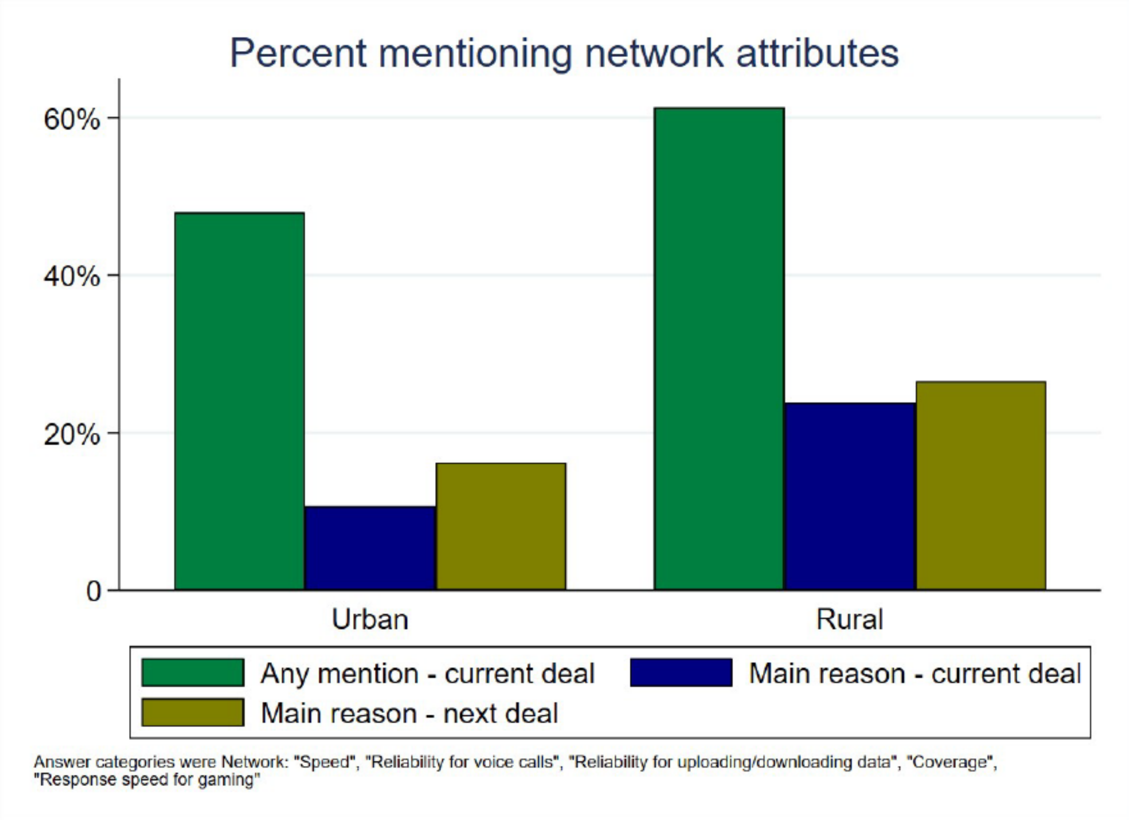
[351] We note that the 18-24 age group is a possible exception, though the result for this age group is based on a small sample size.

Figure 8.1: CMA UK population survey results – percentage of urban/rural respondents mentioning price attributes



Source: CMA analysis of CMA UK population survey

Figure 8.2: CMA UK population survey results – percentage of urban/rural respondents mentioning network attributes



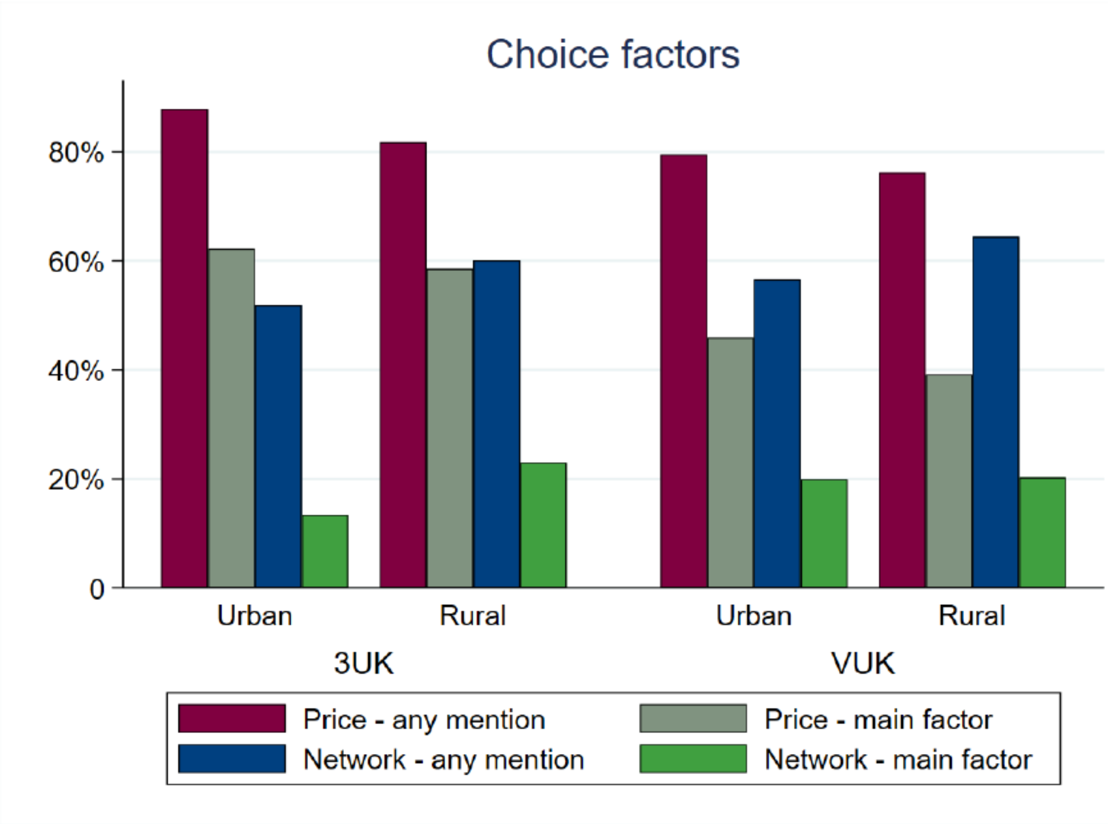
Source: CMA analysis of CMA UK population survey

8.33 This is also consistent with the CMA customer survey results, which showed that across both 3UK and VUK customers urban respondents were relatively more concerned with price and price related attributes compared to their rural counterparts, while rural respondents were relatively more concerned with network related attributes (Figure 8.3).

(a) For 3UK customers, 88% of urban respondents mentioned price and price related factors as a reason for choosing their current provider (compared to 82% of rural respondents), while 62% of urban respondents mentioned it as the main reason for choosing their provider (compared to 59% of rural respondents). 60% of rural respondents mentioned network related attributes as a reason for choosing their provider (compared to 52% of urban respondents), while 23% of rural respondents mentioned it as the main reason for choosing their provider (compared to 13% of urban respondents).

(b) For VUK customers, 80% of urban respondents mentioned price and price related factors as a reason for choosing their current provider (compared to 76% of rural respondents), while 46% of urban respondents mentioned it as the main reason for choosing their provider (compared to 39% of rural respondents). 64% of rural respondents mentioned network related attributes as a reason for choosing their provider (compared to 57% of urban respondents), while 20% of both rural and urban respondents mentioned it as the main reason for choosing their provider.

Figure 8.3: CMA customer survey results - percentage of urban/rural respondents mentioning price and network attributes



Source: CMA analysis of CMA UK population survey

8.34 In response to our Provisional Findings, the Parties submitted that 'network quality is especially important in underprivileged and marginalised communities (particularly in rural communities where connectivity is worst), as the costs of being digitally excluded are considerable'.[352] The Parties also referred to VUK's research with Development Economics and YouGov in October 2022 which found that the cost to working families of not being connected amounted to £286 per month.[353] We consider that consumers require a minimum level of network quality including those who are most reliant on mobile services to get online, such as those in underprivileged groups. However, we do not consider that the research cited by the Parties supports their claim that those in under-privileged communities are more concerned by network quality or have a higher willingness to pay for quality improvements, than others. The £286 figure the Parties quote relates to the amount families would lose from not having 'access to the best prices and online

[352] Parties' response to the Provisional Findings, 4 October 2024, Annex 1, paragraph 2.10.
[353] Parties' response to the Provisional Findings, 4 October 2024, Annex 1, paragraph 2.10.

deals' rather than any value they place on improvements to network quality.[354] As set out above, the CMA survey results do not show a clear link between IMD and a respondent's propensity to mention network related attributes.

8.35 Overall, the results of the two CMA surveys show that price is the single most important factor that customers consider when choosing a provider. The different aspects of network quality are also important with around half of customers identifying at least one network quality parameter as a reason for choosing a provider, although a smaller proportion of customers consider it to be the main reason for choosing a provider. We also note there are some variations between urban and rural respondents, with urban respondents relatively more concerned with price and price related attributes compared to their rural counterparts and rural respondents relatively more concerned with network related attributes. Brand and customer service are also a consideration for customers but are less likely to be the main reason a customer chooses a specific provider. Having mobile services as part of a bundle of products is not considered important by the vast majority of customers.

GFK survey

8.36 VUK provided us with results from the GfK survey.[355] This is an online panel survey that reports quarterly. We considered the survey results for the four quarters from April 2023 to March 2024.

8.37 Respondents who had switched their mobile phone service in the previous three months were asked for the reasons they chose their new operator. Respondents could select multiple reasons and GfK then combined these responses into five broad categories. Table 8.5 shows that attributes in the price/value category were mentioned most often as a reason for joining a network ([60-70]% of respondents mentioned [✂] price attribute as a reason for joining). Network connection attributes were next, mentioned by [40-50]% of respondents, with customer service, brand reputation and recommendation (from family, friends or the press or in other media) attributes mentioned by [✂].

8.38 Table 8.5 also shows that price/value was mentioned more often by respondents who had joined MVNOs than by those who had joined MNOs ([70-80]% compared to [60-70]%).

[354] See: Vodafone, Closing the digital divide: bridging the gap for a connected future, 6 October 2023. Accessed by the CMA on12 November 2024.
[355] Vodafone response to the CMA's s109 notice.

Table 8.5: Reasons for joining the new operator

%

Response option	*All*	*MNOs*	*MVNOs*
Price/Value	[60-70]	[60-70]	[70-80]
Network connection	[40-50]	[50-60]	[40-50]
Customer service	[30-40]	[30-40]	[30-40]
Brand	[20-30]	[20-30]	[20-30]
Recommendation	[20-30]	[20-30]	[20-30]

Source: GfK-360 survey (April 2023 to March 2024).
Base sizes: All: 4,450; MNOs: 2,571; MVNOs: 1,879

8.39 Respondents were also asked to give their main reason for joining the new operator. Table 1.6 shows attributes in the price/value category were selected as the main reason by [30-40]% of respondents and attributes in the network connection category were selected by [20-30]% of respondents. A price/value attribute was selected by many more respondents joining an MVNO than those joining an MNO ([50-60]% and [30-40]% respectively) while a network connection attribute was more likely to be selected by respondents who joined an MNO ([20-30]%) than an MVNO ([10-20]%).

Table 8.6: Main reason for joining the new operator

%

Response option	*All*	*MNOs*	*MVNOs*
Price/Value	[30-40]	[30-40]	[50-60]
Network connection	[20-30]	[20-30]	[10-20]
Customer service	[10-20]	[10-20]	[5-10]
Brand	[5-10]	[5-10]	[5-10]
Recommendation	[5-10]	[5-10]	[5-10]
Other	[10-20]	[10-20]	[5-10]

Source: CMA analysis of GfK-360 survey (April 2023 to March 2024). Numbers do not sum to 100% because of rounding
Base sizes: All: 4,110; MNOs: 2,331; MVNOs: 1,779

8.40 The GfK survey is a survey from a commercial online panel. The CMA does not usually give full weight to surveys from commercial online panels, particularly in circumstances where panel recruitment methodology is not made clear, which is the case for the GfK survey.[356,357] However, the Parties submitted that they collect and consider, among other sources, the GfK survey to monitor their competitive position and therefore we consider we can place some weight on it in so far as it is an input into their decision making.[358] We regard the CMA's surveys to be more robust, but note that the main findings of the GfK survey are broadly consistent with the two CMA surveys. Price is the most important factor for customers when deciding which mobile operator to choose. Network quality is also important for half of MNO customers, and nearly half of all customers, who selected at least one

[356] We consider that the information provided by the Parties about [✂] nor does it give sufficient information about sources of recruitment and the recruitment methodology to assess potential bias for the current purpose.
[357] CMA78, paragraphs 2.29-2.30.
[358] FMN.

network connection attribute as a reason for joining. The GfK survey indicates that customer service, brand reputation and recommendations are less important.

Parties' survey

8.41 The Parties also submitted the results of a survey of 5,561 respondents, which show that the most relevant attribute for respondents choosing a mobile plan is price (ranked as most important by 42% of respondents, second by 23% and third by 9%) with a reliable connection ranked second most important (ranked as most important by 31% of respondents, second by 28% and third by 14%). Data allowance and a fast connection were third and fourth, selected as relevant considerations by fewer than half of respondents.[359] We note this is broadly consistent with the other evidence we have gathered that shows price and network quality related parameters play an important role in customer decisions.

8.42 As set out in Appendix F, we have some concerns with how this survey was conducted and do not consider that it meets a number of requirements set out in the CMA's Survey Good Practice guide.[360] We have therefore placed no weight on it.

Econometric analysis

8.43 To further understand the importance that consumers place on different aspects of operators' offerings we have undertaken econometric analysis on purchases of SIM-only tariffs in the UK in the first half of 2023 (see Appendix D for details). The econometric analysis has the advantage that it is based on the observed choices and switching behaviour of real consumers in the UK.[361] The econometric model then works by trying to explain observed switching and consumer behaviour. Using a large dataset of consumer choices and detailed data on the set of tariffs available and their characteristics (such as data allowances and network quality) the econometric analysis is able to provide important insights into consumer behaviour.

8.44 The econometric analysis we conducted can be used to estimate consumers' willingness to pay for tariff and network characteristics.[362] A subscriber's willingness to pay is the amount they would pay from their current monthly income to obtain a particular improvement in a tariff characteristic. The sum of consumers' willingness to pay for different features of a tariff and network gives their total willingness to pay for the tariff in each month.

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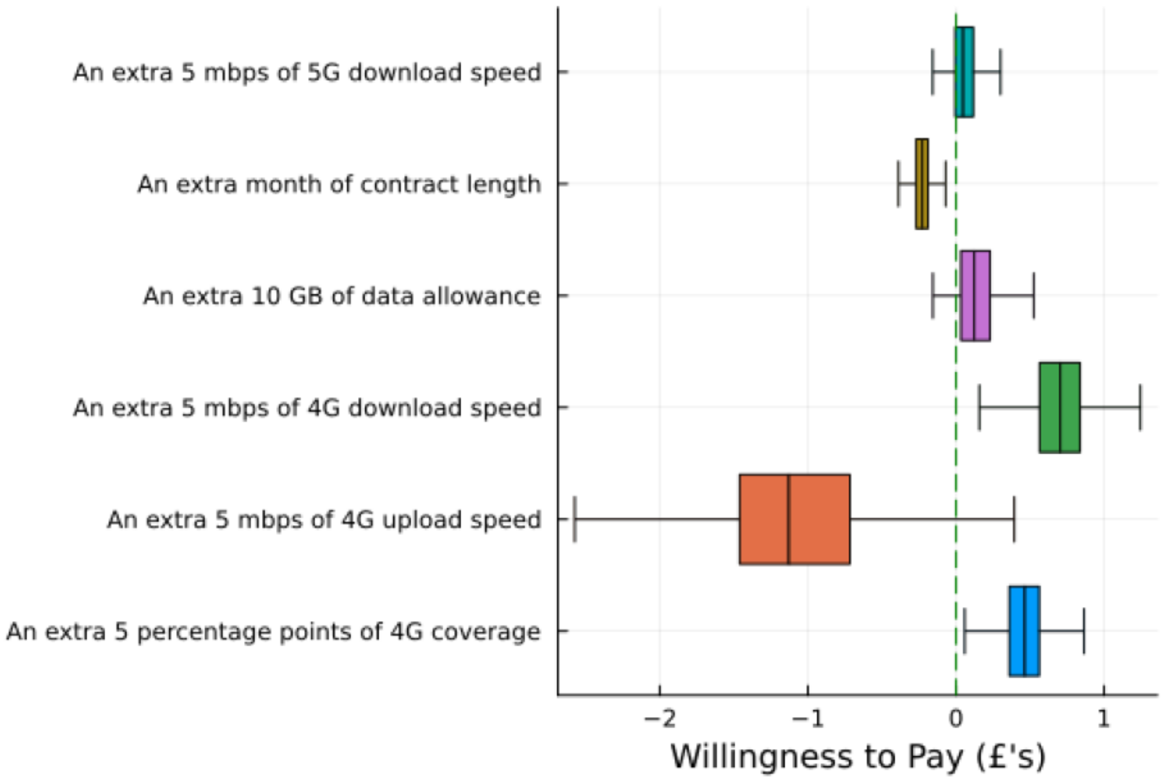
[359] Parties' submission, Quality-focused merger simulation model.
[360] CMA78, paragraph 1.23.
[361] In particular we use a flexible model of subscriber demand to estimate diversion ratios with a sub-sample of a dataset of choices from about 5% of the UK population in January-June 2023. See Appendix D for details.
[362] These include data allowance, download speed, network coverage and other aspects of network quality. For more details of tariff and network characteristics included see Appendix D.

8.45 Our econometric model allows willingness to pay for each tariff or network characteristic to vary across subscribers by age and monthly income. For example, to obtain a 5Mbps increase in download speed on the network they currently use, a high income, middle aged subscriber might be willing to pay more per month than a low-income, young subscriber on the same network.

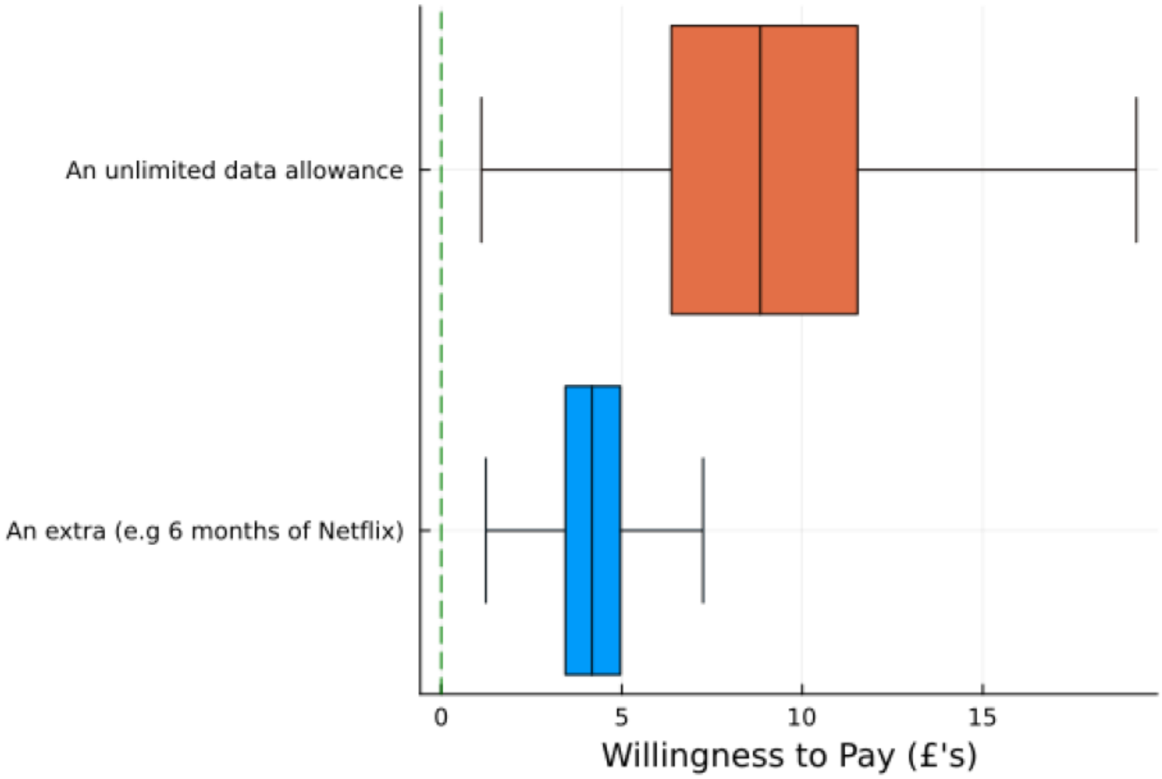
8.46 The Figures below show boxplots of estimated distribution in our sample of subscriber willingness to pay in GBP's per month for different tariff and network characteristics. The box shows the 25th percentile (start of the box), the median and 75th percentiles (end of the box) of willingness to pay in the sample used for estimation.

Figure 8.4: CMA econometric estimates of willingness to pay (GBP's per month)



Source: CMA analysis of Ofcom provider data, Ofcom Connected Nations data, Pure Pricing Data and Opensignal Limited © 2024.

Figure 8.5: CMA econometric estimates of willingness to pay (GBP's per month)



Source: CMA analysis of Ofcom provider data, Ofcom Connected Nations data, Pure Pricing Data and Opensignal Limited © 2024.

8.47 The estimates show that there is willingness to pay for aspects of network quality and in particular for 4G download speed. 5 extra Mbps of 4G download speed has a median valuation of £0.70 (2023 GBP's), while an extra 5% of 4G coverage in the travel to work area around where a consumer lives is valued by the median subscriber in the sample as £0.46.

8.48 In contrast we estimate a more varied valuation for 4G upload speed (important for posting to social media or making calls over 4G) with valuations being zero or negative for large parts of the distribution. In our data, the valuation is positive for those in their early 20s or below and negative or 0 for those older. This may reflect different usage patterns between age groups.[363]

8.49 Compared to 4G measures we only estimate a positive valuation for average 5G download speed and no other network quality variables. Specifically, we find average 5G download speed is valued less than average 4G download speed. While 5G network quality measures of upload speed and coverage have

[363] In the Parties' response to Provisional Findings, they claimed that negative willingness to pay results were implausible (Parties' response to the Provisional Findings, 4 October 2024, Annex 4 paragraphs 3.25-3.27). Here, negative results are not reflections that the model is implausible. Instead, negative results reflect that tariffs bundle several characteristics some of which may not be valued by all consumers who purchase that tariff. For example, a consumer may have a negative valuation for a 1mbps of 4G upload speed. However, as all tariffs have some upload speed and there is limited individualised pricing or tariff design, they still prefer this tariff to others in the market and are willing to purchase the good.

willingness to pay estimates close to £0 such that their values cannot be statistically distinguished from £0 for any subscribers in the sample (at the 95% confidence level).

8.50 It is unclear why consumers value 4G more than 5G. One potential reason for the low willingness to pay for 5G is that aspects of 5G network quality may be less commonly observed by consumers than 4G speeds (eg because some consumers do not have a 5G-enabled phone or because it is still being rolled out in some areas).

8.51 Data allowance (for limited contracts) is valued positively by most consumers with only a fraction having 0 or negative valuation. As can be seen from the graph below, there is a positive valuation amongst younger subscribers. This is consistent with higher internet usage by younger audiences.[364]

Figure 8.6: CMA econometric estimates of willingness to pay (WTP) for an extra GB of data by age

Source: CMA analysis of Ofcom provider data, Ofcom Connected Nations data, Pure Pricing Data and Opensignal Data.

8.52 Other willingness to pay estimates are as follows:

(a) Willingness to pay for an additional month of contract length is negative, consistent with the logic that all else equal, subscribers value the option to be able to change or cancel contracts.

(b) Unlimited data is highly valued with a median willingness to pay of £8.83.

[364] See Global internet users age distribution 2024 | Statista, accessed by the CMA on 3 September 2024.

(c) Extras are also valued positively with a median valuation of £4.18 which seems plausible given extras typically include a period of free access to a streaming service.[365]

8.53 More generally the results show that there is variation in the willingness to pay for different characteristics across consumers included in our sample.

8.54 Additionally, in our demand model willingness to pay estimates are linear in aspects such as speed. This means that in the model willingness to pay does not depend on the current level of speed. Additionally, results are estimated on data on the first half of 2023. As such, our estimates may not be well suited to be used to comment on the consumer valuation for levels of network quality that are far larger than what was observed in the period the data was collected.[366] [367] Instead, the CMA's willingness to pay estimates are informative for understanding the relative importance consumers placed on different aspects of their tariffs in the period before the Merger.

Third party evidence

8.55 We asked the Parties' competitors (the other MNOs and main MVNOs that account for the majority of the retail mobile market (excluding the Parties) as set out in Table 8.9 below) to rate the importance of a pre-populated list of factors[368] that consumers consider when purchasing retail mobile services in the UK, indicating the importance of each factor on a scale of one to five (where one is not important and five is very important) and adding other factors to the extent relevant.

8.56 We provide below an overview of the responses:

(a) The most important factors according to respondents were:

(i) value for money – which all respondents considered to be very important.

[365] Streaming services may cost above this figure however subscribers may not receive the extra for the full contract period and economic theory predicts that consumers have a lower valuation for in-kind transfers compared to cash.
[366] Willingness to pay estimates are calculated in the range of the sample. Therefore, they cannot be reliably extrapolated to predict the aggregate welfare effect that may associated with large changes in tariff characteristics eg a large change in the available network quality. Additionally, our model assumes linearity in willingness to pay for data. Over large changes the assumption of linearity is less likely to hold. For example, a 1mbps increase from a base of 10mbps is possibly valued more than a 1mbps increase when the base is 500mbps.
[367] In their response to the Provisional Findings, the Parties submitted that the CMA's analysis is unable to yield reliable estimates of consumers' valuation of the levels of network quality achieved by the JNP (Parties' response to the Provisional Findings, 4 October 2024, Annex 4, paragraph 3.12-3.20). To the extent that the JNP will deliver changes outside the range observed in the data, we agree.
[368] The list of factors provided was as follows: availability of handsets, brand reputation, latency, perks/rewards (eg free roaming, discounts on other brands, entertainment options), price, quality of customer service, reliability of network, speed of network, and value for money.

(ii) reliability of network[369] – considered to be very important by eight out of nine respondents.

(iii) price – considered to be important by eight out of nine respondents (and very important by five out of nine).

(b) Other factors considered to be important or very important include brand reputation (seven out of nine respondents) and speed of network (six out of nine respondents).

(c) Other factors were considered to be relatively less important:

(i) only three out of nine respondents considered that availability of handsets is important or very important.

(ii) only three out of nine respondents considered that latency[370] is important, and none considered it very important.

(iii) only two out of nine respondents considered that perks/rewards are important or very important.

(iv) only one out of nine respondents considered that quality of customer service is important or very important.

(d) Some respondents listed other factors as important, including mobile plans that are easy to understand and network coverage, although in each case only one respondent listed the factor as important.[371]

8.57 We also gathered evidence from competitors on the key reasons consumers typically switch providers of retail mobile services, and the results were broadly in line with the factors set out in the preceding paragraph that competitors believe consumers consider to be the most important when making their purchasing decision. Nearly all respondents said that switching was easy[372] and that getting a better price or value for money, or bad network quality are key reasons for switching, while customer service was identified as less important.[373]

8.58 Further evidence from third parties also indicates that price and network quality are the most important parameters of competition,[374] and that there are multiple dimensions to network quality.[375] One third party noted that there is a balance

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[369] For completeness, we note that several responses to the CMA competitor questionnaire from third parties ([✂]; [✂]; [✂]; and [✂]) suggested that good network coverage goes hand-in-hand with network reliability, and one respondent noted that network coverage is often conflated with network reliability and speed.
[370] This is the time taken to get a data response.
[371] Responses to the CMA competitor questionnaire from: [✂]; and [✂].
[372] Responses to the CMA questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].
[373] Responses to the CMA questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].
[374] [✂] call note; [✂] call note; [✂] call note and Which? response to the issues statement, 16 May 2024.
[375] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; and [✂].

between value for money and network reliability, where there is a minimum level of network quality a provider needs to meet in order to be credible to customers.[376] As set out in Appendix C, a [✂] BTEE internal document states that customers are willing to pay more for its network quality than 3UK's network, citing evidence of BTEE having more reliable network coverage, the largest coverage, the fastest network, and being the best for 5G. This indicates that it considers network quality to be an important parameter of competition. Some third parties told us that customer service, brand, and offer simplicity are important.[377]

8.59 These results are also broadly in line with Ofcom's findings in its consultation paper on its Future Approach to Mobile Markets and Spectrum, as well as other reports it has published which compare customer service levels across providers. While Ofcom has recognised the increasing importance of network quality, noting that it expects the quality of mobile services to become 'more important as customers' dependence on mobile services grows and their needs evolve', it has also highlighted the continued importance of price, noting that 'although quality is important to customers, there is a greater focus on price as a basis for competition'.[378] Further, an Ofcom report comparing customer service across providers published in May 2023 shows that where mobile customers had a reason to complain about their mobile service, the most common reason given was their service was not performing as it should (47%), for example because of poor connection quality or loss of service. This was followed by billing, pricing or payment issues (36%), and then dissatisfaction with customer service (22%).[379] We note however, that the reasons why customers complain to Ofcom may not necessarily correspond with the factors that determine customers' choice of operator.

8.60 The Parties submitted that the importance of network quality as a parameter of competition will increase as demand for data continues to grow.[380] As noted in Chapter 5, Mobile data traffic growth, third party evidence suggests that there is uncertainty about the future rate of growth of mobile data which reflects uncertainty over future applications and technological developments, however, it is generally accepted that mobile traffic will grow. As discussed in paragraph 8.114 to 8.121 below, we note that due to the growth in mobile traffic MNOs will need to continue to invest in their network in order to provide the level of network quality customers demand.

8.61 We also received survey evidence from a third party – which is not a mobile operator – indicating that when asked to 'rank which is the most important to you

[376] [✂] call note.
[377] [✂] call note; [✂] call note; and [✂] call note.
[378] Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraphs 3.14 and 4.2, accessed by the CMA on 29 November 2024.
[379] Ofcom comparing customer service: mobile, landline and home broadband, May 2023, page 9, accessed by the CMA on 29 November 2024.
[380] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 2.9.

when selecting a mobile network', 55% of mobile respondents with a mobile phone said 'price', 28% said 'good connection/signal', while only 6% said '5G coverage'.[381] The same third party also conducted a survey of 3UK customers and asked 'What would be your main driver for moving to a different mobile network?' of which 65% of respondents said 'price', 15% 'coverage', 9% 'speed', 5% 'add-ons' and 6% 'customer service'.[382] These surveys were conducted using commercial online panels which the CMA does not usually give full weight to, particularly in circumstances where panel recruitment methodology is not made clear.[383]

8.62 In respect of fixed-mobile convergence, as set out above in Chapter 5, Fixed-mobile convergence and bundling, Ofcom has noted that most users tend to purchase mobile services on a standalone basis, and the purchase of fixed-mobile bundles has not been a strong feature of the UK market to date. At phase 1, the CMA sought views from competitors on the importance of fixed-mobile bundles, currently and in the near future.[384] Third parties noted that the take-up of fixed-mobile bundles has been slow to date, and that although take-up is expected to increase (although not significantly) in the near future, customers will largely continue to purchase mobile services on a standalone basis.[385] This is in part because converged offerings are not particularly compelling for customers.[386]

8.63 As set out in in paragraph 8.135 below, VUK is seeking to establish itself as [✄] to BTEE and VMO2 while third party internal documents (set out in Appendix C, competitive strategies) suggest that some operators consider their ability to offer fixed-mobile bundles as part of a converged offering to be a competitive advantage in the retail market. Both BTEE and VMO2 actively pursue a converged offering strategy.[387] However, several third parties also considered that being able to offer fixed-mobile bundles is not critical to compete or succeed in the retail market in the UK, rather it is one of the strategies available to operators to compete.[388] Notably, fixed-mobile convergence [✄] suggesting that 3UK does not perceive this as an impediment to its ability to compete in the retail market.[389]

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[381] Unite the Union submission to the CMA.
[382] Unite the Union, polling submission, 30 July 2024.
[383] CMA78, paragraphs 2.29 and 2.30.
[384] In particular: (a) whether it is important to be able to offer fixed-mobile bundles to compete for consumers of retail mobile services in the UK; and (b) how they anticipate the take-up of fixed-mobile bundles in the UK changing in the near future (ie the next two to three years).
[385] [✄] response to the CMA's questionnaire; ([✄]) and [✄] call note.
[386] Responses to the CMA questionnaire from: [✄]; [✄]; [✄]; [✄]; [✄]; and [✄].
[387] BT Group's 2024 annual report states that to deliver long-term sustainable growth, one of five priorities within BT Group's overall strategic framework is to 'Grow Consumer through converged solutions', specifically that 'Led by EE, Consumer will win more UK households by creating deeper relationships on the back of leadership in full fibre broadband, 5G and convergence' (BT Group plc Annual Report 2024, page 10, accessed by the CMA on 31 July 2024). VMO2's annual report for the year ended 31 December 2023 states that 'Growing demand for bundled household connectivity and services puts us in a strong position to be the UK converged champion and household supplier of choice, providing mobile, broadband and pay-TV with high-value customer experience and innovative propositions' (VMO2's FY23 Annual Report, page 10, accessed by the CMA on 31 July 2024).
[388] Responses to the CMA questionnaire [✄]; [✄]; [✄]; [✄]; [✄]; [✄]; and [✄] call note.
[389] CMA, Phase 1 Decision, 29 April 2024, paragraph 147.

Conclusion on the parameters of competition

8.64 Overall, our view is that price is a key parameter of competition. Whilst customers require a minimum level of quality, and network quality related parameters play an important role in customer decisions, they are currently less important than price. Within network quality there are multiple dimensions including network coverage, speed, consistency, latency, and reliability. Our econometric analysis shows that consumers particularly value 4G download speed, with variability in their valuations for 4G upload speed. We also consider that, in order to continue to meet customers' growing data demand and remain competitive in the future, MNOs will need to continue to invest in their network infrastructure.

8.65 We also consider that the importance of price and quality parameters likely varies across customers. A slightly higher proportion of 3UK's customers consider price to be important and a slightly lower proportion consider network quality attributes to be important compared to VUK's customers. A slightly higher proportion of MVNO customers consider price to be important and a slightly lower proportion consider network quality attributes to be important compared to MNO customers. We also note there are some variations between urban and rural customers, with urban customers relatively more concerned with price related attributes compared to their rural counterparts and rural customers relatively more concerned with network related attributes. Our econometric analysis also shows that there is variation in the willingness to pay for different characteristics across consumers included in our sample.

8.66 Brand and customer service are important to at least some customers but overall are less important than either price or network quality parameters.

8.67 With respect to fixed-mobile convergence, although we consider that it is a competitive strategy used by many operators (ie BTEE, VMO2, Sky Mobile and to some extent VUK), it is only one strategy operators use to compete. The uptake of such bundles has been slower in the UK compared to other European countries and most customers do not consider it an important factor driving their choice of mobile operator. Therefore, we consider that the ability to provide a fixed-mobile offering will not significantly affect the competitive constraints mobile operators exert in the foreseeable future.

Customer bases

8.68 In this section, we use market shares by revenues and subscribers, market shares by data allowances, and customer gross adds, churn rates, and net adds, to analyse the customer bases of the mobile operators in the overall retail mobile market.

Market shares

8.69 We have firstly considered market share at a network level by allocating to each MNO their own revenue and subscribers as well as those of the MVNOs hosted on their respective networks. The Parties submitted that these are uninformative of conditions of competition.[390] However, while MVNOs exert some level of independence from the host MNO by, for example, determining their own competitive strategy and setting prices independently, we consider that, (i) as set out in paragraphs 8.62 to 8.64, price and the various dimensions of network quality are important parameters of competition and (ii) network quality is determined primarily by competition between the MNOs, while the ability of MVNOs to compete effectively on price depends on the wholesale terms granted by their host MNO. Accordingly, we consider that presenting market shares at network level is a useful indicator of the conditions of competition.

8.70 The Merger would reduce the number of MNOs from four to three in the UK and create the largest mobile operator, at the network level, in terms of revenue, and the second largest in terms of subscribers. As set out in Table 8.7, our estimates based on 2023 data show that the Merged Entity and the MVNOs hosted on its network would have a combined market share by retail revenue of [30-40]% with an increment of [10-20]% brought about by the Merger, and a similar market share by subscribers of [30-40]% with an increment of [10-20]%.

Table 8.7: Market shares in the overall retail mobile market at network level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscriber*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE Network	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]
VMO2 Network	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
VUK Network	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	20-30]
3UK Network	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
VUK + 3UK combined	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**
Others*	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *Others represents small MVNOs categorised under 'Others' by the Parties in their revenue and subscriber estimations, and as such cannot be attributed to any one MNO.*

8.71 As set out in Chapter 5, Mobile Services subscriptions, there are a number of different mobile service subscriptions available to both consumers and businesses. Table 8.8 shows the share of overall retail revenues and subscribers for each of these subsegments based on 2023 data. It shows that:

[390] Annex 1 to the Parties' response to the AIS and working papers; Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 3.4

(a) The consumer retail segment accounts for a significantly greater share of overall retail revenues ([80-90]%) and overall retail subscribers ([80-90]%) than the business retail segment ([10-20]% of revenues and [10-20]% of subscribers);

(b) The PAYM handset subsegment has a slightly larger share of overall retail revenues ([30-40]%) than the PAYM SIMO subsegment ([30-40]%), but PAYM SIMO has a larger share of overall retail subscribers ([30-40]% compared to [20-30]% for PAYM handset);

(c) The pre-paid subsegment has a significantly higher share of overall retail subscribers ([20-30]%) compared to share of overall retail revenues ([10-20]%). It accounts for a greater share of subscribers than PAYM handset; and

(d) The PAYM data-only and small office / home office (**SoHo**) subsegments each contribute to less than 5% of overall retail revenues and subscribers.

Table 8.8: 2023 share of overall retail revenues and subscribers in each subsegment

		%
Subsegment	*Revenue share*	*Subscriber share*
Overall Retail	100.0	100.0
Consumer Retail	[80-90]	[80-90]
PAYM SIMO	[30-40]	[30-40]
PAYM handset	[30-40]	[20-30]
PAYM data-only	[0-5]	[0-5]
Pre-paid	[10-20]	[20-30]
Business Retail	[10-20]	[10-20]
SoHo	[0-5]	[0-5]
Other Business Retail*	[10-20]	[10-20]

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
**Other Business Retail subsegments refers to small SME, medium SME, corporate and public services.*

8.72 The Parties provided estimates of market shares for the segments listed in Table 8.8 above (ie overall retail, consumer retail, PAYM SIMO, PAYM handset, PAYM data-only, pre-paid, business retail and subsegments of business retail) at a mobile operator level.[391] We also produced our own estimates of market shares for these segments using the Parties' data, as well as revenue and subscriber data gathered directly from third parties.[392]

8.73 Table 8.9 sets out our estimates for market shares by revenues and subscribers in the overall retail market at mobile operator level. Based on 2023 data, our estimates show that in the overall retail market:

(a) The Merged Entity's market share by revenue would be [30-40]%, with an increment of [10-20]% from the Merger. Its market share by subscribers

[391] Parties' response to the CMA's s109.
[392] [✂] response to the CMA's RFI; [✂] response to the CMA's RFI; [✂] response to the CMA's RFI; and [✂] response to the CMA's RFI.

would be [30-40]%, with an increment of [10-20]%. This would result in the Merged Entity being the largest mobile operator by revenue, and the second largest by subscribers (behind VMO2 + Tesco Mobile[393]);

(b) Between them, the four MNOs generated over 90% of retail mobile revenues and supplied over 80% of subscribers in 2023. This is also the case for the consumer retail segment, as set out in Table 8.10; and

(c) In comparison, independent MVNOs generated [5-10]% of retail mobile revenues and supplied [10-20]% of subscribers in 2023. This has grown from [0-5]% of revenues and [5-10]% of subscribers in 2020.

Table 8.9: Market shares in the overall retail market at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]
EE	[20-30]	[20-30]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]
BT	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
BT Business	[5-10]	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
VMO2 + Tesco Mobile	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
VMO2	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Giffgaff	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]
Tesco Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
VUK	[20-30]	[20-30]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[20-30]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]
Talk Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VOXI	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
3UK + Superdrug†	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Three	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
SMARTY	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Superdrug†	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK + 3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**
Sky Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Lebara	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Lyca Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
iD Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Utility Warehouse	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Asda	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Gamma	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
TalkTalk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *VMO2 was unable to provide a breakdown for the O2 and Virgin Mobile brands.*
†Superdrug is an MVNO hosted on 3UK's network and is a subsidiary within the CK Hutchison group.

8.74 Table 8.10 sets out our estimates for market shares by revenues and subscribers in the consumer retail segment at mobile operator level. Based on 2023 data, our

393 As discussed in Chapter 5, Tesco Mobile, we consider for the purpose of the competitive assessment in relation to retail mobile services that VMO2 and Tesco Mobile cannot be treated as fully independent competitors given VMO2's 50% shareholding in Tesco Mobile and associated rights.

estimates show that the Merged Entity's market share by revenue would be [30-40]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [20-30]%, with an increment of [10-20]%. This would result in the Merged Entity being the largest mobile operator by revenue, and the second largest by subscribers (behind VMO2 + Tesco Mobile).

Table 8.10: Market shares in consumer retail segment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
EE	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
BT	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VMO2 + Tesco Mobile	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
VMO2	[20-30]	[20-30]	[20-30]	[20-30]	[30-40]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Giffgaff	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Tesco Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
VUK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Talk Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VOXI	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
3UK + Superdrug	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Three	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
SMARTY	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Superdrug	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK + 3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**
Sky Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
TalkTalk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *VMO2 was unable to provide a breakdown for the O2 and Virgin Mobile brands*

8.75 Table 8.11 sets out our estimates for market shares by revenues and subscribers in the PAYM SIMO subsegment at mobile operator level. Based on 2023 data, our estimates show that the Merged Entity's market share by revenue would be [30-40]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [30-40]%, with an increment of [10-20]%. This would result in the Merged Entity being the largest mobile operator by revenue, and the second largest by subscribers (behind VMO2 + Tesco Mobile).

Table 8.11: Market shares in the PAYM SIMO subsegment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
EE	[10-20]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
BT	[5-10]	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]	[0-5]
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VMO2 + Tesco Mobile	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
VMO2	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Tesco Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK	[10-20]	[10-20]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]
Talk Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Three	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
VUK + 3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[20-30]**	**[30-40]**
Sky Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
TalkTalk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.

8.76 Table 8.12 sets out our estimates for market shares by revenues and subscribers in the PAYM handset subsegment at mobile operator level. Based on 2023 data, our estimates show that the Merged Entity's market share by revenue would be [30-40]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [20-30]%, with an increment of [10-20]%. This would result in the Merged Entity being the third largest mobile operator by revenue (behind BTEE and VMO2 + Tesco Mobile), and the second largest by subscribers (behind VMO2 + Tesco Mobile).

Table 8.12: Market shares in the PAYM handset subsegment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]
EE	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VMO2 + Tesco Mobile	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
VMO2	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Tesco Mobile	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[10-20]	[10-20]
VUK	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Three	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
VUK + 3UK	**[20-30]**	**[20-30]**	**[30-40]**	**[30-40]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**
Sky Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[10-20]
TalkTalk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.

8.77 Table 8.13 sets out our estimates for market shares by revenues and subscribers in the PAYM data-only subsegment at mobile operator level. Based on 2023 data, our estimates show that the Merged Entity's market share by revenue would be [30-40]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [40-50]%, with an increment of [10-20]%. This would result in the Merged Entity being the second largest mobile operator by revenue (behind BTEE), and the largest by subscribers.

Table 8.13: Market shares in the PAYM data-only subsegment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[40-50]	[40-50]	[50-60]	[40-50]	[40-50]	[40-50]	[40-50]	[40-50]
VMO2	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
VUK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
Three	[10-20]	[10-20]	[10-20]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
VUK + 3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[40-50]**	**[40-50]**	**[30-40]**	**[40-50]**
Sky Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.

8.78 Table 8.14 sets out our estimates for market shares by revenues and subscribers in the pre-paid subsegment at mobile operator level. Based on 2023 data, our estimates show that in this subsegment:

(a) The Merged Entity's market share by revenue would be [20-30]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [20-30]%, with an increment of [10-20]%. This would result in the Merged Entity being the second largest mobile operator by revenue and by subscribers (behind VMO2 + Tesco Mobile);

(b) In contrast to the PAYM subsegments, MNO sub-brands Giffgaff, VOXI, and SMARTY all operate in the pre-paid subsegment; and

(c) Independent MVNOs, in large part due to Lebara and Lyca Mobile, generated [10-20]% of revenues and supplied [20-30]% of subscribers. Lebara in particular has grown significantly from 2020 to 2023, with its market share by revenue more than doubling, and its market share by subscribers more than tripling.

Table 8.14: Market shares in the pre-paid subsegment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
VMO2 + Tesco Mobile	[40-50]	[40-50]	[40-50]	[40-50]	[40-50]	[40-50]	[40-50]	[30-40]
VMO2	[40-50]	[40-50]	[40-50]	[30-40]	[30-40]	[30-40]	[30-40]	[30-40]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Giffgaff	[20-30]	[20-30]	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
Tesco Mobile	[5-10]	[5-10]	[5-10]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
VUK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[5-10]	[5-10]	[10-20]	[10-20]	[10-20]	[10-20]
Talk Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VOXI	[0-5]	[0-5]	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
3UK + Superdrug†	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Three	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]
SMARTY	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Superdrug†	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK + 3UK	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**
Lebara	[0-5]	[0-5]	[5-10]	[5-10]	[0-5]	[0-5]	[5-10]	[10-20]
Lyca Mobile	[5-10]	[5-10]	[5-10]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Asda	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *VMO2 was unable to provide a breakdown for the O2 and Virgin Mobile brands.*
†Superdrug is an MVNO hosted on 3UK's network and is a subsidiary within the CK Hutchison group.

8.79 Table 8.15 sets out our estimates for market shares by revenues and subscribers in the business retail segment at mobile operator level. Based on 2023 data, our estimates show that:

(a) In the business retail segment, the Merged Entity's market share by revenue would be [30-40]%, with an increment of [0-5]% from the Merger. Its market share by subscribers would be [40-50]%, with an increment of [0-5]%. This would result in the Merged Entity being the second largest mobile operator by revenue (behind BTEE) and the largest by subscribers; and

(b) The business retail segment is more concentrated than the consumer retail segment, with three MNOs (BTEE, VMO2 + Tesco Mobile, and VUK) having generated over 95% of business retail revenues and having supplied over 90% of subscribers.

Table 8.15: Market shares in business retail segment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[40-50]	[40-50]	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]
VMO2 + Tesco Mobile	[10-20]	[10-20]	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
VMO2	[10-20]	[10-20]	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Tesco Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK	[30-40]	[30-40]	[20-30]	[20-30]	[40-50]	[30-40]	[30-40]	[30-40]
Vodafone	[30-40]	[30-40]	[20-30]	[20-30]	[40-50]	[30-40]	[30-40]	[30-40]
3UK	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Three	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK + 3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**	**[40-50]**	**[30-40]**	**[40-50]**	**[40-50]**
TalkTalk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[5-10]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *VMO2 was unable to provide a breakdown for the O2 and Virgin Mobile brands*

8.80 Table 8.16 sets out our estimates for market shares by revenues and subscribers in the SoHo subsegment at mobile operator level. Based on 2023 data, our estimates show that in this subsegment:

(a) The Merged Entity's market share by revenue would be [20-30]%, with an increment of [10-20]% from the Merger. Its market share by subscribers would be [30-40]%, with an increment of [10-20]%. This would result in the Merged Entity being the second largest mobile operator by revenue and by subscribers (behind BTEE);

(b) 3UK has seen significant growth since 2020. From 2020 to 2023, its market share by revenue grew from [0-5]% to [10-20]%, and its market share by subscribers grew from [0-5]% to [20-30]%; and

(c) Independent MVNOs have a particularly small presence, generating only [0-5]% of revenues and supplying [0-5]% of subscribers. The four MNOs have a combined market share of over 95% by both revenue and subscribers in 2023.

Table 8.16: Market shares in the SoHo subsegment at mobile operator level (by revenue and subscribers)

%

Operator	*Revenue*				*Subscribers*			
	2020	*2021*	*2022*	*2023*	*2020*	*2021*	*2022*	*2023*
BTEE	[70-80]	[60-70]	[50-60]	[40-50]	[60-70]	[40-50]	[40-50]	[30-40]
VMO2 + Tesco Mobile	[5-10]	[5-10]	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
VMO2	[5-10]	[5-10]	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
O2*	*	*	*	*	*	*	*	*
Virgin Mobile*	*	*	*	*	*	*	*	*
Tesco Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
VUK	[10-20]	[10-20]	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]
Vodafone	[10-20]	[10-20]	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]
3UK	[0-5]	[0-5]	[5-10]	[10-20]	[0-5]	[5-10]	[10-20]	[20-30]
Three	[0-5]	[0-5]	[5-10]	[10-20]	[0-5]	[5-10]	[10-20]	[20-30]
VUK + 3UK	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[30-40]	[30-40]
Talk Talk	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Others	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' revenue and subscriber data.
*Notes: *VMO2 was unable to provide a breakdown for the O2 and Virgin Mobile brands.*

8.81 The Parties submitted that 3UK's 'core business' ([✂])[394] has been declining from 2020 to 2023,[395] and that 3UK experienced the lowest growth in PAYM SIMO and PAYM handset of all MNOs.[396] The Parties' submitted that this is primarily due to [✂].[397]

8.82 We have found that, while 3UK's core business has seen a fall in subscribers, this is driven primarily by [✂], while the [✂] have remained relatively steady over the same timeframe.

(a) While 3UK did experience materially lower growth in absolute subscriber numbers than all other MNOs in PAYM SIMO from 2020 to 2023, it did not experience the lowest growth in PAYM handset, as all other MNOs experienced significant declines in subscriber numbers in this period while 3UK had a stable number of subscribers. This has resulted in 3UK's market share by subscribers in the PAYM handset subsegment increasing slightly from [10-20]% in 2020 to [10-20]% in 2023

(b) Three's losses in pre-paid are likely due to the growth of MNO sub-brands (notably 3UK's sub-brand SMARTY, but to some extent VOXI and GiffGaff as well) and MVNOs (notably Lebara). As set out in Table 8.14, losing market

[394] CK Hutchison's response to the CMA's s109 notice.
[395] Annex 1 to the Parties' response to the AIS and working papers.
[396] Annex 1 to the Parties' response to the AIS and working papers.
[397] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 3.10.

share by subscribers in the pre-paid subsegment is not unique to 3UK, as both BTEE and VMO2 + Tesco Mobile have seen more significant declines in their market shares from 2020 and 2023 than 3UK.

8.83 In relation to the Parties' submission that [✂] is the [✂] driver behind 3UK losses, as discussed in paragraphs 8.62 to 8.64 we note that although [✂] plays some role in customer choices and in 3UK's churn, the Parties' analysis does not show that the majority of the customer churn in a given area is [✂].[398] Further, as discussed in paragraphs 8.163 to 8.183 below, we note that although 3UK's network quality has been historically below that of the other MNOs, due to recent investment it has improved its network.

8.84 Based on 2023 market shares by revenue and subscribers, our view is that:

(a) The Merged Entity would be the largest mobile operator in the overall retail mobile market by revenue, with a market share of [30-40]%, and the second largest by subscribers, with a market share of [30-40]%;

(b) The Merged Entity would also have a particularly strong position in some of the subsegments discussed above, with combined market shares by revenue and subscribers greater than 30% in the PAYM SIMO subsegment, PAYM data-only subsegment, and business retail segment;[399]

(c) This market is very concentrated, with the four MNOs generating over 90% of revenues and supplying over 80% of subscribers in both the overall retail market and consumer retail segment. Concentration levels are even higher in the business retail segment, with the four MNOs generating over 95% of revenues and supplying over 90% of customers. The pre-paid subsegment is less concentrated, with the four MNOs generating over 80% of revenues and supplying over 70% of subscribers; and

(d) Independent MVNOs, while growing, only cumulatively generate [5-10]% of retail mobile revenues and supply [10-20]% of subscribers, and none has a market share greater than 5% by subscribers or revenue. As of 2023, the largest independent MVNOs by subscribers do not operate in all consumer retail subsegments, for example Sky Mobile only operates in PAYM subsegments and Lebara only operates in the pre-paid subsegment.

(e) All four MNOs, including both Parties, provide all the main types of consumer tariff (ie PAYM SIMO, PAYM handset, PAYM data-only, and pre-paid) and have a market share greater than 10% (by revenues and subscribers) in

[398] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraphs 3.10-3.15.
[399] For example, based on 2023 data, the Merged Entity would have a combined market share of: 30-40]% by revenue and [30-40]% by subscribers in the PAYM SIMO subsegment; [30-40]% by revenue and [40-50]% by subscribers in the PAYM data-only subsegment; and [30-40]% by revenue and [40-50]% by subscribers in the business retail segment.

each of these subsegments. In contrast, many of the main MVNOs have a more limited offering, as outlined above.

Market shares by data allowances

8.85 We have conducted analysis of market shares by data allowance for PAYM SIMO customers using the Ofcom Provider Database (**PD**). PD contains detailed information on the tariffs used by PAYM SIMO subscribers from January to June 2023, including on data allowances, contract lengths and prices (for a detailed description of the PD see Appendix D, Data).[400]

8.86 We segment data allowances into seven categories. The Parties submitted that segmenting the market by data allowance is inappropriate and that we do not provide any arguments to justify the segmentation used.[401] We are interested in understanding any differences between the competitive positions of providers across different data allowances. We acknowledge that, as data allowance is a continuous variable, any categorisation will involve a degree of arbitrariness. For instance, we have seen evidence that the Parties and other third parties each use different segmentations.[402] The segmentation we have chosen includes a greater number of segments within the lower allowance range to reflect the high concentration of consumers on tariffs under 50GB per month.

8.87 Table 8.17 shows the share of PAYM SIMO consumers in each data allowance category based on the PD data. It shows that the majority ([50-60]%) of PAYM SIMO customers are on low data tariffs (the 0-5GB and 5-12GB data allowance categories). There is also a material proportion ([10-20]%) of PAYM SIMO customers in the 500+ GB category.

Table 8.17: Share of PAYM SIMO consumers in each data allowance category

	%
Data Category	*Share*
0-5GB	[30-40]
5-12GB	[10-20]
12-25GB	[10-20]
25-50GB	[5-10]
50-150GB	[10-20]
150-500GB	[0-5]
500+ GB*	[10-20]
Total	100.0

Source: CMA analysis of PD.
**Includes unlimited.*

400 For the analysis presented in this section, we use the same data as is presented in Appendix D with two differences. Firstly, we base the analysis on a sample of 100,000 not 10,000 choices. Secondly, we sample from the choices of all subscribers not just the choices of 'contestable' subscribers. See CMA Appendix D, Demand model and estimation approach, for the definition of contestable.
401 Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 3.5(c).
402 Vodafone internal document; CK Hutchison internal document; BTEE response to the CMA's RFI and Ofcom's research paper 'Monitoring Consumer Outcomes in the Mobile Sector', 22 October 2024, page 32, Monitoring Consumer Outcomes in the Mobile Sector, accessed by the CMA on 29 November 2024.

8.88 Using the PD we estimated market shares by data allowances in the PAYM SIMO subsegment, as set out in Table 8.17. Our analysis shows that:

(a) VUK has a strong presence in larger data categories. For example, it supplies [30-40]% of the 50-150GB, and [20-30]% of the 500+ GB category, whereas VUK has a weaker presence in smaller data categories, supplying only [10-20]% of consumers in the 25-50GB category and less than 10% of subscribers in the 5-12GB data category.

(b) 3UK has a strong presence in the 500+ GB category with a [40-50]% share. It also has a material presence in the 5-12GB and 25-50GB categories, with [20-30]% and [20-30]% shares respectively. However, it does not have a uniform presence across all data categories. For example, its share is below 5% in the 0-5GB, 12-25GB, and 150-500GB categories and [5-10]% in the 50-150GB category.

(c) BTEE and VMO2 + Tesco Mobile have a presence across all data categories. However, their presence is not uniform across the different categories.

(i) BTEE has a notably stronger presence in the 0-5GB, 50-150GB and 150-500GB category, supplying [30-40]%, [30-40]% and [30-40]% of consumers respectively, but only [10-20]% of consumers in the largest 500+ GB category.

(ii) In contrast, VMO2 + Tesco Mobile is strongest in the 12-25GB category, where it supplies [50-60]% of consumers, more than double the next largest supplier BTEE, but with only [10-20]% of consumers in the largest 500+ GB category.

(iii) Similarly to independent MVNOs, Tesco Mobile has a stronger presence in the smaller data categories supplying close to 10% of consumers in categories up to 25GB, but is weaker in the larger data segments with a share below 5% in data allowances of 50GB and over.

(d) Sky Mobile has a stronger presence in smaller data categories compared to larger data categories. Sky Mobile accounts for between 10-20% of consumers with data contracts under 12GB compared to below 5% in data categories exceeding 25GB. In addition, Sky Mobile does not supply consumers in the 150GB+ data categories.

(e) iD Mobile’s shares were below 5% across all categories.

Table 8.18: Market shares in data allowances in the PAYM SIMO subsegment by subscribers

%

Operator	*0-5GB*	*5-12GB*	*12-25GB*	*25-50GB*	*50-150GB*	*150-500GB*	*500+ GB***
BTEE	[30-40]	[20-30]	[20-30]	[20-30]	[30-40]	[30-40]	[10-20]
EE	7[30-40]	1[10-20]	[20-30]	[20-30]	[30-40]	[30-40]	[10-20]
BT	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-
VMO2 + Tesco Mobile	[30-40]	[30-40]	[40-50]	[20-30]	[20-30]	[40-50]	[10-20]
O2	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[40-50]	[5-10]
Virgin Mobile	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Tesco Mobile	[10-20]	[10-20]	[10-20]	[5-10]	[0-5]	[0-5]	[0-5]
VUK	[5-10]	[5-10]	[20-30]	[20-30]	[30-40]	[10-20]	[20-30]
3UK	[0-5]	[20-30]	[0-5]	[20-30]	[5-10]	[0-5]	[30-40]
VUK + 3UK	**[10-20]**	**[20-30]**	**[20-30]**	**[30-40]**	**[40-50]**	**[20-30]**	**[70-80]**
Sky Mobile	[10-20]	[10-20]	[5-10]	[0-5]	[0-5]	-	-
iD Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Talk Mobile	-	-	[0-5]	-	-	-	-
Total*	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

%

Operator	*0-5GB*	*5-12GB*	*12-25GB*	*25-50GB*	*50-150GB*	*150-500GB*	*500+ GB***
BTEE	[30-40]	[20-30]	[20-30]	[20-30]	[30-40]	[30-40]	[10-20]
EE	[30-40]	[10-20]	[10-20]	[20-30]	[30-40]	[30-40]	[10-20]
BT	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-
Plusnet	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-
VMO2 + Tesco Mobile	[30-40]	[30-40]	[40-50]	[20-30]	[20-30]	[40-50]	[10-20]
O2	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[40-50]	[5-10]
Virgin Mobile	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Tesco Mobile	[5-10]	[10-20]	[10-20]	[5-10]	[0-5]	[0-5]	[0-5]
VUK	[10-20]	[5-10]	[20-30]	[10-20]	[30-40]	[10-20]	[20-30]
Vodafone	[10-20]	[5-10]	[20-30]	[10-20]	[30-40]	[10-20]	[20-30]
Talk Mobile	-	-	[0-5]	-	-	-	-
3UK	[0-5]	[20-30]	[0-5]	[20-30]	[5-10]	[0-5]	[40-50]
VUK + 3UK	**[10-20]**	**[20-30]**	**[20-30]**	**[30-40]**	**[40-50]**	**[10-20]**	**[70-80]**
Sky Mobile	[10-20]	[10-20]	[5-10]	[0-5]	[0-5]	-	-
iD Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total*	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of PD.
*Notes: *The complete list of brands included in PAYM SIMO OPD is BTEE, Plusnet, Vodafone, VMO2, Tesco Mobile, Three, Sky Mobile, iD Mobile and Talk Mobile.*
***Includes unlimited.*

8.89 Overall, we note that the Parties compete particularly closely in the 500+ GB category, with VUK and 3UK having a combined share of [70-80]%. Post-Merger the Parties would also be the largest suppliers in the 5-12GB and 50-150GB categories, accounting for [20-30]% and [40-50]% of PAYM SIMO customers respectively. BTEE and VMO2 + Tesco Mobile compete across the full range of tariffs, while Sky Mobile predominately competes in the lower data categories.

8.90 In response to our Provisional Findings, the Parties stated that our analysis of market shares by data allowances is backwards-looking and submitted an analysis of MNP port-in data, used as a proxy for gross adds, across various data allowances. The Parties stated that the analysis shows that.[403] For example, it shows that the Parties have gained different proportions of customers across data allowances, with 500+ GB data accounting for [✂]% of VUK [✂] and [✂]% of 3UK [✂], in Q4 FY23.[404] The Parties state this contradicts our finding that they compete particularly closely in the 500+ GB category.[405]

8.91 However, we do not consider that the Parties' analysis provides evidence of their competitive position in the high data segment relative to each other or to other operators. This is because their analysis presents the distribution of customers switching to them by data allowance, rather than the proportion of all customers within each data allowance that switch to them. Additionally, the analysis does not account for the Parties' relative position compared to BTEE, VMO2, and MVNOs. These factors mean that, even if high data customers represent a [✂] percentage of VUK's [✂], it could still be capturing a relatively large share of all customers in the 500+ GB category compared to its competitors. Therefore, we consider that this evidence does not support the Parties' claim that they are not close competitors in the 500+ GB category.

Customer gross adds/churn/net adds data

8.92 We note that market shares based on existing revenue and subscribers, although a useful indicator, only capture the current competitive strength of mobile operators to a certain degree. In the PAYM subsegment, many customers are bound by long-term contracts, which means that, at any given time, only a proportion of the total customer base is actually contestable. We therefore also considered market shares by gross adds as well as churn rates and net adds, which capture more recent competitive dynamics.

8.93 The Parties provided estimates for gross adds, churn rates, and net adds in the PAYM subsegments, and pre-paid subsegment.[406] We also produced our own estimates for these subsegments using the Parties' data, as well as data gathered directly from third parties.[407]

[403] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 3.5(d),
[404] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 Figure 3.1 and Figure 3.2,
[405] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 3.5(d),
[406] Parties' response to the CMA's s109 notice.
[407] [✂] response to the CMA's RFI; [✂] response to the CMA's RFI; [✂] response to the CMA's RFI; and [✂] response to the CMA's RFI.

8.94 We have not considered gross adds and churn rates in the pre-paid subsegment, as market shares by revenue and subscribers are likely to be a better reflection of competitive strength. This is due to the lack of long-term contracts in the pre-paid segment and as customers will have used services in the last 90 days.

8.95 We define gross adds as the number of new subscribers in a given period, excluding: (i) customers that have disconnected within a cooling period (typically 14 days) and (ii) customers that have internally migrated within a mobile operator from a different subsegment (eg PAYM handset to PAYM SIMO).

8.96 Table 8.19 sets out our estimates of market shares by gross adds and by subscribers.[408] In this analysis we included the operators which we had gross adds data for, namely BTEE, VMO2 + Tesco Mobile, VUK, 3UK, and Sky Mobile. These estimates are based on the Parties' and third parties' estimates in the PAYM subsegment.[409] These estimates show that:

(a) In 2022 and 2023, 3UK performed more strongly than its market shares by subscribers suggested (ie [10-20]% by gross adds vs [10-20]% by subscribers in 2023);

(b) Similarly, Sky Mobile had higher 2022 and 2023 market shares by gross adds ([5-10]% in 2023) compared to by subscribers ([5-10]% in 2023).

(c) In contrast, VMO2 + Tesco Mobile and VUK both had smaller 2022 and 2023 market shares by gross adds than by subscribers; and

(d) In 2023, BTEE had higher market shares by gross adds ([20-30]%) than by subscribers ([20-30]%), but a smaller gross adds share than subscriber share in 2022.

[408] These market shares by subscribers are not comparable to those set out in the Market Shares section above, as the market shares in Table 8.22 omits 'others'.
[409] We have not considered gross adds in the PAYM subsegment prior to 2022 due to insufficient data.

Table 8.19: Market shares in the PAYM subsegment (by gross adds and subscribers)

%

Operator	*Gross adds share*		*Subscribers share*	
	2022	*2023*	*2022*	*2023*
BTEE	[20-30]	[20-30]	[20-30]	[20-30]
VMO2+Tesco	[20-30]	[20-30]	[30-40]	[30-40]
VMO2	[20-30]	[20-30]	[20-30]	[20-30]
Tesco Mobile	[5-10]	[5-10]	[5-10]	[5-10]
VUK	[10-20]	[10-20]	[10-20]	[10-20]
3UK	[10-20]	[10-20]	[10-20]	[10-20]
VUK+3UK	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**
Sky Mobile	[5-10]	[5-10]	[5-10]	[5-10]
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' and third parties' gross adds and subscriber data.
Notes: iD Mobile, Utility Warehouse, Gamma, TalkTalk and 'others' has been omitted from this table due to data limitations.

8.97 We define churn rate as disconnections (ie the number of subscribers lost in a given period) divided by a mobile operator's opening customer base (ie number of subscribers at the start of that period).

8.98 Table 8.20 sets out our estimates of mobile operator churn rates, based on the Parties' and third parties' estimates, in the PAYM subsegment. These estimates show that from Q1 2021 to Q4 2023:

(a) BTEE had the second highest rates of churn of MNOs, and these rates have increased, particularly from Q2 2023 to Q4 2023. As of the end of 2023, BTEE's churn rate was at a similarly high level to 3UK's;

(b) VMO2 + Tesco Mobile had the lowest rates of churn of MNOs, though this rate has been slowly increasing, driven primarily by VMO2's churn. When excluding Tesco Mobile, VMO2 had the second lowest rates of churn of MNOs in this period. Tesco Mobile had considerably lower rates of churn than MNOs and Sky Mobile in 2023;

(c) VUK had stable rates of churn, which have been the second lowest of MNOs. When excluding Tesco Mobile from VMO2, VUK had the lowest rates of churn of MNOs in this period;

(d) 3UK had the highest rates of churn of all MNOs; and

(e) Sky Mobile had considerably lower rates of churn than MNOs, though its churn was higher than Tesco Mobile in 2023.

8.99 The Parties submitted that the increase in BTEE's churn rates is not consistent with the Parties' analysis of BTEE's published data, figures reported by Enders

Analysis, or BTEE's reported data.[410] They also submitted that BTEE's recent churn is due to the closure of its Plusnet sub-brand.[411]

8.100 In response to this, we adjusted the churn figures to exclude Plusnet, given it closed in this period, and found that BTEE's churn rates in Q3 and Q4 2024 were [3-4]% and [3-4]%. We consider that this shows that, whilst Plusnet drove the increase in BTEE's churn rate in 2023, BTEE's churn rates were still the second highest of all MNOs even when Plusnet was removed. More generally, we consider that BTEE's churn rates are broadly consistent with its published and reported data.

Table 8.20: Quarterly churn rates in the PAYM subsegment

%

Operator	*Q2 2021*	*Q3 2021*	*Q4 2021*	*Q1 2022*	*Q2 2022*	*Q3 2022*	*Q4 2022*	*Q1 2023*	*Q2 2023*	*Q3 2023*	*Q4 2023*
BTEE	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[4-5]	[4-5]
VMO2 + Tesco Mobile	[2-3]	[2-3]	[2-3]	[3-4]	[2-3]	[3-4]	[3-4]	[3-4]	[3-4]	[2-3]	[3-4]
VMO2	[2-3]	[2-3]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]
Tesco Mobile	[1-2]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[1-2]
VUK	[2-3]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]	[3-4]
3UK	[3-4]	[3-4]	[4-5]	[4-5]	[4-5]	[4-5]	[4-5]	[4-5]	[3-4]	[3-4]	[4-5]
Sky Mobile	[1-2]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]	[2-3]

Source: CMA analysis of Parties' and third parties' churn rates data
Dates refer to calendar years, ie Q2 2021 refers to 1 April 2021 to 30 June 2021.

8.101 We define net adds as the difference between a mobile operator's opening and closing base in a given time period.

8.102 Table 8.21 sets out our estimates of net adds in the PAYM subsegment. Our estimates show that in the period 2020 to 2023:

(a) BTEE had the weakest net adds of MNOs over this period, with significant losses in 2023;

(b) VMO2[412] + Tesco Mobile had positive net adds over this period, with Tesco Mobile in particular having greater net adds than all MNOs;

(c) VUK had positive net adds in 2021 and 2022 but small net losses in 2020 and 2023; and

(d) 3UK had positive net adds over this period, particularly so in 2021, and driven by [✂] in 2022 and 2023; and

[410] Annex 1 to the Parties' response to the AIS and working papers.
[411] Annex 1 to the Parties' response to the AIS and working papers.
[412] Data for VMO2 is only available from 2022 onwards.

(e) Sky Mobile had greater net adds than all MNOs combined, though from a smaller starting base.

8.103 The Parties submitted that the vast majority of growth in 3UK's PAYM data-only subscriber base is attributable to its FWA offering, which they submitted has [✂]. They submitted that when excluding PAYM data-only, 3UK's PAYM net adds (ie PAYM SIMO and PAYM handset) have been negative in 2020 and 2023.[413] Consistent with this, we found that when excluding FWA, 3UK's PAYM net adds in 2022 and 2023 were negative, at [(50,000)-0] and [(100,000)-(50,000)].

Table 8.21: Net adds in the PAYM subsegment

000s

Operator	*2020*	*2021*	*2022*	*2023*
BTEE	[0-50]	[150-200]	[(50)-0]	[(400)-(350)]
VMO2* + Tesco Mobile	*	*	[250-300]	[300-350]
VMO2*	*	*	[50-100]	[50-100]
Tesco Mobile	[100-150]	[150-200]	[150-200]	[200-250]
VUK	[(50)-0]	[100-150]	[100-150]	[(50)-0]
3UK	[50-100]	[250-300]	[0-50]	[0-50]
Sky Mobile	[550-600]	[600-650]	[500-550]	[350-400]

Source: CMA analysis of Parties' and third parties' net adds and subscriber data.
*Notes: * Data for VMO2 is only available from 2022 onwards.*
Dates refer to calendar years, ie 2021 refers to 1 January 2021 to 31 December 2021.

8.104 Table 8.22 sets out our estimates of net adds in the pre-paid subsegment. Our estimates show that relative to the PAYM subsegment, net adds in the pre-paid subsegment tend to be much lower for the mobile operators we have data for. We believe this is partly due to the significant recent growth of Lebara, an MVNO specialising in the pre-paid subsegment, and partly due to the reduction in the size of the pre-paid subsegment by subscribers since 2020.

8.105 Our estimates show that in the pre-paid segment over this period:

(a) BTEE had large negative net adds, particularly from 2020 to 2022;

(b) VMO2[414] + Tesco Mobile had large negative net adds, with VMO2 having negative and worsening net adds every year from 2021 to 2023, and Tesco Mobile having significant negative net adds in 2020, 2021 and 2023, and marginally positive net adds in 2022;

(c) 3UK had large negative net adds in 2020 and 2021, followed by large positive net adds in 2022 and marginally positive net adds in 2023. Its main brand, Three, experienced very large and negative net adds (with the exception of 2022), while its sub-brand, SMARTY, experienced large and positive net adds every year from 2020 to 2023;

[413] Annex 1 to the Parties' response to the AIS and working papers.
[414] Data for VMO2 is only available from 2022 onwards.

(d) VUK has performed more strongly than other MNOs, with two consecutive years of large positive net adds in 2022 and 2023;

(e) Lebara, following small negative net adds in 2020, has maintained strong net adds since 2021, consistently achieving the largest net adds among all providers; and

(f) Lyca Mobile had large negative net adds in 2020, but has had negligible net adds since 2021.

Table 8.22: Net adds in the pre-paid subsegment

Operator				*000s*
	2020	*2021*	*2022*	*2023*
BTEE	[(700)-(650)]	[(350)-(300)]	[(200)-(150)]	[(50)-0]
VMO2* + Tesco Mobile	*	*	[(150)-(100)]	[(550)-(500)]
VMO2*	*	*	[(200)-(150)]	[(400)-(350)]
Tesco Mobile	[(200)-(150)]	[(150)-(100)]	[0-50]	[(200)-(150)]
VUK	[(350)-(300)]	[(150)-(100)]	[100-150]	[300-350]
3UK	[(700)-(650)]	[(400)-(350)]	[350-400]	[0-50]
Three	[(1000)-(950)]	[(600)-(550)]	[200-250]	[(300)-(250)]
SMARTY	[250-300]	[150-200]	[150-200]	[250-300]
Lebara	[(100)-(50)]	[300-400]	[600-700]	[800-900]
Lyca Mobile	[(300)-(200)]	[0-50]	[(50)-0]	[0-50]

Source: CMA analysis of Parties' and third parties' net adds and subscriber data.
*Notes: * Data for VMO2 is only available from 2022 onwards.*
Dates refer to calendar years, ie 2021 refers to 1 January 2021 to 31 December 2021

8.106 The Parties submitted that net adds present a better view of competitive dynamics in the market than gross adds.[415] We consider that gross adds, churn rates, and net adds are all useful measures in understanding competitive dynamics in the PAYM subsegment. Whilst net adds capture how the overall size of mobile operators' customer bases changes over time, gross adds and churn rates are informative in understanding what is driving this. Gross adds indicate how effectively mobile operators compete for new or switching customers, whilst churn rates indicate their effectiveness at retaining their existing customers.

8.107 The Parties submitted that we have only considered gross adds, net adds and churn for two MVNOs, Sky Mobile and Tesco Mobile, and that this omits the recent growth of other MVNOs such as Lebara and iD Mobile.[416] We consider that gross adds and churn rates are relevant metrics in the PAYM subsegment, as set out in paragraph 8.86, and we have included the largest independent MVNO in this subsegment (Sky Mobile). In the PAYM subsegment, the Parties were unable to provide a breakdown for iD Mobile, whilst all other MVNOs have a very small

[415] Annex 1 to the Parties' response to the AIS and working papers.
[416] Annex 1 to the Parties' response to the AIS and working papers.

presence. We have considered the net adds of Lebara and Lyca Mobile which are the largest MVNOs in the pre-paid subsegment.

8.108 Overall, our view based on gross adds, churn rates, and net adds is that:

(a) 3UK is performing more strongly than its market shares by subscribers suggest in the PAYM subsegment as, despite its high churn rates, it also has high gross adds and stronger net adds than BTEE and VUK (although positive net adds are driven by growth in FWA). 3UK performs more weakly in the pre-paid subsegment, due to the poor performance of its main brand, Three, and the growing presence of Lebara; though, its sub-brand, SMARTY, has seen significant growth in pre-paid market share since 2020;

(b) BTEE appears to be performing more weakly than its market shares by subscribers indicate, with high churn rates and large negative net adds;

(c) VUK performs similarly compared to market shares by subscribers in the PAYM subsegment. It has lower market share by gross adds than by subscribers, but also has stable and low churn rates. Unlike other MNOs, VUK performs strongly in the pre-paid subsegment;

(d) Similarly to VUK, VMO2 + Tesco Mobile performs similarly compared to market shares by subscribers in the PAYM subsegment. It has lower market share by gross adds than by subscribers, but also has the lowest churn rates of MNOs (though greater than those of Sky Mobile). As with most other MNOs, it has large and negative net adds in the pre-paid subsegment;

(e) Sky Mobile performs strongly in the PAYM subsegment, with low churn rates and strong net adds.

Conclusion on customer bases

8.109 Overall, our view is that the retail mobile market is highly concentrated.

8.110 From 2020 to 2023, 3UK has been marginally gaining market share by revenue and by subscribers, though it is still the smallest MNO. While it has seen rapid growth in the business segment (predominately from gains with SoHo customers) its overall presence in business is relatively small. Based on market shares by gross adds in the PAYM subsegment, 3UK appears to perform more strongly than its market shares by subscribers suggest, though it has the highest churn rates of all MNOs. Based on net adds, 3UK performs less strongly in the pre-paid subsegment than the PAYM subsegment, with substantial subscriber losses for its Three brand but also with significant gains for its sub-brand, SMARTY. In the PAYM SIMO segment, 3UK does not have a uniform presence across all data allowance categories but has a material presence in many, notably the unlimited space.

8.111 From 2020 to 2023, VUK has also been gaining market share by revenue and has been marginally losing share by subscribers, and it is the second smallest MNO. It has a large market share in the business retail segment. Based on market shares by gross adds in the PAYM subsegment, VUK appears to perform more weakly than its market shares by subscribers suggests, though it has had low and stable churn rates. Unlike other MNOs, VUK performs strongly in the pre-paid subsegment based on net adds. In the PAYM SIMO segment, VUK has a strong presence in large data allowance categories and is the biggest supplier of consumers in the unlimited space.

8.112 In the overall retail market, BTEE's and VMO2 + Tesco Mobile's market shares continue to fall, though they remain the largest two mobile operators. Based on its market shares by gross adds, its high churn rates, and its net adds, BTEE appears to perform more weakly than its market shares by subscribers suggests. In the PAYM subsegment, VMO2 + Tesco Mobile has lower market share by gross adds than market share by subscribers, but also has the lowest churn rates of all MNOs (though higher than Sky Mobile's). In the PAYM SIMO segment, BTEE and VMO2 + Tesco Mobile have a strong presence across all data categories.

8.113 The combined market share of independent MVNOs is growing, most notably due to Sky Mobile and Lebara, which also have large and positive net adds in the PAYM subsegment and pre-paid subsegment respectively. Sky Mobile also has a higher market share by gross adds than by subscribers and has lower churn rates than all MNOs. But even when combined, independent MVNOs still supply a small proportion of retail mobile subscribers ([10-20]%), no independent MVNO has a market share greater than 5% by revenue or subscribers in the overall retail mobile market, and most independent MVNOs do not operate in all consumer retail subsegments. In the PAYM SIMO segment, Sky Mobile accounts for between 10-20% of consumers with small data allowances (ie, those under 12GB) compared to below 5% in data categories exceeding 25GB, while iD Mobile's shares are below 5% across all categories.

The Parties' competitive position

8.114 The Parties submitted that:

(a) Each Party's lack of scale is impeding its ability to compete effectively in the relevant markets, including in the retail market for mobile telecommunications services, and – as demonstrated in financial performance – both Parties face scale disadvantages as compared to BTEE and VMO2:[417]

(i) 3UK's lack of scale to sufficiently invest in nationwide network improvements has contributed to high congestion levels and a

[417] Annex 1 to the Parties' response to the AIS and working papers.

reputation for poor network quality, limiting its ability to win and retain customers.[418] This is demonstrated by its market share having 'stagnated' over recent years.[419] CK Hutchison submitted that while 3UK has recently invested in improving its network quality, it [✂][420] and – as a result of 3UK's [✂] unable to commit the necessary funding to roll out further 5G technology and limit congestion, to the detriment of its competitive capabilities in the consumer retail market and in its more recently established revenue streams.[421]

(ii) VUK's ability to compete is [✂] as a result of its lack of scale and [✂].[422] This is related to (i) [✂] and (ii) [✂].[423]

(b) Smaller MNOs do not have stronger incentives to compete aggressively, and the CMA's phase 1 analysis in this respect disregards (i) the targeting of different customer segments by market operators; and (ii) that the amount of capacity deployed is a key determinant of the intensity of competition.[424] The CMA's assessment also ignores that the Parties' lack of scale constrains their ability to compete in a meaningful way (due to their inability to fund sustainable [✂]), as well as evidence of the competitive constraint currently placed on the Parties by the activities of BTEE and VMO2.[425]

8.115 We have examined the Parties' current competitive position, including the relevance of scale economies in the UK telecommunications industry, and the factors highlighted by the Parties (above). In this assessment, we have considered:

(a) third party perspectives on the relevance of scale in the UK mobile telecommunications industry and of the Parties' positions;

(b) evidence from the Parties' internal documents of each Party's assessment of its scale and ability to make investments, including evidence of each Party's assessment of its recent financial performance;

(c) evidence of the Parties' competitive strategies;

[418] Parties' initial submission, 1 May 2024, paragraph 3.1 (i) (a).
[419] Parties' initial submission, 1 May 2024, paragraph 3.1 (i) (a).
[420] CK Hutchison submits that 3UK's recent network investment was funded by the proceeds of a recently completed transaction with Cellnex. See Parties' initial submission, 1 May 2024, paragraph 2.15(ii).
[421] Parties' initial submission, 1 May 2024, paragraphs 2.15 – 2.21; 3.5(i) – 3.5(iv) and Annex 1 to the Parties' response to the AIS and working papers.
[422] Parties' initial submission, 1 May 2024, paragraph 3.1 (i) (b).
[423] Parties' initial submission, 1 May 2024, paragraphs 2.33 – 2.38. Vodafone submitted that many of these concerns were outlined in a paper it submitted to Ofcom in the context of separate Ofcom work in the mobile market titled 'The Importance of Scale in the 5G era'. This paper outlines, in Vodafone's view, the particular scale and investment requirements involved in rolling out 5G SA. We note third party perspectives that support some of this view, together with evidence setting out some of VUK's plans with respect to 5G SA, in this chapter.
[424] Parties' initial submission, 1 May 2024, paragraphs 3.1(iv), 3.29(i)
[425] Parties' initial submission, 1 May 2024, paragraphs 3.1(iv), 3.29(ii)

(d) evidence of the Parties' performance against key parameters of competition, including price and network quality; and

(e) the impact of the size of an operator's customer base on its competitive incentives.

Third party views on the relevance of scale in the UK telecommunications industry and of the Parties' positions

8.116 Consistent with our conclusions outlined at paragraph 8.188, several stakeholders and market participants have told us that the UK mobile telecommunications industry is characterised by high fixed costs and significant ongoing investment requirements.[426] A number of mobile operators and stakeholders told us that having sufficient 'scale' (ie sufficient subscribers providing sufficient revenue to (i) cover a high fixed cost base, and (ii) maintain and improve network infrastructure) is important to an MNO's ability to operate effectively.[427]

8.117 In its published reports, Ofcom has recognised that scale economies are currently a feature of mobile markets, but that it is unclear how important these will be in future (with the potential for MNOs' cost profiles to become more variable in nature).[428] However, Ofcom has also noted that an MNO consistently earning returns below its cost of capital over a sustained period, despite continuing to compete (and invest), may have reduced forward-looking investment incentives.[429] Ofcom noted that this could happen if one or more smaller MNOs become weaker competitors, unable to invest as fully as a larger, stronger player.[430] Ofcom found that this may lead to the MNO scaling back investment to reduce its costs which could both (i) impact its quality of service and ability to retain or gain market share, and (ii) weaken the incentives of rival operators to invest in network improvements, ultimately leading to poorer outcomes for customers.[431] However, Ofcom told us that its own empirical analysis has not found evidence of a positive link between market concentration and investment or average download speeds.[432] We note this analysis draws on international comparisons, and as discussed below, we have taken a cautious approach to placing weight on any cross-country comparisons of mobile markets in our assessment of the Merger.

[426] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].
[427] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].
[428] Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraph 4.20, accessed by the CMA on 13 June 2024.
[429] Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraph 4.33, accessed by the CMA on 13 June 2024.
[430] Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraph 4.47, accessed by the CMA on 13 June 2024
[431] Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraph 4.47, accessed by the CMA on 13 June 2024
[432] Ofcom's Market structure, investment and quality in the mobile industry paper, 8 January 2021, accessed by the CMA on 13 June 2024; and Ofcom, response to the CMA's 19 April 2024 letter.

8.118 While Ofcom's published analysis has never described VUK or 3UK specifically as 'sub-scale', Ofcom has noted in one paper that the companies may be earning returns (as measured by **ROCE**[433]) below a representative 'industry' cost of capital (**WACC**).[434]

8.119 Following the publication of our Provisional Findings, Ofcom confirmed its view to us that scale is an important aspect of an MNO's competitiveness, including as demonstrated by the relative profitability (measured by ROCE) of different MNOs.[435] Ofcom submitted that this is a consequence of, for a high fixed cost business model, profitability being strongly linked to revenues which are in turn underpinned by customer volumes (and revenues per customer).[436] With respect to the Parties, Ofcom submitted that 3UK has shown itself to be innovative in finding ways to generate additional revenues, seeing growth ahead of its competitors which is leading to improved reported profitability, and that it has made significant recent investments to improve network quality in an attempt to overcome its scale/ profitability disadvantage.[437] However, overall, Ofcom submitted that it considers 3UK – as a result of factors described – to be subject to greater capital constraints than VUK (and, by extension, other MNOs), and that this would likely impact its longer term investment decisions.[438]

8.120 A number of third parties have also highlighted perceived challenges in the 'profile' of both investment incentives and returns[439] across the industry:

(a) One third party expressed the view that declines in unit pricing (for MNOs' suppliers' technology, which may translate into consumer savings) are driven by innovation, which in turn is funded by continuous network investment by MNOs.[440] This third party asked that our investigation consider the potential for any price rises against the industry's 'already impaired ability to invest', which risked 'suffer[ing] still further erosion', noting that 'consistently poor' returns may ultimately lead to sub-optimal consumer outcomes.[441]

(b) Another third party noted the importance of the CMA considering 'infrastructure competition' (ie competition by MNOs to improve networks and roll out next generation technology) alongside 'retail competition'.[442] This third party considered that 'retail competition alone cannot dramatically drive down the unit price per bit of mobile data [for consumers]', and that there was

[433] ROCE means return on capital employed.
[434] WACC means weighted average cost of capital; for Ofcom's analysis of MNOs' relative ROCE performance, see Ofcom's future approach to mobile markets and spectrum Conclusions paper, 6 December 2022, paragraphs 4.21-4.33, accessed by the CMA on 13 June 2024.
[435] Ofcom, response to the CMA's 1 October 2024 letter.
[436] Ofcom, response to the CMA's 1 October 2024 letter.
[437] Ofcom, response to the CMA's 1 October 2024 letter.
[438] Ofcom, response to the CMA's 1 October 2024 letter.
[439] In this context, 'returns' largely refers to increased income or profitability following network investment.
[440] Communication Chambers response to the Issues Statement, 16 May 2024, page 1.
[441] Communication Chambers response to the Issues Statement, 16 May 2024, page 1.
[442] Professor Stephen Temple response to the Issues Statement, 26 May 2024, page 1.

a question around 'whether the intensity of retail competition is having a detrimental effect on the effectiveness of infrastructure competition' (ie competition to improve network quality). [443]

(c) One third party referred to MNOs in the UK being 'stuck' in a 'status quo' with respect to network investment, as a result of perceived challenges for operators in achieving adequate returns.[444] This third party suggested that a contributing factor may be low average revenues per user (**ARPU**s) in the UK, aided by competition and disruption by 3UK and MVNOs, which has been a feature of the market even as technology has evolved in the provision of 3G, 4G and 5G. [445] This third party suggested that this has meant 'less money coming in' which is able to be filtered into investment in high quality network infrastructure.[446] This third party submitted, however, that we should carefully consider what may drive innovation in the market after the Merger (including in network quality), noting that 3UK has been something of a catalyst for innovation in its brand and in the retail market more broadly.[447]

(d) One third party told us, in relation to network quality, that the Merger would enable a 'more sustainable market structure to secure a return on investment for digital infrastructure and attract increased capital into [mobile] network[s]', that it 'offers the prospect of significant cost efficiencies and economies of scale, which will increase financial stability', and that '[c]onsolidation is broadly seen as a pivotal measure towards helping operators to attain the necessary scale for expanding their future network infrastructure'.[448]

(e) A number of third parties, in response to a CMA questionnaire, told us that 'returns' and perceptions of the potential for 'returns' are thought to be particularly limited with respect to MNOs' investment in new technology (eg 5G, both 5G NSA and 5G SA), contributing to a challenging 'business case' for investment in general.[449]

8.121 Several third parties also indicated that both VUK and 3UK are likely to already generate sufficient revenues, based on a sufficient number of subscribers, to benefit from economies of scale with their current market position.[450] Some third parties recognised the considerations and factors raised by the Parties, but did not agree that market consolidation was the best solution for favourable market

[443] Professor Stephen Temple response to the Issues Statement, 26 May 2024, pages 1–2.
[444] [✂] call note.
[445] [✂] call note.
[446] [✂] call note.
[447] [✂] call note.
[448] Ericsson response to the Issues Statement, 10 June 2024, pages 1-2
[449] Responses to the CMA's questionnaire from: [✂]; [✂]; and [✂].
[450] Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; and [✂].

outcomes. Some third parties submitted that the proposed Merger may, as a result of reduced competition, dampen incentives to invest to improve network quality:

(a) One third party noted that the position of firms within a market naturally fluctuates over time, with firms' level of returns, size, growth prospects, and market share all shifting as the market evolves and competitors respond – and this can be influenced by many other factors including the strategic and business choices that firms make.[451]

(b) Another third party suggested that the mobile industry is a challenging environment in which to achieve adequate ROCE and it can therefore be assessed as low priority for capital allocation.[452] However, this third party submitted that this was likely as a result of current challenges in growing revenue (given the lack of growth in the total 'addressable' market of potential subscribers, and challenges in 'convincing' consumers to pay more for higher quality services), and that the solution can be innovation by MNOs to find new revenue sources, perhaps aided by advances in technology such as 5G. This third party noted that such challenges are faced by players in both three-player and four-player markets in Europe.[453]

(c) A number of third parties noted that certain market features, such as the presence of network sharing arrangements, may act to ease an MNO's investment requirements.[454,455]

(d) Two third parties referenced academic evidence suggesting that a reduction in competition (ie in three-player markets compared to four-player markets) may result in a reduction in network quality investment, given that MNOs compete in respect of both quality and price. In the context of a range of academic evidence, one of these third parties noted that 'adverse impacts on investment' are 'a distinct possibility'[456] and another of these third parties noted that all firms essentially compete by offering 'good product[s]' to customers, and - in the context of mobile telecommunications - this can be thought of as offering high-quality network infrastructure (through investment) at sufficiently attractive prices.[457]

(e) Another third party suggested that the concentration of network infrastructure envisaged by the Merger 'will in itself reduce the ability of the mobile

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[451] [✂] response to the CMA's preliminary Invitation to Comment.
[452] [✂] response to the CMA's preliminary Invitation to Comment; [✂] meeting slides.
[453] [✂] meeting note.
[454] Responses to the CMA's questionnaire from: [✂]; and [✂]. [✂] response to the CMA's preliminary Invitation to Comment.
[455] We note that the Parties submitted, in response to these third party perspectives, that (by making use of network sharing arrangements and using neutral host providers), MNOs have already leveraged all available economies of scale that can be delivered by these arrangements, and must leverage economies of scale from capacity and scope to address exponential growth in data demand. See Annex 1 to the Parties' response to the AIS and working papers.
[456] Which?, response to the CMA's preliminary Invitation to Comment, October 2023, pages 10-11.
[457] [✂] and [✂] meeting transcript.

operators to differentiate their mobile service offerings, removing incentives to invest in new infrastructure […] to the detriment of consumers'.[458]

8.122 Evidence from third party internal documents, discussed at Appendix C suggests that other MNOs view operating scale as an important factor in providing a competitive mobile offering.[459] With respect to the Parties' performance more specifically, we note some evidence from these internal documents that 3UK, in particular, is perceived to face challenges:

(a) Internal documents of BTEE show that it has been assessing the threat from other MNOs to [✂] in 5G deployment ([✂], and [✂]), but that it also considers [✂].[460]

(b) An internal document of VMO2, dated 15 December 2021, states that '[✂]'. The document highlights 3UK's mobile base, its revenue, and its estimated return on capital employed (ROCE), all of which [✂].[461]

8.123 We consider that the mobile telecommunications industry is characterised by the need to make significant infrastructure investments, the presence of high fixed costs, and economies of scale. In assessing the potential impact of the Merger on competition in the retail market, we have considered evidence relating to (i) the Parties' own perspectives of their relative 'scale' and the influence this may have on their competitive capabilities, incentives, and go-to-market strategy as reflected in their internal documents, and (ii) observed outcomes in respect of key parameters of competition. We did this to understand whether either Party's relative scale is impacting, or is likely to impact in future, its ability to provide competitive constraint in the retail market.

Evidence of the Parties' assessment of their scale and ability to make network investments

Evidence from Parties' internal documents

8.124 We have found mixed evidence in the Parties' internal documents with respect to each Party's own assessment of the impact of 'scale considerations' on its competitive capability (i) currently, and (ii) over the medium term (ie in typical five-year budgeting cycles).

8.125 With respect to 3UK, as set out at Appendix C, Importance of scale:

[458] [✂] response to the issues statement, 15 May 2024, pages 1-2.
[459] Appendix C, paragraphs C.16 to C.17.
[460] Appendix C, paragraph C.29.
[461] VMO2 internal document [✂].

(a) We have reviewed some material evidencing both (i) [✂], and (ii) [✂]. We also observe that [✂]. We have found [✂].

(b) We have also reviewed evidence demonstrating that, [✂]. [✂]. We have also seen some evidence that [✂].[462]

(c) We have reviewed 3UK's most recent long term business plan, which both (i) notes [✂] significant [✂] across [✂]; and (ii) anticipates [✂],[463] [✂]. We have also reviewed internal management reporting updates in FY24 which, in general, demonstrate that [✂].[464] This growth performance, together with improving financial performance - as set out in internal documents - is consistent with its recently published results.

8.126 With respect to VUK, as set out at Appendix C, Importance of scale:

(a) We have reviewed materials which suggest that VUK considers itself to [✂] and [✂], and have reviewed a number of documents in which (i) VUK perceives its 'converged' competitors to [✂] or (ii) VUK perceives itself to be positioned as a [✂]. We have also reviewed documents over a significant period which demonstrate that VUK has historically not perceived itself to be [✂],[465] although this has been improving more recently.

(b) A number of documents also discuss VUK showing [✂] revenue growth performance, [✂] against [✂], and to have [✂] over recent years.

(c) Vodafone's most recent 'Long Range Plan' for VUK for FY25 onwards [✂].[466] [✂].

Evidence on the Parties' financial performance

3UK's recent growth and financial performance

8.127 We observe (as also discussed above) that 3UK has seen significant growth in the business retail segment (albeit its overall presence remains relatively small) and it has marginally grown its overall market share by revenue and subscribers over the course of 2020 to 2023. This is consistent with [✂]. Table 8.23 outlines recent full-

[462] We have seen some evidence of 3UK management being requested to review capital expenditure in light of preparations for the Merger, see Appendix C, Importance of scale.
[463] We note that 3UK had a period of high investment from around FY20 to FY22, and has recently reduced its capex to be more in line with 'pre-2020 levels'.
[464] In this chapter we refer to financial years (**FY**) in each of CK Hutchison's, 3UK's, Vodafone's and VUK's financial reporting cycles. For CK Hutchison and 3UK, each FY ends on 31 December, and so – in the context of discussing 3UK's or CK Hutchison's performance – FY23 means the 12 months ended on 31 December 2023. For Vodafone and VUK, each FY ends on 31 March, meaning - in the context of discussing Vodafone's and VUK's financial performance - FY23 refers to the 12 months ended on 31 March 2023.
[465] ROCE is often compared to the WACC.
[466] Vodafone internal document.

year growth (to FY22 and FY23) in respect of 3UK's internally classified categories of revenue.

Table 8.23: Revenue performance across 3UK's internally classified categories of revenue; FY21–FY23

	Unit	*FY21*	*FY22*	*FY23*	*Unit*	*Growth– FY21 - FY22*	*Growth– FY22 - FY23*	*CAGR FY21- FY23*
		Actual	*Actual*	*Actual*				
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Publicly reported definition of revenue	GBPm	**2,444**	**2,520**	**2,588**	%	**3.1**	**2.7**	**2.9**

Source: CMA analysis of [✂].

8.128 As can be seen at Table 8.23, 3UK has seen year-on-year revenue growth over the last three financial years at a compound annual growth rate (**CAGR**) of [✂]% in its internally defined revenue (we note that this was during a period of high inflation, and – as with other MNOs – 3UK's total revenue declined in 'real' terms). We observe 3UK's significant recent growth, in particular, in newly established revenue streams. Over the last two financial years, it has experienced CAGR of [✂]% in its business segment and [✂]% in its FWA segment, and significant growth in these segments' subscriber bases.[467]

8.129 Internal documents suggest that, over the course of FY24, 3UK has generally continued to perform in line with its budget and in its year-on-year growth performance:

(a) An email setting out 'year to date' (**YTD**) results for the quarter ended 31 March 2024 demonstrates that, [✂],[468] [✂].[469]

(b) Several 'chairman meeting' packs demonstrate that 3UK continues to perceive itself as achieving strong financial performance, against both the prior year and [✂], performing particularly well in its more recently established revenue streams:

(i) A 'Chairman pack' setting out YTD performance to 31 March 2024 shows that '[✂]' is '[✂]', and this has been driven particularly by year-on-year growth in 5G Home (part of 3UK's FWA offering) of [✂]%, growth in SMARTY of [✂]%, and growth in the Business segment of

[467] This is consistent with subscriber data submitted by the Parties (which appears to define revenue subtotals with slightly different parameters), which demonstrates that 3UK's Consumer FWA subscriber base grew by [✂]% from 2021 to 2022, and by [✂]% from 2022 to 2023 (see Parties response to the CMA's RFI), and 3UK's business retail subscriber base grew by [✂]% from 2021 to 2022, and by [✂]% from 2022 to 2023 (see Parties' response to the CMA's s109 notice).
[468] This email notes that – [✂].
[469] CK Hutchison internal document.

[✂]%.[470] This document also sets out that 3UK has both (i) [✂] and (ii) performed strongly year-on-year in respect of profit metrics, with EBITDA up [✂]% year-on-year, and EBIT and cashflow metrics – [✂] – noted to have shown significant improvements.[471]

(ii) This is consistent with a number of management reporting documents outlining performance in FY24 so far:

(1) February's performance demonstrated [✂]% year-on-year growth in '[✂]' (gross profit), with improvements in a number of metrics (EBIT, EBITDA, and cashflow), demonstrating [✂] and showing significant improvement on the prior year;[472]

(2) January's performance demonstrated [✂]% year-on-year growth in total gross profit ([✂]), with all of EBIT, EBITDA, and cashflow noted to be [✂] significantly improving year-on-year.[473]

(iii) The evidence set out in internal documents is also largely consistent with 3UK's published financial results to the first half of FY24 (**H1'24**), and subsequently:[474]

(1) To H1'24, CK Hutchison reported that 3UK saw both revenue growth and gross profit ('total margin') growth at 9% year-on-year, with EBITDA noted to have increased by 31% year-on-year. The results also show that 'EBITDA less Capex' (which is a proxy for operating cashflow in CK Hutchison's external quarterly reporting) improved to be negative £(17) million, as compared to negative £(112) million in H1'23. [475]

(2) CK Hutchison commented publicly that this was driven by 'significant growth' in the areas that 3UK has 'expanded into', noting: 54% year-on-year growth in Business, 30% year-on-year growth in SMARTY, and 61% year-on-year growth in 5G Home (part of 3UK's FWA offering). [476]

[470] CMA calculations based on CK Hutchison internal document.
[471] CK Hutchison internal document. EBITDA growth is a CMA calculation based on figures set out on page 6 of this document.
[472] CK Hutchison internal document.
[473] CK Hutchison internal document.
[474] CK Hutchison continued to report strong growth for the 3UK business in its update to the third quarter of FY24, with total revenue up +9%, 'total margin' (gross profit) up +9%, which it noted was supported by strong growth across SMARTY, Business and Home Broadband (FWA). See CK Hutchison Group Telecom Holdings 2024 Q3 Trading Update, accessed by the CMA 22 November 2024, and CK Hutchison, investor relations webcast, 14 November 2024, Webcast – CK Hutchison Group Telecom Holdings – 2024 Q3 Trading Update, 7:00 – 11:00 minutes, accessed by the CMA 14 November 2024.
[475] CK Hutchison Group Telecom Holdings 2024 Interim Results Analyst Presentation, accessed by the CMA 15 August 2024.
[476] CK Hutchison, investor relations webcast, 15 August 2024, Webcast – CK Hutchison Group Telecom Holdings – 2024 2024 Interim Results Analyst Presentation, 12:00 – 18:00 minutes, accessed by the CMA 15 August 2024.

(3) 3UK noted its total revenue performance as showing ‘very strong growth overall [at] 9%’ and noted that it had continued to outperform all other MNOs in respect of total net adds for the sixth consecutive quarter.[477]

8.130 CK Hutchison told us that 3UK’s activities in its higher-growth areas have [✂], and will be [✂].[478]

8.131 We observe that 3UK’s most recent long term plan suggests that it perceives itself to be competitively capable in these areas, and continues to anticipate growth, [✂]:[479]

(a) [✂];

(b) [✂]; and

(c) [✂].

8.132 In response to our Provisional Findings, CK Hutchison re-iterated its view that 3UK’s areas of recent revenue growth have [✂] and face various challenges.

(a) In respect of FWA, CK Hutchison submitted that its total addressable household base [✂], and that [✂].[480] CK Hutchison further submitted that certain internal documents discuss challenges in the current competitive landscape of the broadband market, and that there are [✂].[481]

(b) In respect of the Business (‘SoHo’) segment, CK Hutchison submitted that – although 3UK has made some [✂].[482]

(c) In respect of the SMARTY brand, which is demonstrated in internal documents and in public reporting to show significant growth, CK Hutchison submitted that this has [✂], and growth in this segment would be insufficient to offset declining subscriber numbers in the Three brand.[483]

8.133 We find that these considerations do not alter that 3UK has continued to demonstrate significant growth performance in these areas, including over the course of FY24 to date, and that its internal assessments anticipate this trajectory continuing for some time (see above).

[477] CK Hutchison, investor relations webcast, 15 August 2024, Webcast – CK Hutchison Group Telecom Holdings – 2024 2024 Interim Results Analyst Presentation, 12:00 – 18:00 minutes, accessed by the CMA 15 August 2024.
[478] Parties, Issues Meeting presentation and Annex 1 to the Parties’ response to the AIS and working papers.
[479] Calculated from CK Hutchison internal document.
[480] Parties’ response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 4.29(a)
[481] Parties’ response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 4.36.
[482] Parties’ response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 4.29(b)
[483] Parties’ response to the Provisional Findings 4 October 2024, Annex 1 paragraph 4.29(c)

8.134 We continue to consider that 3UK's expectations for its business over the medium term (ie the coming five years) – together with the evidence set out above, that it has recently, in many cases, been broadly performing in line with many of its own expectations – demonstrates that, in the absence of the Merger, it anticipates continuing to compete and operate in the market for retail mobile telecommunications services in the UK.

VUK's recent financial performance

8.135 Based on the evidence provided to us by Vodafone and consistent with the evidence noted above, we see commentary in Vodafone's most recent group-level reviews of VUK that suggest it perceives [✂].[484]

8.136 Table 8.24 sets out a summary of VUK's financial performance to FY24 on the basis of management accounts submitted to the CMA, and in comparison to its 'budget' expectations for FY24 as highlighted in the same document.[485] This demonstrates that VUK's performance [✂] (as seen in [✂]), and has [✂].

Table 8.24 VUK's performance over the period FY23 to FY24, compared to FY24 budget expectations, from management accounting records submitted to the CMA

	Unit	**FY23**	**FY24**	**FY24**	**Unit**	*Year-on-year growth (FY24 actual vs FY23 actual)*
		[✂]	[✂]	[✂]		
Mobile service revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
o/w Wholesale	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
o/w Consumer	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
o/w Business	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Fixed service revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total service revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Mobile direct costs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Fixed direct costs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total direct costs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct margin*	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Acquisition and retention costs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total other operating expenses	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EBITDA	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Margin		[✂]	[✂]	[✂]		
Depreciation and amortisation	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EBIT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Margin		[✂]	[✂]	[✂]		
Operating free cashflow		[✂]	[✂]	[✂]		[✂]

Source: CMA analysis of Vodafone response to the CMA's s109 notice. [✂] Vodafone internal document. [✂].

8.137 We see evidence that, following its performance to FY24, Vodafone group's expectations for the VUK business have [✂]. [✂].[486] This is known as its long range plan (**LRP**), and Vodafone has told us that [✂].[487] Table 8.25 compares forecast plans set in Spring 2023 (**FY24 LRP**) to forecast plans set in Spring 2024

[484] See Appendix C, Importance of scale.
[485] Vodafone response to the CMA's s109 notice.
[486] Vodafone response to the CMA's s109 notice.
[487] Parties' response to the Issues Letter.

(**FY25 LRP**), showing some key metrics, as highted in Vodafone's group-level budget and LRP for VUK.

Table 8.25 Summary of Vodafone's changes to long-range plan (LRP) forecasts for VUK

[✂]					*[✂]*			
		[✂]	*[✂]*	*[✂]*	*[✂]*	*[✂]*	*[✂]*	*[✂]*
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]
[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂] [✂]	[✂] [✂]

Source: [✂]: see Vodafone internal documents. We note that Vodafone has submitted that [✂], for example Vodafone internal document.

8.138 While Table 8.25 shows [✂] in some cases, it demonstrates that – following [✂] – its future plans (as set by Vodafone) appear [✂]. Its [✂] plans, in particular, have largely [✂]. It is therefore difficult for us to conclude – on this basis and following Vodafone's submissions (outlined at paragraph 8.108(a)(ii)) – that Vodafone is [✂].

8.139 In response to many of the observations outlined above (ie [✂]), Vodafone told us that measures such as [✂].[488] Vodafone submitted that [✂] were a result of [✂].[489] Vodafone asked that we consider [✂].[490] Vodafone re-iterated this perspective in response to our Provisional Findings, submitting that:[491]

(a) Revenue growth was [✂], and that VUK's revenue growth is [✂] the market average;

(b) [✂]; and

488 Annex 1 to the Parties' response to the AIS and working papers.
489 Annex 1 to the Parties' response to the AIS and working papers. The [✂] (see Parties response to the CMA's RFI). Given that (i) many businesses are likely to experience cost savings or positive performance as a result of 'ordinary course' project delivery, and (ii) [✂], it remains the case that VUK [✂], we consider that this is not sufficiently material to change our conclusions.
490 Annex 1 to the Parties' response to the AIS and working papers.
491 Parties' response to the Provisional Findings, 4 October 2024, Annex 1, paragraph 4.42.

(c) [✂]. [✂], we did not adequately recognise that this [✂].

8.140 Considering these submissions (ie that the above metrics are not appropriate for assessing financial performance), we note:

(a) Revenue growth – and service revenue growth in particular – appears to be a core performance metric highlighted across Vodafone's internal and external reporting. For example, for Vodafone's FY24 performance, service revenue performance (and in particular, the percentage growth rate) is noted as the first 'highlight' in the initial pages of its summary presentation.[492] This is consistent with external reporting over previous years.[493] This is also consistent with the metric being assessed and discussed across Vodafone's and VUK's internal documents (discussed at Appendix C). A factor which may contribute to its [✂], as discussed in several of VUK's internal documents.[494]

(b) Various measures of profitability (including 'direct margin', 'contribution margin', EBITDA and EBIT) are tracked in Vodafone's external and internal reporting, to be considered alongside balance sheet measures (such as net debt or those tracking financial leverage) and cashflow measures (such as Op FCF, highlighted in VUK's FY24 performance (above) [✂]). We have not found evidence that these various measures of profitability are unimportant to, or considered not to be appropriate by, Vodafone or VUK and – on the contrary – see that these measures are frequently reported and discussed in external and/or internal reporting.[495]

(c) Vodafone's most recent long range plan summarising performance across its group, indicates that, [✂].[496] This document shows that Vodafone [✂] for VUK's [✂] (as outlined at Table 8.25 above).

8.141 We consider, based on the evidence assessed, that, in the absence of the Merger, VUK, supported by Vodafone, would likely remain an important competitor in the UK mobile telecommunications industry.

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[492] Vodafone FY24 Results Presentation, page 3, accessed by the CMA on 8 November 2024.
[493] See, for example, Vodafone's public reporting for FY23, which highlights Vodafone's strategic focus on 'Customers', 'Simplicity' and 'Growth', and discusses service revenue growth performance at page 4. Vodafone FY23 Results Presentation, accessed by the CMA on 8 November 2024.
[494] [✂].
[495] For internal reporting, see Vodafone response to the CMA's s109 notice, where a range of revenue and profit measures are highlighted, and 'direct margin', 'contribution margin', EBITDA, and Operating Free Cash Flow are highlighted as key figures. The range of profitability, balance sheet and cashflow measures tracked is largely consistent with Vodafone's response to an RFI on its financial performance, see Parties response to the CMA's RFI. For external reporting, see – for example – Vodafone's recent annual reports, where EBITDAaL (and EBITDAaL growth), is discussed often as a key metric among others: Vodafone FY24 annual report, pages 2, 6, 21, 24, accessed by the CMA on 27 November 2024; Vodafone FY23 annual report, pages 3, 6, 18, 20-27, accessed by the CMA on 27 November 2024; Vodafone FY22 annual report pages 3, 6, 13, 26-35, accessed by the CMA on 27 November 2024.
[496] Vodafone response to the CMA's s109 notice.

Evidence of the Parties' competitive strategies

3UK's competitive strategy

8.142 We found evidence in 3UK's internal documents suggesting a commitment to long-term growth, along with [✂] and compete sustainably in the supply of retail mobile services.

8.143 Calendar years 2019 and 2020 are presented in 3UK's documents as 'pivotal' years to set the business up for longer term growth, which we note coincided with 3UK's significant 4G and 5G NSA network investment programme initiated in 2020.[497] As submitted by the Parties, in an effort to address traffic growth and congestion on its network, 3UK significantly increased its total investment during FY20 to FY22 (approximately £2.3 billion in capex, excluding spectrum).[498]

8.144 In its 2020 budget presentation to CK Hutchison, 3UK set out a number of avenues to meet its growth objectives, focusing on growing its base while [✂]. [✂].[499] Further to the introduction of 3UK's new 5 Year Plan in the course of 2020, 3UK presented to CK Hutchison [✂] and [✂].[500] Those [✂] have since consistently been used by 3UK [✂].[501]

8.145 3UK's internal documents indicate that its competitive strategy over the last three years has been focused on seven broad areas, which show that 3UK competes actively in the supply of retail mobile services. We briefly set out below what these areas are, with more detail of our analysis of 3UK's internal documents set out in Appendix C, Competitive strategies:

(a) pricing strategy [✂];

(b) business – where it re-introduced a business offering in 2020, initially focusing on SoHo/micro businesses [✂];

(c) SMARTY – which 3UK positions as a hybrid pre-paid provider [✂];

(d) FWA – 3UK has seen strong growth in FWA in recent years [✂];

(e) network enhancements – 3UK has made significant investment in recent years to improve its network – [✂];

(f) customer experience – [✂]; and

497 CK Hutchison internal document
498 FMN.
499 CK Hutchison internal document.
500 CK Hutchison internal document.
501 CK Hutchison internal documents.

(g) brand reputation – 3UK is committed to improving the perception and reputation of its brand and is making significant progress in this direction.

VUK's competitive strategy

8.146 VUK's internal documents indicate that it strives to compete strongly in the supply of retail mobile services. We briefly set out below some examples of this, with the detail of our analysis of VUK's internal documents set out in Appendix C, Competitive strategies:

(a) challenging the converged players – internal documents show that VUK is seeking to establish itself as [✂];

(b) business – [✂], including through targeting a market leading position;

(c) network ambitions – Vodafone's internal documents also convey [✂], including in terms of 5G deployment.

(d) pricing strategy – a number of Vodafone's internal documents suggest that it has exerted – and continues to exert – strong competitive pressure on other operators in the supply of retail mobile services and [✂].

Parties' performance against key parameters of competition

8.147 As discussed in paragraphs 8.62 to 8.64, we consider that price followed by network quality are the two most important parameters of competition, while brand and customer satisfaction are also important to at least some customers. Below we summarise the evidence on the Parties' competitive positioning with respect to these parameters.

Pricing

8.148 We have considered the Parties' competitive positions in relation to pricing primarily by analysing Pure Pricing tariff data (the **Pure Pricing data**). The Pure Pricing data is available on a monthly basis from January 2019 until present.[502] However, to analyse pricing on recently available tariffs before the Parties formally notified the Merger to the CMA, we primarily focused on data from July to December 2023.[503]

[502] Pure Pricing sources information from mobile operators' publicly facing pricing materials, including website published pricing, price guides, legal terms and conditions, online sales customer journeys and discussions with customer support teams. The Pure Pricing data does not capture any tariffs or deals that might be offered to existing customers through other sales channels.

[503] We understand that, although many tariffs remain available for long periods of time, tariffs can change and be added or removed from the market on a monthly basis. As a result, analysis of different time periods will not show the exact same set of tariffs. However, focusing on tariffs in the last two quarters of 2023 covers all tariffs that were (a) available

8.149 This dataset contains information on all publicly available tariffs offered by 3UK (under the Three and SMARTY brands), VUK (under the Vodafone and VOXI brands), BTEE, VMO2 (under the O2 and Giffgaff brands), Tesco Mobile, Sky Mobile, and iD Mobile. In the rest of this section, we refer to mobile operators' sub-brands by their brand names: (i) O2 and Giffgaff for VMO2, (ii) Three and SMARTY for 3UK, and (iii) Vodafone and VOXI for VUK.

8.150 Mobile tariffs typically have many different attributes including allowances for minutes, texts and data alongside a range of extras (eg additional data or the ability to use certain apps for free), promotions, and discounts.[504] This is particularly true for post-paid tariffs (ie PAYM SIMO and PAYM handset).

8.151 On the other hand, pre-paid (PAYG) tariffs are relatively more straightforward and typically comprise simple time-limited allowance bundles. For example, a customer with a pre-paid SIM may buy a bundle of texts, minutes, and data that runs out one month from the time of purchase. Our analysis of the Pure Pricing data suggests that pre-paid tariffs do not typically have the same range of extras that are available for post-paid tariffs.[505] This therefore makes it easier to compare pre-paid tariffs on a like-for-like basis than post-paid tariffs.

8.152 To understand pricing among pre-paid tariffs, we first compared the effective monthly prices across different capped data allowances (ie excluding unlimited data tariffs) for the period July to December 2023.[506] Effective monthly prices reflect the advertised monthly price of a tariff net of any promotions or discounts averaged over the length of the contract.[507] Pre-paid tariffs accounted for 20.6% of VUK's customer base and 25.8% of 3UK's in 2023. Figure 8.8 shows that:

(a) MNOs' main brands typically offered pre-paid tariffs at the same price points (eg £10, £15, £20, and £30).

during the most recent period before the Parties formally notified the Merger to the CMA (26 January 2024); and (b) were offered by the set of mobile operators currently active in the market. In this regard, we note that by the second half of 2023 both BTEE and VMO2 had stopped offering mobile tariffs under their BT/Plusnet and Virgin Mobile sub-brands, respectively.

504 We note that today the vast majority of tariffs have unlimited minutes and texts meaning they are primarily differentiated according to their data allowance and extras, for example the ability to stream content for free.

505 Typically, if the customer exhausts the allowances, they must buy additional texts and minutes or another bundle to continue using their pre-paid SIM. Mobile operators do provide some extras on their pre-paid tariffs. For example, VOXI provides free social media usage and/or video streaming on some of its tariffs and the O2 brand has a range of international allowances. However, generally there is a far smaller range of extras for pre-paid tariffs.

506 In the data for the period Q3 and Q4 2023 Sky Mobile did not offer a pre-paid tariff so it is not included in the figures.

507 To calculate the 'effective price', we have subtracted the value of any discount or promotion from the advertised monthly tariff price. For pre-paid tariffs, these types of discounts and promotions are less common than PAYM SIMO tariffs. Where they are offered, discounts and promotions are typically for one month given pre-paid tariffs are typically time limited. A small number of pre-paid tariffs do offer promotions if a customer renews their tariff purchase when it runs out. However, it is not possible to fully adjust for these types of promotions given we cannot know whether the typical customer would purchase the bundle on a recurring basis and for how long. Where there is no promotion or discount on a tariff, the effective monthly price is the advertised monthly tariff price. For post-paid PAYM SIMO tariffs, we have averaged any discount on a tariff over the tariff length of the contract and then subtracted this amount from the advertised monthly tariff price. For example, a 12-month PAYM SIMO contract might be advertised with a monthly tariff price of £30 with a promotion for 'half price for the first three months'. In this case, the effective monthly price would be £26.25 because customer would receive a total discount of £45 over the 12-month contract.

(b) At each price point, 3UK's main brand, Three, offered more data than the other MNOs' main brands. Therefore, it tended to offer the lowest price per GB of data;

(c) Across all price points, the Vodafone brand offered tariffs with a higher price per GB than the Three brand, with its prices being more similar to the other main brands: EE and O2; and

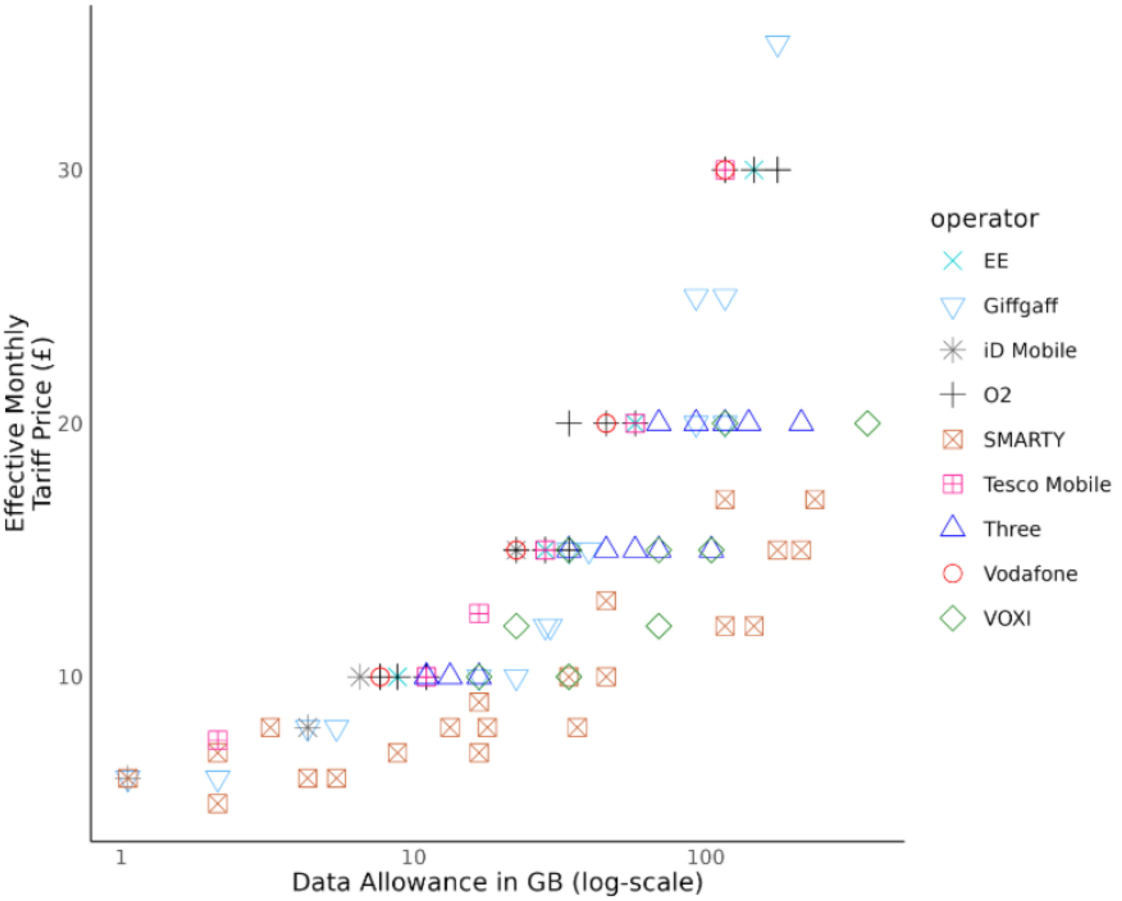
(d) MNOs typically offered tariffs at lower price points and with a lower price per GB through their sub-brands than their main brands.

  (i) 3UK, through its sub-brand SMARTY, offered tariffs with the lowest price per GB across the range of data allowances.

  (ii) Similarly, VUK, through its sub-brand VOXI, offered among the lowest price per GB at the price points served by its pre-paid tariffs.

(e) iD Mobile, the only independent MVNO we have data for in this category, offered pre-paid tariffs in line with the MNO's main brands.

Figure 8.7: Pre-paid tariff prices across capped data allowances, by brand Q3 and Q4 2023



Source: CMA analysis of Pure Pricing data

8.153 Second, we compared mobile operators' unlimited pre-paid tariffs for the same period. Customers on unlimited pre-paid tariffs cannot run out of data within the period the tariff covers (typically one month). For the mobile operators that offer them, Figure 8.9 shows the average effective monthly price of an unlimited data pre-paid tariff across those operators between July and December 2023, showing that:[508]

(a) the cheapest provider was iD Mobile, which was also the only MVNO in the Pure Pricing data to offer unlimited pre-paid tariffs;

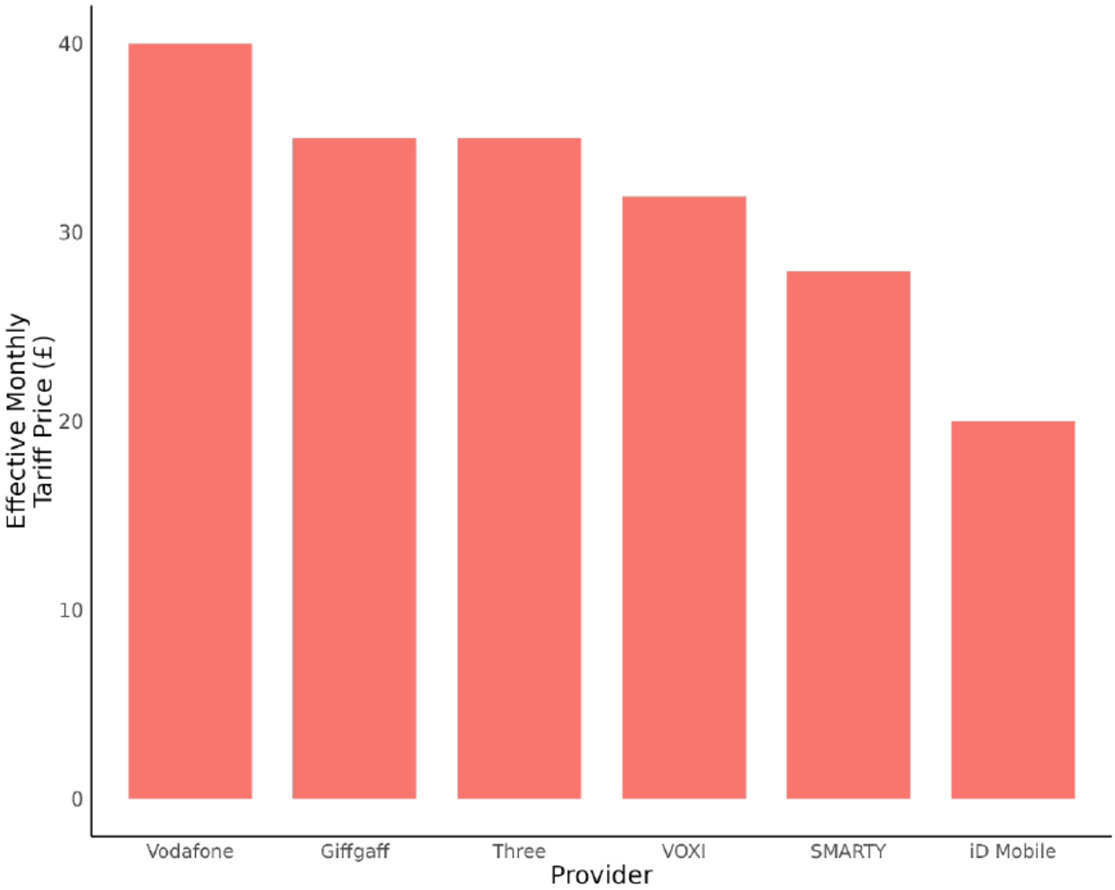
(b) the next cheapest tariffs were offered by the Parties' sub-brands SMARTY and VOXI;

(c) Three's tariffs were similar to Giffgaff's tariffs, whilst Vodafone's tariffs were the most expensive; and

(d) Tesco Mobile, BTEE and VMO2 did not offer unlimited pre-paid plans in this period.

[508] As was the case with capped pre-paid tariffs some operators offer more than unlimited data tariff: SMARTY offered four plans and VOXI offered three with different extras or promotions. Vodafone, Three, Giffgaff and iD Mobile offered one.

Figure 8.8: Unlimited data pre-paid tariff prices, by brand Q3 and Q4 2023



Source: CMA analysis of Pure Pricing data.

8.154 Third, we compared operators' PAYM SIMO tariffs. As noted in paragraphs 8.139 and 8.140, it is significantly more difficult to compare PAYM SIMO tariffs between mobile operators on a like-for-like basis than it is to compare pre-paid tariffs. We segmented our analysis of PAYM SIMO tariffs by contract length and data allowance. Even within these segments, tariff prices will vary because the analysis does not account for other differentiating factors. Nonetheless, we consider that comparing mobile operators' PAYM SIMO prices across data allowances and contract length provides insight into the design of the menu of tariffs they offer and evidence on the prices they charge for them.

8.155 In the Pure Pricing data, PAYM SIMO contracts are 1, 12, 18, or 24 months. Our analysis of mobile operators' PAYM SIMO pricing focuses on the two most popular contract lengths, 12 and 24 months.

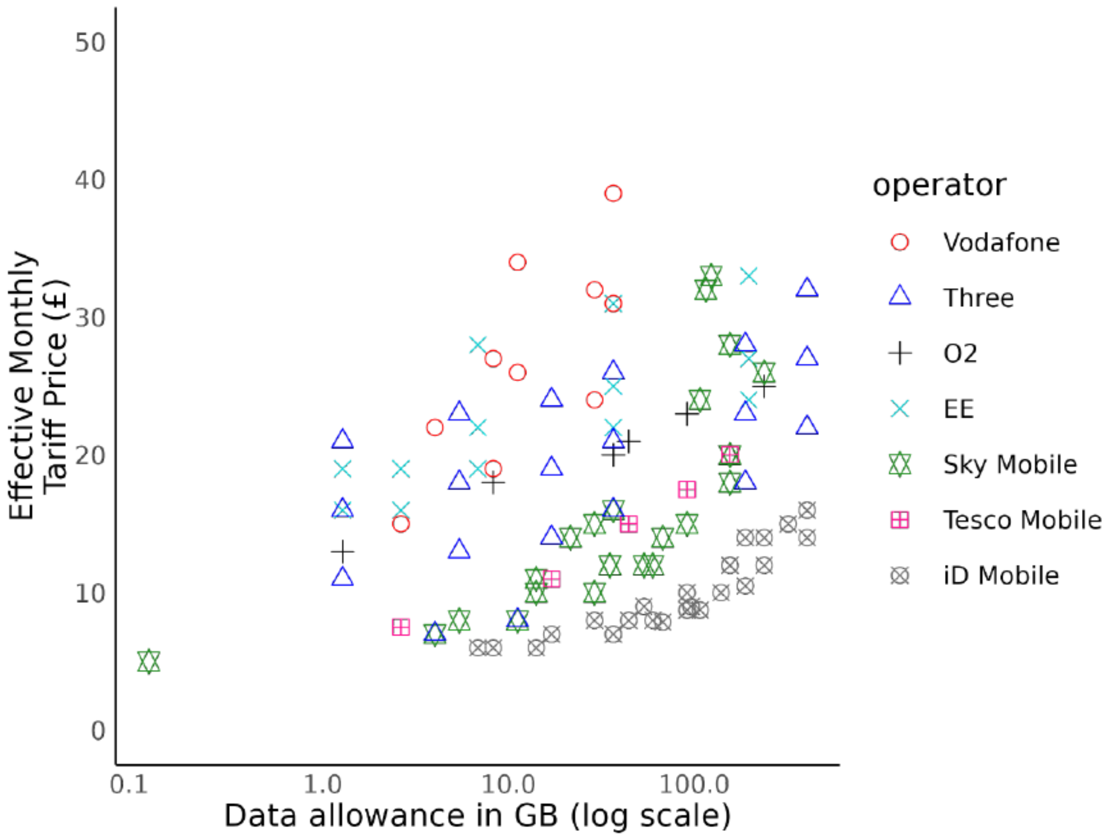
8.156 Figure 8.9 shows mobile operators' effective monthly prices for PAYM SIMO 12-month tariffs with capped data allowances. Overall, the picture is mixed. In broad terms:

(a) the cheapest tariffs across data allowances were offered by Tesco Mobile, Sky Mobile and iD Mobile;

(b) under their main brands, MNOs offered tariffs at more price points than they did for their pre-paid tariffs. Three typically offered the cheapest tariffs, but it also offered tariffs that were broadly similarly priced to O2 tariffs and the cheaper EE and Vodafone tariffs; and

(c) Vodafone offered tariffs across a range of price points. Whilst it offered some of the most expensive tariffs, it also offered some tariffs that were similarly priced to the other MNO brands. We note that some of these more expensive tariffs are likely the result of differences in other aspects of the offer – for example, Vodafone typically offered additional streaming and media content, roaming, and data allowance extras with its more expensive tariffs. Vodafone did not offer any tariffs with more than 25GB of data.

Figure 8.9: 12-month PAYM SIMO tariff prices across capped data allowances, by brand Q3 and Q4 2023



Source: CMA analysis of Pure Pricing data

8.157 For each mobile operator that offered unlimited data PAYM SIMO 12-month tariffs in Q3 and Q4 2023, Figure 8.10 shows the average (mean, indicated by the dots) and range (the grey bars) of their effective monthly prices.[509]

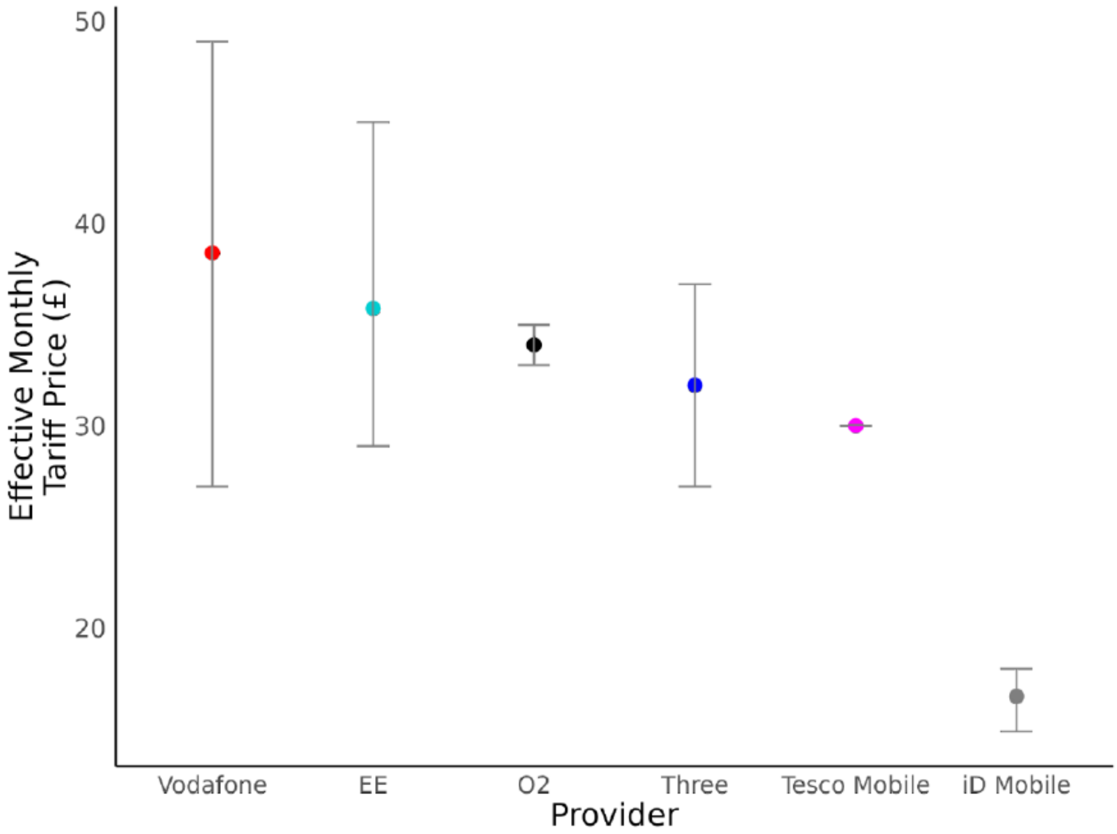
[509] Tesco Mobile and iD Mobile are the only MVNOs/sub-brands in the Pure Pricing dataset to offer PAYM SIMO 12-month tariffs with unlimited data. Operators offer different unlimited data tariffs with various extras and promotions, which

(a) The cheapest tariffs were offered by iD Mobile by a significant margin.

(b) On average, Vodafone had the most expensive tariffs, followed by EE, O2, Three, and then Tesco Mobile. However, Vodafone, EE, and to a lesser extent Three, have a wide range of prices – in particular, despite having the highest price on average, Vodafone offered the cheapest unlimited data tariff among MNOs (alongside Three).[510]

(c) As was the case with capped data tariffs (Figure 8.10), the MNOs' unlimited data tariffs prices overlap, and much of the variation in tariff prices within operators appears to be driven by differences in extras offered.

Figure 8.10: Unlimited data 12-month PAYM SIMO tariff prices, by brand Q3 and Q4 2023



Source: CMA analysis of Pure Pricing data

8.158 Next, we analysed mobile operators' prices for PAYM SIMO 24-month contracts with capped data allowances.[511] Figure 8.11 below plots the effective monthly

is why they have multiple tariffs. Tesco Mobile does not have range bars because it only has one unlimited data. We provide ranges for these PAYM SIMO tariffs because there is a greater range of tariffs/prices, whereas pre-paid tariffs are more homogeneous. The variation in prices for a single provider is due to temporary promotional discounts and variation in contact features eg roaming charges and promotional extras.

[510] We note that the cheapest Vodafone tariff was available only in July 2023.

[511] The CMA also analysed average prices for unlimited data 24-month PAYM SIMO tariffs. The results of that analysis are the same as those from its analysis of 12-month unlimited data PAYM SIMO tariffs (see paragraph 8.146).

price against the (logarithm of) data allowance in GB for these longer contracts, and shows that:

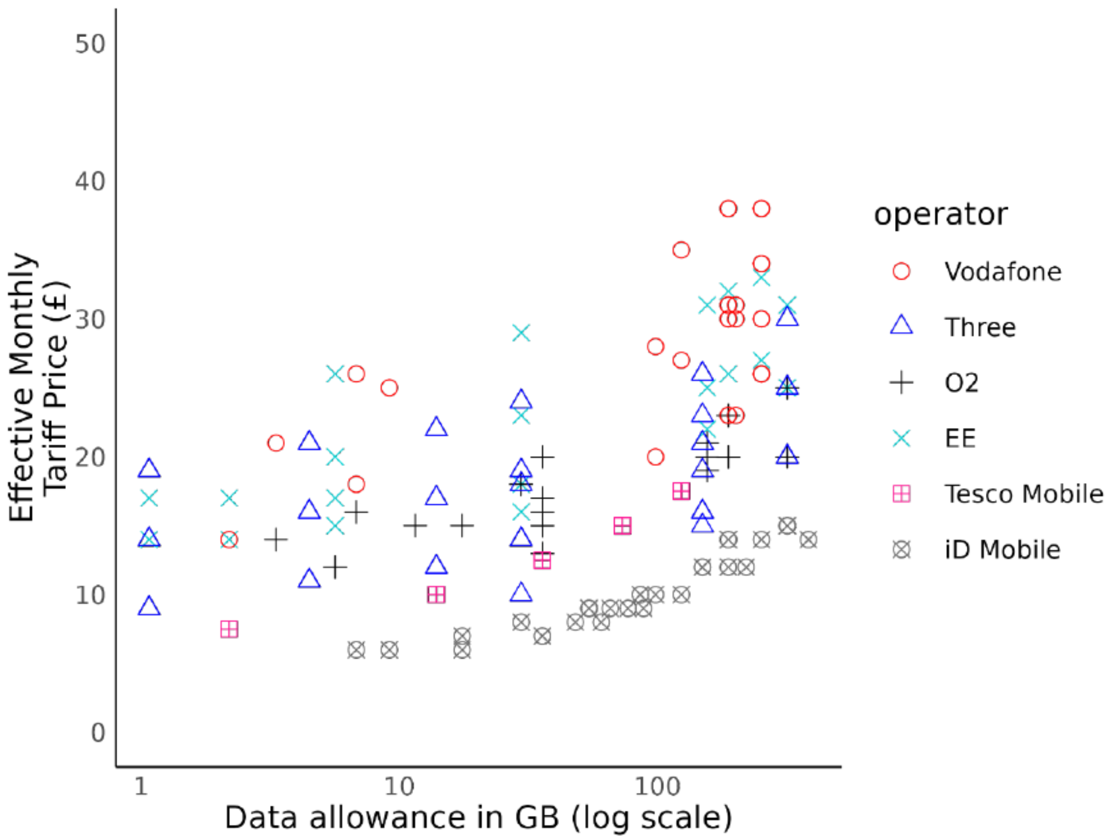
(a) as with 12-month contracts, iD Mobile and Tesco Mobile offered some of the cheapest tariffs per GB across a wide range of data allowances. However, Sky Mobile did not offer any 24-month PAYM SIMO tariffs;

(b) there was overlap in the offerings of mobile operators that offered 12-month and 24-month tariffs (both MNOs' main brands and MVNOs with the exception of iD Mobile). Three again offered the cheapest tariffs across allowances and Vodafone offered the most expensive. Vodafone, Three, O2, and EE all still overlapped to a large extent in terms of their allowances and price points; and

(c) one significant difference is that Vodafone only offered tariffs with higher data allowances on its 24-month contracts. This is in contrast to its 12-month PAYM SIMO offering (in Figure 8.10 above), where it only offered tariffs at or below 25 GB.[512]

[512] There is a similar, although less pronounced, pattern with Three, EE, and O2 – although they did offer 12-month tariffs with higher data allowances, over 24-months these mobile operators also offer more and/or higher-allowance tariffs.

Figure 8.11: 24-month PAYM SIMO tariff prices across capped data allowances, by provider Q3 and Q4 2023



Source: CMA analysis of Pure Pricing data

8.159 The Parties submitted that 3UK's prices have been converging with the other MNOs and provided analysis of Pure Pricing data that shows 3UK's SIMO prices increasing from the second half of 2022, but then slightly decreasing to June 2024.[513] We note that the data presented by the Parties also shows that 3UK was the cheapest MNO over the period of the analysis (2020 to June 2024) and that 3UK's price rises have coincided with the Parties' contemplation of the Merger and then the CMA Merger investigation.

8.160 Overall, we consider that our analysis of the Pure Pricing data from July to December 2023 broadly indicates that:

(a) There was material overlap in how mobile operators priced their tariffs across data allowances and contract lengths, including between VUK and 3UK. There were also significant similarities between the Parties' pricing.[514] In particular, the Parties both operated low-price sub-brands, offered tariffs

[513] Annex 1 to the Parties' response to the AIS and working papers; and [Parties' response to the Provisional Findings](), 4 October 2024, Annex 1 paragraphs 7.1-7.8.

[514] In the response to the Issues Letter, the Parties submitted the similarity in pricing was not unique to VUK and 3UK and for example also applied to VMO2 (Parties' response to the phase 1 Issues Letter). We note the Parties do not need to each other's closest competitors for horizontal unilateral effects to arise as a result of the Merger.

across the range of possible data allowances, and a significant portion of their tariffs overlapped in terms of data allowances and price points.

(b) Although it offers tariffs at a range of prices, among MNOs, 3UK offered the cheapest tariff at any data allowance where it was present. [✂] outlined in Appendix C, Competitive strategies, and is supported by third party views.[515]

(c) Across the pre- and post-paid subsegments, VUK offered a range of tariffs, prices and features. While the Vodafone brand typically offered the most expensive tariffs in the period, this was often in conjunction with additional media, content, and roaming offers. It also offered a range of PAYM SIMO tariffs that were similar in terms of price to EE, O2 and Three's PAYM SIMO tariffs. Its VOXI sub-brand was among the cheapest in the pre-paid segment.

Network quality

8.161 In this section we consider the Parties' competitive positions in relation to network quality.

8.162 As discussed at paragraph 8.62, we note that network quality has different dimensions, including coverage, average speeds, and congestion. Although there is no clear industry consensus on which measures of network quality are most important, there are some external measures that are helpful to compare network quality between MNOs, which the Parties track in their internal documents and appear to rely on – in conjunction with their own internal measures – in their internal strategy documents. These external measures are from:

(a) Umlaut, which publishes benchmarking results annually at a national level and also sells the underlying data on a quarterly basis which provides a more granular/disaggregated view. Umlaut measures network quality and reliability, broken down by voice, data, crowdsourcing and by city. The Umlaut 'overall best network' is determined using the aggregate score of each MNO over the voice, data and crowd tests.[516] Both Parties monitor their quarterly Umlaut results and these measures are referenced in their board level documents.[517]

(b) RootMetrics, which has an overall performance test that captures a combination of reliability and speed results from data, call and text testing. MNOs are also ranked across six categories (reliability, accessibility, speed, data, calls and texts).[518] Both Parties monitor RootMetrics results in their internal documents, although the Parties submitted that VUK does not

[515] Responses to the CMA's questionnaire from: [✂]; [✂]; and [✂].
[516] FMN; and Parties' response to the CMA's data questions.
[517] See for example, CK Hutchison internal document; and Vodafone internal document.
[518] FMN.

purchase data from RootMetrics.[519] Prior to Ookla acquiring RootMetrics in 2021,[520] Ookla published data performance broken down by download speed, upload speed, latency and by technology. Both Parties monitored their Ookla results which are referenced in their board level documents.[521]

(c) Opensignal, which is a third party analytics provider which gathers network speed data across the UK and produces reports comparing MNOs' network performance.[522] It publishes analysis based on this data in a bi-annual UK mobile network experience report. Both Parties monitor Opensignal reports which are referenced in their board level documents.[523]

(d) Measures of availability (measured by complaints) and coverage published by Ofcom, which are broken down by geographic and population coverage (measured by number of sites). Both Parties monitor their Ofcom results.[524]

8.163 The Parties also confirmed that MVNOs cannot directly influence network speed and coverage,[525] but that full MVNOs can offer tiered download speeds to different subscribers.[526] We consider, however, that MVNOs cannot improve customer download speeds beyond that offered by their host MNO. MVNOs told us that they cannot directly compete on network quality, as this is determined by MNOs.[527] Therefore, we do not consider that MVNOs compete on network quality with the MNOs for the purpose of our competitive assessment.

8.164 In this section we consider evidence on the relative position of the Parties' network quality from:

(a) Evidence from internal documents and third parties; and

(b) Third party data on predicted signal strength and download speeds.

Evidence from internal documents and third parties

8.165 The Parties' internal documents show that based on the Umlaut benchmarking results, which the Parties track on a regular basis:[528]

(a) 3UK's network quality was the lowest of all MNOs in Q3 2020. Since then, its network quality has been improving. In contrast, the overall scores for each

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519 Parties' response to the CMA's data questions; CK Hutchison internal document; and Vodafone internal document.
520 Ookla Acquires RootMetrics, 14 December 2021, accessed by the CMA on 28 August 2024.
521 For example, CK Hutchison internal document; and Vodafone internal document.
522 About us | Opensignal, accessed by the CMA on 28 August 2024.
523 For example, CK Hutchison internal document; and Vodafone internal Document.
524 Parties' response to the CMA's data questions.
525 Parties' response to CMA RFI.
526 Annex 1 to the Parties' response to the AIS and working papers.
527 Notes of calls with: [✂]; [✂]; [✂]; and [✂].
528 CK Hutchison internal documents.

of BTEE, VMO2 and VUK have remained largely flat over time, indicating no significant improvements in the quality of their networks.

(b) In 2021, 3UK moved ahead of VMO2 from fourth to third, and has since maintained this position, meaning that 3UK no longer has the lowest network quality among MNOs according to Umlaut benchmarks.

(c) BTEE has consistently had the highest Umlaut score for the period Q1 2019 to Q2 2023, consistently followed by VUK.

8.166 This is consistent with the Rootscore results which also show BTEE as having the best overall network performance, followed by VUK and then 3UK. VMO2 has the lowest score.[529]

8.167 We also considered the relative rankings of each MNO for 'Fastest 5G' published by Ookla. One internal document shows that according to Ookla's measure, 3UK had the fastest 5G network and was nearly twice as fast as second place VUK's download speeds in H1 2023.[530] The same document shows that VMO2 had the slowest speed, with BTEE in third place.

8.168 More recently, in August 2024 a RootMetrics 'UK Mobile Performance and 5G in review' also showed that at a UK level 3UK's network quality has improved. 3UK ranked equal first in one network performance category (UK Text), second in six, and third in one category. At a UK level VUK ranked second in two categories and third in the others. Umlaut also noted that 'Vodafone's RootScores were generally similar to those of Three across the board, reflecting strong competition between the two operators in our UK-wide testing'. BTEE ranked first (or first equal) on all UK-wide categories, and VMO2 ranked last.[531]

8.169 Beyond references to benchmarking results, the improvement in 3UK's network quality is reflected further in its internal documents:

(a) In one internal document from 2023, 3UK mentioned that [✂].[532] Another internal document shows that 3UK is closing the network quality gap between itself and VUK. The same document notes that 3UK has maintained its lead over VMO2 ever since it moved ahead of VMO2 in 2021.[533]

(b) An internal document from October 2023 notes that although '[✂]',[534] the improvements to its network has [✂] the number of customers leaving 3UK

[529] See UK RootScore Report 2nd Half 2023, accessed by the CMA on 6 September 2024.
[530] CK Hutchison internal documents.
[531] RootMetrics' UK Mobile Performance and 5G in review: Which operator came out on top in 1H 2024, dated 5 August 2024 (reviewed 12 August 2024), accessed by the CMA on 6 September 2024.
[532] CK Hutchison internal document.
[533] CK Hutchison internal document.
[534] This is in the context of 'poor network coverage' being the highest ranking in the 'Top Reasons for Rejecting Three' see CK Hutchison internal document.

due to [✂] and [✂] has also [✂] as a reason for customers to stay. 3UK considers this is '[✂]'.[535] However, the document also references that 3UK considers that its '[✂]'.[536]

(c) A brand health KPI report from December 2023 shows that in the period since August 2021, the perception of 3UK's brand image as having a '[✂]' has [✂] although it remains behind that of [✂].[537]

(d) Despite references in a Leavers Report of January 2024 that [✂], diagrams on slide 3 in that report also demonstrate [✂] in the [✂] in '[✂]' and the '[✂]' for leaving 3UK, although '[✂]' has been trending [✂] as a reason for leaving 3UK in [✂].[538] The same document further emphasises that over the long term 3UK has seen '[✂]', with the relevant network reasons for leaving 3UK identified as [✂].[539]

(e) A June 2024 report on the '[✂]' shows that '[✂]' come second of all reasons for joining the brand, behind '[✂]' as is also the case for [✂].[540]

8.170 Evidence from third parties also suggests that 3UK's network quality has improved. Several competitors noted that 3UK has improved network quality in recent years.[541] One third party noted that changing perceptions following a period of investment generally requires a long time horizon and significant investment in advertising,[542] and [✂].[543] A number of 3UK's competitors also stated that its 5G speeds and network capacity were particular strengths.[544] Some third parties also considered that BTEE has strongest overall network quality,[545] and VMO2 has the weakest network quality of the four MNOs.[546]

8.171 Evidence from third parties' internal documents, the detail of which is set out in Appendix C, Network investment strategies, shows that:

(a) BTEE is considered to have the best network in the UK and [✂] in 5G;

(b) VUK is considered to have the second-best network in the UK, and its 5G SA poses some threat to BTEE's [✂] 5G;

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535 CK Hutchison internal document.
536 CK Hutchison internal document.
537 CK Hutchison internal document.
538 CK Hutchison internal document.
539 CK Hutchison internal document.
540 CK Hutchison internal document.
541 Notes of calls with: [✂]; [✂]; and [✂].
542 [✂] call note.
543 Phase 1 decision meeting transcript. On page 39, a Vodafone representative discusses that 'perception lags the delivery on experience' and that network perception is 'less science, more art'. On page 39, a Vodafone representative also discusses an '18-month delay before the actual experience is perceived'.
544 Responses to the CMA questionnaire from: [✂]; [✂]; [✂]; [✂]; and [✂].
545 Responses to the CMA questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂].
546 [✂] call note; and responses to the CMA questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; and [✂].

(c) 3UK is considered to have the third-best network in the UK, due its recent improvements in network quality, and poses a threat to [✂] 5G. However, [✂]; and

(d) VMO2 is considered to have the [✂] network, and [✂] 5G offering, in the UK.

CMA analysis on the quality of each network using third party data

8.172 In order to assess the quality of the Parties' 4G and 5G networks we analysed predicted coverage data from Ofcom and download speeds data from Opensignal in 2023.

Predicted coverage data

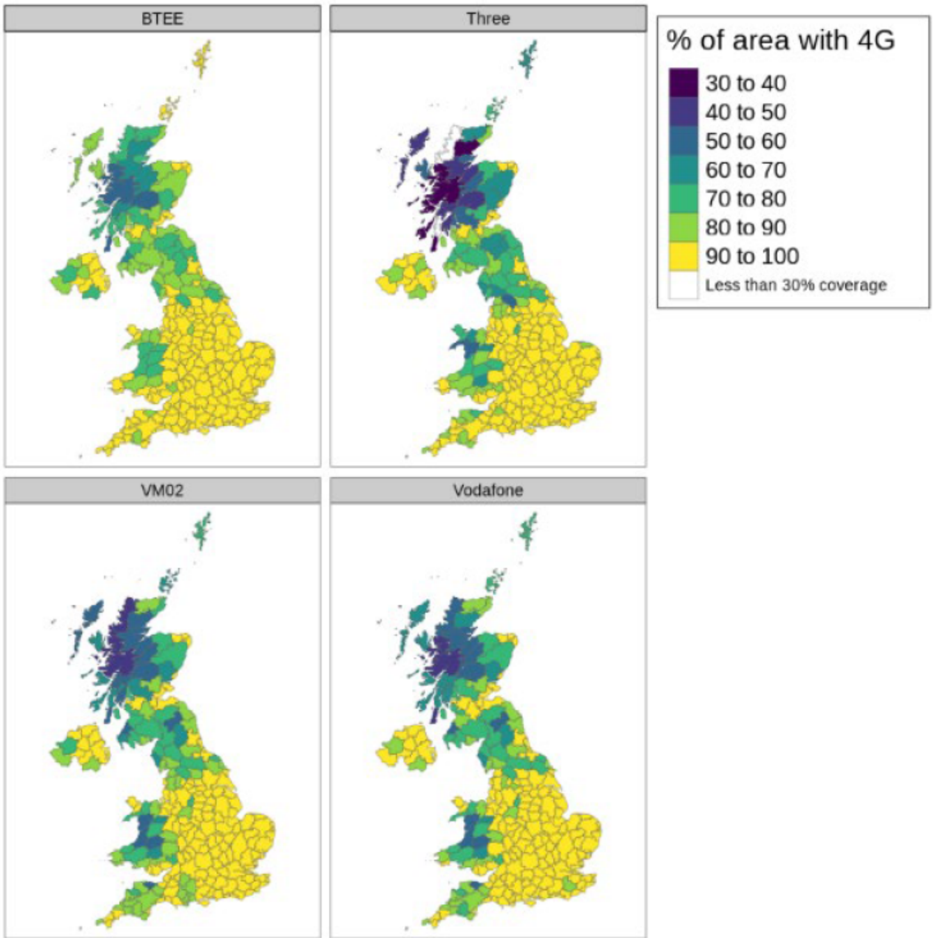
8.173 With regards to coverage we analysed coverage predictions submitted to Ofcom by each network between May 2022 and September 2023 for the purpose of producing Ofcom's Connected Nations Reports.[547] The network coverage prediction data contain a prediction of signal strength for each technology and frequency band within the network that provides a measure of the coverage of that technology in a given area. [548] Ofcom told us that these signal strength predictions 'represent a reasonable basis for estimating signal strength (and coverage) in aggregate' and we note they are used by Ofcom to analyse coverage in their Connected Nations Reports. [549]

8.174 Figure 8.13 and Figure 8.14 below show the 4G and 5G coverage for June 2023 based on the 2011 definitions of Travel to Work Areas (**TTWA**s).[550] These are based on signal strength predictions provided by each MNO to Ofcom. For the purposes of defining coverage, we apply the thresholds used by Ofcom in their connected nations reports.[551]

[547] These network predictions are collected by Ofcom for the purpose of producing its Connected Nations Reports. Ofcom's methodology annex which explains its approach to obtaining and analysing the information from the operators to generate the Connected Nations data can be found here.
[548] Formally signal strength measures the power of a given signal. This can be associated to coverage by using by reference to thresholds as is done in Ofcom's connected nations reports.
[549] Ofcom response to the CMA's 19 April 2024 letter.
[550] TTWAs approximate a self-contained labour market area. These are areas where most people both live and work and therefore relatively few commuters cross a TTWA boundary on their way to work. They are produced by the ONS using statistical analysis of census data.
[551] In particular for 4G we consider there to be coverage if the signal strength is above -105dBm. This is the threshold Ofcom considers as meaning there is a 95% probability a user can make an uninterrupted voice call or get 2mb/s of download speed. For 5G we use a threshold of -100dBm which corresponds to a very high confidence (over 95% probability) of accessing 5G outdoors. To consider the coverage in a TTWA we analyse predictions at the 100x100 pixel level aggregating predicted signal strengths across frequency bands by taking the highest signal strength across frequency bands for a network in a given pixel. Then we count the percentage of pixels in the TTWA with e.g a maximum 4G signal strength above the coverage threshold.

8.175 Figure 8.12 shows the percentage coverage of 4G in different TTWAs in June 2023. This shows that coverage is broadly similar across all four networks, with each network having over 90% coverage in the majority of TTWAs in England.

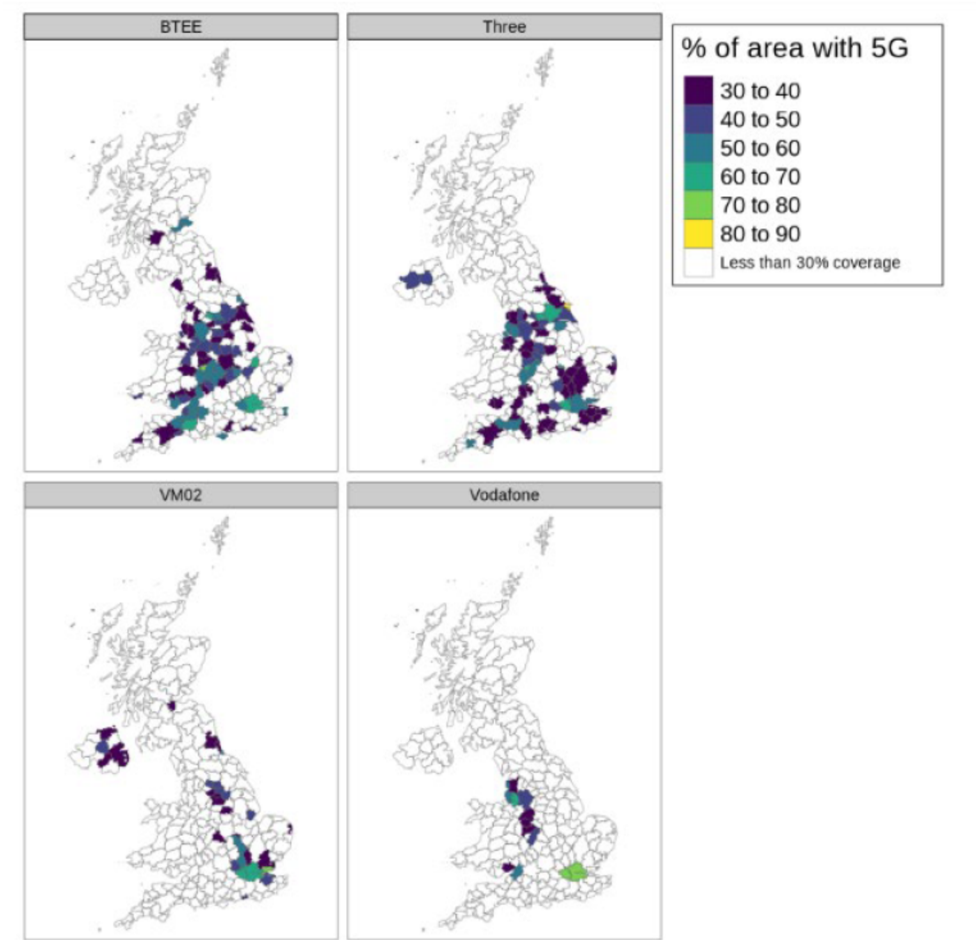
Figure 8.12: 4G coverage in TTWAs in the UK in June 2023



Source: CMA analysis of Ofcom's Connected Nations data

8.176 Figure 8.13 shows the percentage coverage of 5G in different TTWAs in June 2023. In contrast to 4G, there are larger differences in 5G coverage between the networks. 3UK and BTEE have over 30% coverage in more areas across the UK. VUK has more limited 5G coverage across the UK but is strong in London and parts of the west of England. VMO2 also has more limited 5G coverage across the UK than 3UK and BTEE.

Figure 8.13: 5G coverage in TTWAs in the UK in June 2023



Source: CMA analysis of Ofcom's Connected Nations data

8.177 The Parties submitted that the Ofcom Connected Nations signal strength data alone does not capture the actual quality experienced on each network. Therefore, its results cannot be relied upon in isolation.[552] As a result we have also analysed data on 4G and 5G download speeds for each network between January 2023 to June 2023.

Download speed data

8.178 We analysed download speed data from Opensignal, a third party analytics provider which gathers network speed data based on network performance tests using mobile devices across the UK.[553] We analysed 4G and 5G download speeds for each network from January 2023 to June 2023. In our analysis we only considered download speed results in TTWAs with over 25% coverage and over 50 conducted tests. This was to ensure the estimates provide an appropriate

[552] Annex 1 to the Parties' response to the AIS and working papers.
[553] Opensignal collects measurements of network experience quality and speed based on regularly scheduled periodic tests, executed independently and at random intervals to capture what users are experiencing at a typical moment in time. For more information on Opensignal's approach and methodology see [Our Approach | Opensignal](), accessed by the CMA on 29 November 2024.

snapshot of the speeds in the area (and for example were not biased by a single test result).

8.179 Figure 8.14 and Figure 8.15 show the distribution of speed in megabytes per second (**mbps**) across the TTWAs in the UK with over 25% coverage. Each chart is a box plot. The bottom and top of the box represent the 25^{th} and 75^{th} percentiles of the data, respectively. The middle line in the box represents the median average download speed across TTWAs with over 25% coverage.

8.180 For reference a Vodafone news article from 2023 cites the following standards for mobile download speeds:[554]

(a) 2Mbps is fast enough for

(i) Streaming or downloading music;

(ii) sending and receiving text in messages and emails;

(iii) web browsing.

(b) 10Mbps is fast enough for all of the above, as well as:

(i) Video chats;

(ii) sending and receiving photos and videos;

(iii) streaming or downloading video in HD quality;

(iv) playing most single-player online games.

(c) 50Mbps is fast enough for all of the above, as well as

(i) Streaming or downloading video in 4K quality;

(ii) livestreaming video of yourself or your surroundings;

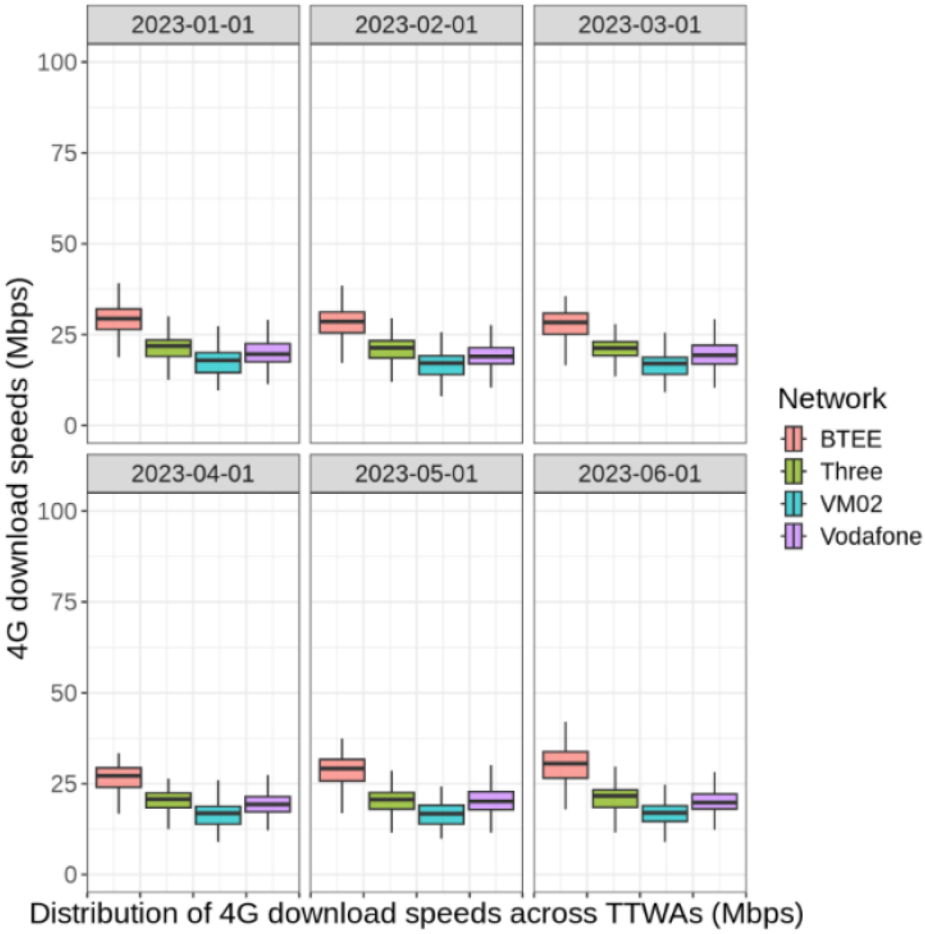
(iii) playing most multiplayer online games;

(iv) playing games using cloud gaming services;

(v) uploading multiple files to cloud storage services.

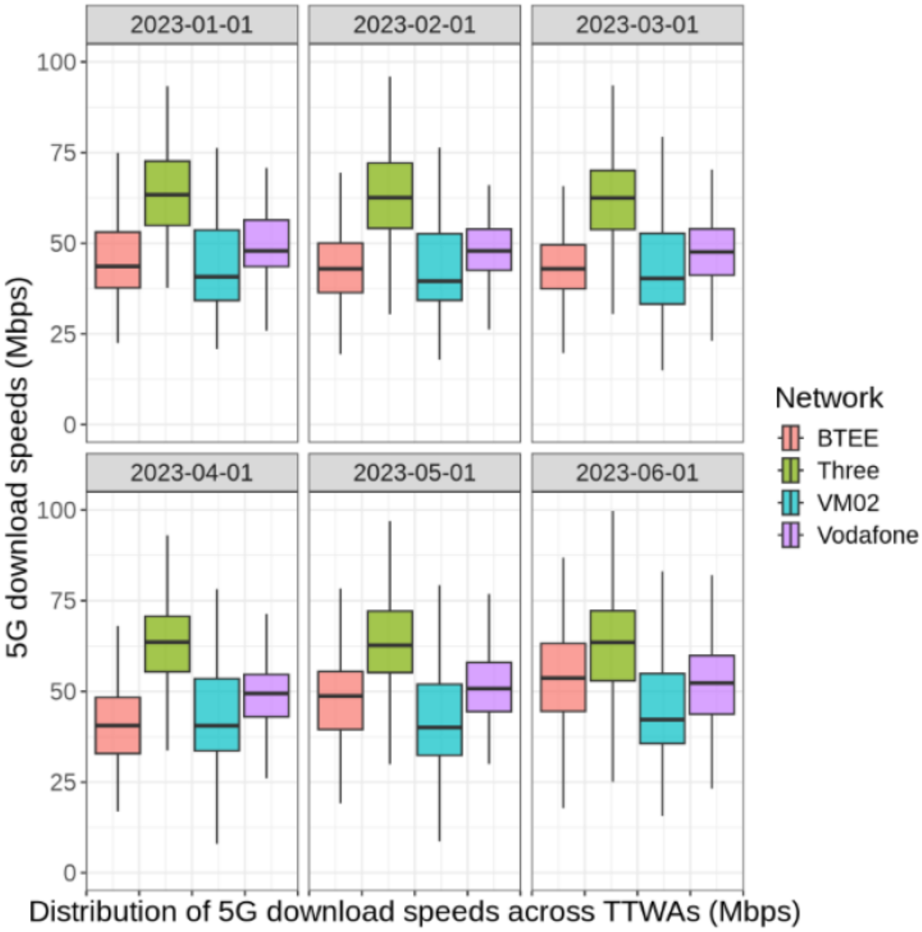
[554] Mobile data speeds explained, accessed by the CMA on 18 August 2024

Figure 8.14: 4G Download speed in 2011 TTWAs in the UK in January-June 2023



Source: CMA analysis of Opensignal Limited © 2024.

Figure 8.15: 5G Download speed in 2011 TTWAs in the UK in January-June 2023



Source: CMA analysis of Opensignal Limited © 2024.

8.181 Figure 8.14 shows the distribution of 4G download speed tests by network across TTWAs from January 2023 to June 2023. This shows that:

(a) In the majority of TTWAs with above 25% 4G coverage all networks provide an average download speed of above 10Mbps fast enough for streaming HD video and playing online games;

(b) BTEE consistently had the fastest average 4G download speed;

(c) 3UK had the second highest average although VUK was close behind in third with broadly similar 4G download speeds; and

(d) VMO2 consistently had the slowest 4G network in terms of download speed.

8.182 Figure 8.15 shows the distribution of 5G download speed tests by network across TTWAs from January 2023 to June 2023. We note that compared to 4G download speeds, 5G is around twice as fast.

(a) 3UK consistently had the fastest 5G download speeds and was improving across the period;

(b) VUK and BTEE made improvements to their average 5G download speed; and

(c) compared to 4G there is greater variability in download speeds.

8.183 We note that although this analysis provides an insight into the quality of each network in 2023 there are some important limitations to the analysis.

(a) Coverage and download speeds are just a few possible measures of network quality (alongside for example, signal interference), and thus, the descriptive analysis of these measures only provides a partial insight into the quality offering of each network.[555]

(b) The Opensignal data is based on tests and as such in areas where there are limited numbers of tests or tests do not happen across the TTWAs, the results may provide an inaccurate representation of the speed consumers may experience in that area.

8.184 Overall, based on all the evidence above on network quality, we consider that:

(a) 3UK has seen improvements in its network quality. Where it has rolled it out, its 5G network outperforms others and in the median TTWA it currently has the fastest 5G speeds. A number of 3UK's competitors consider that its 5G speeds and network capacity are particular strengths. This is also broadly consistent with 3UK's assessment of its own network performance in its internal documents as set out in the Evidence from internal documents and third parties section above.

(b) VUK has historically been in second place behind BTEE on network quality across several measures. More recently, due to improvements in 3UK's network, VUK's network quality appears broadly similar to 3UK's on some measures and slightly behind 3UK's on others (notably 5G).

(c) BTEE, on different measures and according to competitors, is regarded as having the strongest overall network quality.

(d) On a number of measures, and according to competitor views, VMO2 now has the lowest network quality of the UK MNOs.

(e) We do not consider that MVNOs compete on network quality with the MNOs for the purpose of our competitive assessment.

8.185 In response to our Provisional Findings, the Parties referred to a number of other measures of network quality. These include the Opensignal coverage experience

[555] Ofcom response to the CMA's 19 April 2024 letter.

data which they state shows 3UK and VUK significantly behind the coverage experience of VMO2 and BTEE, Ofcom's Connected Nations Spring 2024 report which they state shows VMO2 has the best voice coverage among MNOs and Ofcom's Connected Nations data which they state shows the Parties are in a weaker position than suggested by our analysis.[556] As outlined in paragraph 8.62, we consider that network quality has different dimensions and there is no clear industry consensus on which measures of network quality are most important. Therefore, rather than relying on any single measure of network quality, we have sought to undertake a holistic assessment of network quality based on a wide range of recognised industry measures (including those monitored by the Parties), the Parties' own measures, and views from informed third parties.

Brand

8.186 We have considered the Parties' competitive positions in relation to brand by considering how the Parties assess the strength of their brands in their internal documents.

8.187 3UK provided 'Brand Health KPI Reports' for both the Three and SMARTY brands covering the three years up to December 2023.[557] The December 2023 iteration of this report shows that the spontaneous awareness of the Three brand is [✂] but is [✂].[558] A similar report for the SMARTY brand demonstrates that since December 2021, consideration of the brand has [✂].[559]

8.188 Another 3UK internal document from December 2023 indicates that Three's spontaneous awareness is [✂] than [✂] in the period from September to November 2023. It also shows that spontaneous awareness for the Three brand is [✂] than [✂].[560] The document also notes that '[✂]', and that 3UK has seen '[✂]'.[561]

8.189 Regarding VUK's brands, a presentation from April 2023 regarding net promoter scores (**NPS**)[562] in the consumer retail segment shows that:

(a) [✂]; and

(b) [✂].[563]

[556] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraphs 5.11-5.12.
[557] FMN.
[558] CK Hutchison internal document.
[559] CK Hutchison internal document.
[560] CK Hutchison internal document.
[561] CK Hutchison internal document. The brand image associations referenced on [✂] of the presentation are network coverage, fastest 5G network, good value for money, and appreciation and rewards for loyalty.
[562] We note that NPS measures the loyalty of customers to a company or brand.
[563] Vodafone internal document.

8.190 We consider that this evidence shows that Vodafone and EE have strong brands. The Three brand is relatively weaker, but is generally stronger than MVNO brands, and there is some evidence that it has been improving.

Customer satisfaction

8.191 We assessed the Parties' competitive positions in relation to customer satisfaction by considering data on the number of complaints lodged with Ofcom per 100,000 post-paid mobile subscribers per year, quarter and operator. In the first quarter of 2024: Tesco Mobile received the least complaints (1 complaint per 100,000 subscribers) while BTEE's EE brand, VUK's Vodafone brand and Sky Mobile each received the second least complaints (2 complaints per 100,000 subscribers), while 3UK's Three brand and ID Mobile both received 4 complaints and VMO2's O2 brand received 8 complaints per 100,000 subscribers. The industry average was 4 complaints per 100,000 subscribers. This indicates that, overall, the customer satisfaction of the Parties is better (in VUK's case) and in line (in 3UK's case) with the industry average, and better than VMO2's O2 brand but worse than its joint venture, Tesco Mobile.[564]

The impact of the size of an operator's customer base on its competitive incentives

8.192 In this section we consider how a mobile operator's competitive incentives could be impacted by the size of its customer base. As outlined in the customer bases section above, we note that 3UK, and to a lesser extent, VUK have smaller customer bases than BTEE and VMO2. The Merged Entity would have a significantly larger customer base than the Parties on a standalone basis.

8.193 As a starting point, we note that there are several ways in which an operator's size could impact its competitive incentives. For example:

(a) Mobile operators may try to attract new customers from their competitors by offering cheaper tariffs. In the short-term, the existence of long-term contracts means that the operator can charge lower prices for new customers compared to its existing customers. However, in the medium-term, the mobile operator is likely to have to extend the same terms to its existing customers. Therefore, when deciding whether to reduce prices, a mobile operator faces a trade-off between the short-term benefit of gaining additional customers from rivals and the cost of reducing the profitability of its existing base in the medium-term. This cost is likely to be greater for mobile operators with larger existing bases than those with smaller existing bases. This means that those

[564] Ofcom, Report: Complaints about broadband. Landline, mobile and pay-TV services, January 2024, accessed by the CMA on 29 November 2024.

with larger existing bases may have lower incentives to compete strongly on price than mobile operators with smaller bases.

(b) We consider that, as set out above in the Third party views on the relevance of scale to the UK telecommunications industry section, the mobile industry is characterised by the presence of high fixed costs and significant ongoing investment requirements. As well as investing to respond to technological developments and changing customer demands, MNOs must also invest to maintain their base of network infrastructure. We consider that this may mean that smaller MNOs have particularly strong incentives to find ways to increase revenue to cover this fixed cost base, including by being competitive on prices and/or innovating to increase their customer bases.

8.194 We consider that several of the Parties' submissions and statements acknowledge that the competitive incentives of an operator depend, in part, on the size of its customer base:

(a) 3UK – in the context of discussing its recent expansion into the business retail segment (see Table 8.16) – noted that [✂]. It [✂].[565] 3UK noted that [✂].[566]

(b) VUK told us at the Main Party Hearing that it 'disagree[s] that scale is the only reason for driving price competition' because 'you can want to be more aggressive, but you have to have the ability to be more aggressive'.[567] However, this appears to indicate that scale is one factor in an operator's incentives to price aggressively.

(c) The Parties submitted that 'to the extent that MergeCo will face a trade-off when setting tariff prices between attracting new customers and reducing the profitability of its existing base, this trade-off must be weighed against a range of other factors. Any reduction in competitive incentives as a result of the Transaction would likely be minimal as a result.'[568]

(d) In Vodafone's submissions to the European Commission in relation to the *Hutchison 3G UK/Telefónica UK* merger it noted that it would have been the [✂].[569]

8.195 We have also found some internal documents which suggest that operators consider the impact of 'front-book' prices on their 'back-books'.

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[565] 3UK site visit recording.
[566] 3UK site visit recording.
[567] Vodafone Main Party Hearing transcript.
[568] Annex 1 to the Parties' response to the AIS and working papers.
[569] Vodafone internal document.

(a) One of VUK's recent internal documents discusses [✂].[570] This is consistent with a number of other internal documents which discuss similar themes.[571]

(b) A VUK internal document states that it '[✂]'.[572]

(c) A BTEE internal document dated 20 December 2023 for the '[✂]' states that '[✂]. The document justifies this because '[✂]'. It also states that BTEE '[✂]'.[573]

8.196 Third party evidence is also consistent with a smaller customer base providing operators with incentives to compete harder:

(a) A [✂] dated 9 September 2021, states that 'BTEE and O2 [are] positioning at a premium to defend value & Vod[afone], H3G & Sky [are] discounting to drive scale'. The document further states that Vodafone's strategy is to 'scale [its] mobile base through high-end discounting, indirect and Voxi', and Three's strategy is to 'scale [its] mobile base through aggressive UL pricing & indirect'.[574]

(b) Gamma told us that a converged entity of greater or similar scale to BTEE and VMO2 will potentially have less incentive to disrupt the market, and this could potentially result in higher retail prices over time.[575]

(c) Sky Mobile submitted that 3UK has significantly disrupted the status quo between the three main incumbent MNOs. It told us that 3UK's role as a competitor has evolved over the years since it first entered, softening (to some extent) some of its more aggressive tactics. However, it nevertheless has played and continues to play a critical role in the retail mobile market – offering low prices and good value deals, improving and investing in its network quality, driving growth in some parts of the market.[576]

(d) A BTEE internal document [✂] lists volume performance drivers for mobile operators, and states that [✂].[577]

(e) Third parties also submitted that 3UK is a strong competitor in the supply of retail mobile services. One third party noted that despite being the smallest MNO 3UK has been innovative, disruptive and very competitive,[578] while another noted that 3UK has been a 'disruptor' in the SIMO space for a long

[570] Vodafone internal document.
[571] See, for example, Vodafone internal document. See also Vodafone internal documents.
[572] Vodafone internal document.
[573] BTEE internal document.
[574] [✂] internal document.
[575] Gamma response to the CMA's questionnaire.
[576] Sky Mobile, response to the CMA's preliminary Invitation to Comment.
[577] BTEE internal document.
[578] [✂] meeting slides.

time by offering cheap unlimited deals.[579] One third party noted, while recognising challenges for 3UK in making 'sufficient' returns, that 3UK has been something of a catalyst for innovation in its brand and in the retail market more broadly, and that we should carefully consider 'what' may drive innovation in the market after the Merger.[580]

8.197 The Parties submitted that there are a range of other factors which are more important in impacting the competitive abilities, incentives and strategies of smaller MNOs. These include the operator's scale and financial situation, the capacity available to an operator,[581] and operator's ability to price discriminate.[582]

8.198 We consider that there are a range of factors which impact the competitive incentives of operators, and the evidence suggests that the size of an operator's customer base is one of these. We consider that when an operator is deciding whether to reduce prices for a specific segment it faces a trade-off between the short-term benefit of gaining additional customers from rivals and the cost of reducing the profitability of its existing base in the segment in the medium to longer term. We consider the other factors raised by the Parties, in particular as these relate to forward-looking network investment plans and incentives as compared to what is proposed in the JBP, elsewhere in our assessment.

8.199 We note that 3UK and, to a lesser extent, VUK, currently have smaller customer bases than the other MNOs. We consider that this may, to some extent, mean that each of the Parties, and 3UK in particular, has strong incentives to be competitive on prices and innovate to increase its customer base. We note that the Merged Entity would have a significantly larger customer base, which conversely means that it may have a lower incentive to compete strongly compared to each Party (and, in particular, 3UK) on a standalone basis.

Conclusion on competitive position of the Parties

8.200 Overall, our view is that both Parties act as a strong competitive constraint on other mobile operators in the supply of retail mobile services. In particular, our view – based on the evidence set out above – suggests that:

(a) 3UK is the cheapest MNO. Although its network quality and brand reputation were historically below that of the other MNOs, due to recent improvements in 3UK's network it has improved its network quality and [✂]. Our analysis of quality data shows that it is leading on 5G speeds, is behind BTEE on 4G speeds and is comparable to BTEE on 5G coverage. It has successfully

[579] [✂] call note.
[580] [✂] call note.
[581] Annex 1 to the Parties' response to the AIS and working papers, 8 July 2024.
[582] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 4.4(a).

grown in the business retail segment, FWA and [✂] evidencing its ability and incentive to find new avenues for revenue growth.

(b) VUK's share of supply and recent revenue growth metrics, including as measured in its internal documents, demonstrate that it is providing competitive constraint in the supply of retail mobile services. Its network quality has consistently been high, and VUK has established plans to continue to improve this network performance by rolling out next-generation technology (including 5G NSA and 5G SA).

(c) Informed by our review of the Parties' internal documents and third party submissions, we recognise that economies of scale are an important feature of the UK mobile telecommunications industry and that being able to invest in network quality is important to compete effectively, albeit certain market features (such as network sharing arrangements) act to ease MNOs' total investment requirements. We also recognise significant evidence from both Parties' internal documents that relative scale is a key consideration for both of VUK and 3UK, as well as third parties:

   (i) historically – VUK has perceived itself to be making [✂], and Vodafone has recently [✂], following VUK's achievement of a number of financial performance objectives.

   (ii) 3UK has placed significant reliance on CK Hutchison and the Cellnex transaction to fund recent significant network improvements, and has been [✂]. While this has largely been as part of a strategy to grow its business, its [✂] has lasted longer than initially anticipated. It has delivered significant growth, by industry standards, more recently to begin to improve its position.

8.201 Considering currently observed competitive conditions (ie the 'short run' conditions observed 'today'), and drawing on evidence related to (i) market outcomes (seen in changes to the Parties' and others' customer bases), (ii) the Parties' pricing strategies, and (iii) the Parties' network quality metrics, we consider that the Parties currently provide, and – absent the Merger – would likely continue to provide, a competitive constraint in the retail market.

8.202 In respect of the Parties' longer term ability to exert a competitive constraint, including through network investment, we observe that both Parties' internal documents refer to [✂] (in particular for 3UK in its more recently established revenue streams). Both Parties' medium-term budgets (ie considering the coming five years) anticipate [✂] (with 3UK continuing to expect particularly strong growth, in line with its recent performance). Both Parties' current business plans also anticipate [✂] network investment to improve customer experience.

8.203 We also consider that CK Hutchison and Vodafone are incentivised to prioritise and allocate resources both (i) where 3UK and VUK see scope for revenue growth and (ii) to protect the current value of their shareholdings in each business (with a view to enabling organic growth and improving financial performance or to realising this value through alternative 'inorganic'[583] means).

8.204 While we consider, as outlined above, that the Parties – absent the Merger – would likely continue to compete in broadly the same way they do now, we consider the potential for differences between this and the outcome envisaged under the JBP and Network Commitment at Chapter 14 and Chapter 16.

Closeness of competition and competitive constraints

8.205 We have examined the extent to which VUK and 3UK compete closely for different types of retail customers and the constraint they currently face from rivals. Within this assessment, we have considered the following sources of evidence:

(a) evidence on customer bases and competitive positioning;

(b) customer switching data;

(c) diversion ratios;

(d) the Parties' internal documents;

(e) evidence from the other MNOs and MVNOs;

(f) evidence from business customers; and

(g) third party views on the impact of the Merger.

Customer bases and competitive positioning

8.206 In this section we summarise the evidence above in relation to closeness of competition and competitive constraints.

Customer bases

8.207 As discussed in paragraphs 8.106 to 8.110 above:

(a) VUK and 3UK are the third and fourth largest suppliers of retail mobile services by revenue and subscribers, respectively. The Parties also both have market shares between 10% and 30% by revenue and subscribers in all consumer subsegments. 3UK has been marginally gaining market share by

[583] ie alternative divestment of the VUK or 3UK, mergers, acquisitions, investments or other strategic options.

revenue and subscribers and VUK has been gaining market share by revenue but marginally losing share by subscribers.

(b) While 3UK has seen rapid growth in the business segment (predominately from gains with SoHo customers) its overall presence in business is relatively small. Based on market shares by gross adds in the PAYM subsegment, 3UK appears to perform more strongly than its market shares by subscribers suggest, though it has the highest churn rates of all MNOs. The Parties also compete closely for PAYM SIMO customers in the large and unlimited data allowance tariffs. In the pre-paid subsegment, where MVNOs such as Lebara and Lyca Mobile operate, 3UK (and particularly its main brand, Three) performs less strongly than in the PAYM subsegment.

(c) BTEE's and VMO2 + Tesco Mobile's market shares in the overall retail mobile market continue to fall but they remain the largest two suppliers.

(d) The combined market share of independent MVNOs is growing, most notably due to Sky Mobile and Lebara, which also have large and positive net adds in the PAYM subsegment and pre-paid subsegment respectively. Independent MVNOs generated 5-10]% of retail mobile revenues and supplied 10-20]% of subscribers in 2023, which has grown from 0-5]% of revenue and 5-10]% of subscribers in 2020. However, no independent MVNO has a market share greater than 5% by revenue or subscribers, and most independent MVNOs do not operate in all consumer retail subsegments.

Competitive positioning of the Parties

8.208 As discussed in paragraphs 8.197 to 8.201 above:

(a) 3UK and VUK both operate low-price sub-brands, offer tariffs across the range of possible data allowances, and a significant portion of their tariffs overlap in terms of data allowance and price points. 3UK consistently offers lower-priced tariffs out of the MNOs;

(b) 3UK has successfully grown its propositions in the business retail segment, FWA and in the pre-paid subsegment (through its SMARTY brand). VUK is also seeing growth in similar subsegments; and

(c) 3UK has seen improvements in its network quality and is particularly strong in NSA 5G where it currently has the fastest 5G speeds where it has rolled it out. VUK's network quality has historically been second place behind BTEE. However, more recently due to improvements in 3UK's network, VUK's network quality appears broadly similar to 3UK's on some measures and slightly behind 3UK's on others (notably 5G). It has established plans to continue to improve this network performance by rolling out next-generation technology (including 5G NSA and 5G SA). BTEE has been the market leader on network quality for several years, while VMO2 is the lowest ranked provider.

Customer switching

8.209 We have considered evidence from the following:

(a) Mobile Number Portability (**MNP**) data; and

(b) GfK survey data submitted by the Parties.

MNP data

8.210 The MNP data captures the switching behaviour of customers that leave either Party's network using the number portability service – which is a regulated facility that allows customers to keep their numbers when changing provider. MNP data has the benefit of showing revealed preferences, while the main limitation of the MNP data is that it is an opt-in service and therefore does not capture switching for users who do not choose to retain their number (which is particularly common for pre-paid customers).[584] Further, the MNP data does not provide any evidence as to the reasons behind customers leaving either of the Parties' networks nor the type of tariff the customer switched to.[585]

8.211 We consider that switching ratios calculated at the operator level treat all MVNOs as completely independent and can be considered as an upper bound/are likely to overstate the constraint provided by MVNOs. On the other hand, switching ratios calculated at the network level are likely to overstate closeness of competition by excluding some of the competitive pressure from MVNOs hosted on the Parties' networks. We therefore calculate and present switching ratios at both a network and an operator level.

8.212 The Parties submitted that the MNP data shows that 3UK and VUK are not the 'primary alternatives' to one another.[586] We consider that in differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors or where their products are close substitutes but the merger firms need not be each other's closest competitors for unilateral effects to arise.[587]

[584] The Parties estimate that the MNP data captures between [✂]% of consumer post-paid customers, [0-5]% of consumer pre-paid customers and between [✂]% of business post-paid customers of the overall customer churn from the Parties. FMN.
[585] The data show what segment the customer switched from and the network and operator the customer switched to, but not the segment it switched to.
[586] Annex 1 to the Parties' response to the AIS and working papers.
[587] CMA129, paragraph 4.8.

8.213 Table 8.26 sets out the proportion of 3UK's customers that switched to an MNO at the network level by allocating to each MNO the switches to themselves as well as the switches to the MVNOs hosted on their respective networks in FY 2022 and FY 2023.[588] At an overall retail and consumer retail level [30-40]% and [30-40]% of 3UK's customers switched to VUK, respectively in FY 2023. [✂], [20-30]% of 3UK's business customers switched to VUK in FY 2023. The switching rates from 3UK to VUK were [✂] between the FY 2022 and FY 2023.

Table 8.26: 3UK switching rates at a network level

%

MNO	*Overall retail*		*Consumer*		*Business**	
	FY22	*FY23*	*FY22*	*FY23*	*FY22*	*FY23*
BTEE	[20-30]	[10-20]	[20-30]	[10-20]	[30-40]	[30-40]
VMO2	[40-50]	[40-50]	[40-50]	[40-50]	[30-40]	[30-40]
VUK	[30-40]	[30-40]	[20-30]	[30-40]	[30-40]	[20-30]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' MNP data.
Notes: excluded 'other' and ID mobile as it is hosted on 3UK, from the analysis. 3UK data from 2023 is only provided for the Three brand, not Smarty.
** 3UK provided business data combined as it does not record business subsegments (however it noted that [✂] of its business customers are SoHo, RFI5 Q5)*

8.214 Table 8.27 sets out the proportion of 3UK's customers that switched to other mobile operators (ie switching at an operator level) in FY 2022 and FY 2023. At both an overall retail and consumer retail level, [20-30]% of 3UK's customers switched to VUK in FY 2023. A [✂] proportion, [20-30]% of 3UK's business customers switched to VUK in FY 2023. Across the overall retail, consumer, and business segments there was a [✂] in switching from 3UK to VUK between the FY 2022 and FY 2023.

8.215 Table 8.27 also shows that VMO2 + Tesco Mobile and BTEE accounted for a [✂] portion of consumer ([30-40]% and [10-20]% respectively) and business ([20-30]% and [30-40]% respectively) switches from 3UK in FY 2023. 3UK's customers switching to the three other MNOs accounted for the [✂] of consumer switches ([60-70]% or [70-80]% when including Tesco Mobile) and the vast majority of business customer switches ([70-80]% or [80-90]% when including Tesco Mobile). No independent MVNO accounted for more than [5-10]% of consumer switches or [0-5]% of business switches.[589]

588 Due to 3UK being unable to provide updated data for SMARTY between April 2023 and December 2023, we have presented data for the 2022 and 2023 financial years (being April to March).
589 Excluding 'Other'.

Table 8.27: 3UK switching rates at an operator level

%

Mobile operator	Overall retail		Consumer		Business*	
	FY22	FY23	FY22	FY23	FY22	FY23
Asda Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
BTEE	[20-30]	[10-20]	[20-30]	[10-20]	[20-30]	[30-40]
iD Mobile	[0-5]	[5-10]	[0-5]	[5-10]	[0-5]	[0-5]
Lebara	[0-5]	[5-10]	[0-5]	[5-10]	[0-5]	[0-5]
Lyca Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Other	[5-10]	[0-5]	[5-10]	[0-5]	[10-20]	[5-10]
Sky Mobile	[5-10]	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]
VMO2 + Tesco Mobile	[30-40]	[30-40]	[30-40]	[30-40]	[20-30]	[20-30]
VMO2	*[20-30]*	*[30-40]*	*[20-30]*	*[30-40]*	*[20-30]*	*[20-30]*
Tesco Mobile	*[0-5]*	*[0-5]*	*[0-5]*	*[0-5]*	*[0-5]*	*[0-5]*
VUK	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: CMA analysis of Parties' MNP data.
Notes: 3UK data from 2023 is only provided for the Three brand, not Smarty.
** 3UK provided business data combined as it does not record business subsegments (however it noted that [✂] of its business customers are SoHo, Parties response to the CMA's RFI.*

8.216 Table 8.28 sets out the proportion of VUK's customers that switched to another MNO at the network level by allocating to each MNO the switches to themselves as well as the switches to the MVNOs hosted on their respective networks in FY 2022 and FY 2023. At an overall retail, consumer retail, and SoHo level the proportion of VUK's customers that switched to 3UK in FY 2023 was [20-30]%, [20-30]% and [10-20]% respectively. For overall retail and consumer, switching from the VUK network to the 3UK network was [✂] from FY 2022, [✂] for SoHo it was [✂].

Table 8.28: VUK switching rates at a network level

%

MNO	Overall retail		Consumer		SoHo*	
	FY22	FY23	FY22	FY23	FY22	FY23
BTEE	[20-30]	[10-20]	[20-30]	[10-20]	[40-50]	[30-40]
VMO2	[50-60]	[50-60]	[50-60]	[50-60]	[40-50]	[40-50]
3UK	[20-30]	[20-30]	[20-30]	[20-30]	[10-20]	[10-20]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' MNP data.
Notes: excluded 'other' from the analysis.
** [✂]. Parties response to the CMA's RFI.*

8.217 Table 8.29 sets out the proportion of VUK's customers that switched to another mobile operator (ie switching at an operator level) in FY 2022 and FY 2023. At both an overall retail and consumer retail level, [10-20]% of VUK's customers switched to 3UK in FY 2023. A [✂] ([10-20]%) of VUK's SoHo customers switched to 3UK in FY 2023 compared to FY 2022. Across the overall retail and consumer level there was a [✂] in switching from VUK to 3UK between FY 2022 and FY 2023, while for SoHo there was a [✂].

8.218 Table 8.29 also shows that VMO2 + Tesco Mobile and BTEE accounted for a [✂] portion of consumer ([40-50]% and [10-20]% respectively) and SoHo ([30-40]% and [30-40]% respectively) switches from VUK in FY 2023. Together the switching to the three other MNOs [✂] of consumer switches ([60-70]% or [70-80]% when including Tesco Mobile) and SoHo customer switches ([60-70]% or [70-80]% when including Tesco Mobile) in FY 2023.

8.219 Of the independent MVNOs, Sky Mobile ([10-20]%) accounted for the [✂] share of consumer switches, followed by iD Mobile ([5-10]%). For SoHo switches, Sky Mobile ([5-10]%) accounted for the [✂] share, followed iD Mobile ([0-5]%).

Table 8.29: VUK switching rates at an operator level

%

Mobile operator	*Overall retail*		*Consumer*		*SoHo**	
	FY22	*FY23*	*FY22*	*FY23*	*FY22*	*FY23*
Asda Mobile	NA	NA	NA	NA	NA	NA
BTEE	[20-30]	[10-20]	[20-30]	[10-20]	[30-40]	[30-40]
iD Mobile	[5-10]	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]
Lebara	NA	NA	NA	NA	NA	NA
Lyca Mobile	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Other	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]
Sky Mobile	[10-20]	[10-20]	[10-20]	[10-20]	[5-10]	[5-10]
VMO2 + Tesco Mobile	[30-40]	[40-50]	[30-40]	[40-50]	[30-40]	[30-40]
VMO2	*[20-30]*	*[30-40]*	*[20-30]*	*[30-40]*	*[20-30]*	*[20-30]*
Tesco Mobile	*[5-10]*	*[5-10]*	*[5-10]*	*[5-10]*	*[5-10]*	*[5-10]*
3UK	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CMA analysis of Parties' MNP data.
Notes: No data provided for [✂].
** VUK provided SoHo data only. Parties response to the CMA's RFI.*

8.220 Overall, we consider that the MNP data shows that the Parties provide a constraint on each other across consumer and business (particularly the SoHo segment). The data also shows that BTEE provides a constraint on the Parties, while VMO2 + Tesco Mobile provides a strong constraint on the Parties. While independent MVNOs collectively provide a constraint this is spread across a range of smaller suppliers, most notably Sky Mobile, iD Mobile and Lebara.

GfK data

8.221 The GfK switching data [✂]. This data [✂]. [✂]. We acknowledge that [✂], particularly if recall is inaccurate.

8.222 For the reasons set out in paragraph 8.40 we assign limited evidential weight to the GfK 'Tech 360' survey.

8.223 Table 8.30 sets out the proportion of 3UK's customers that switched to an MNO at the network level by allocating to each MNO the switches to themselves as well as the switches to the MVNOs hosted on their respective networks in FY 2023. It shows [20-30]% of 3UK's customers switched to VUK, at a network level.

8.224 As with the MNP data (discussed at paragraph 8.208) we calculate switching ratios at a network and operator level.

Table 8.30: UK retail switching ratios at a network level, FY2023

MNO	*GfK data (%)*
BTEE	[20-30]
VMO2	[40-50]
VUK	[20-30]
Total	**100**

Source: CMA analysis of the GfK data from Figure 15.15 of the FMN.
Note: The CMA excluded the 'other' figures and iD Mobile given it is hosted by 3UK.

8.225 Table 8.31 sets out the proportion of 3UK's customers that switched to other mobile operators (ie switching at an operator level) in FY2023. It shows that [10-20]% of 3UK's customers switched to VUK, at an operator level. VMO2 + Tesco Mobile ([40-50]%) and BTEE ([20-30]%) accounted for the highest proportion of 3UK consumer switches. Sky Mobile accounted for [5-10]% and no other independent MVNO accounted for more than 5% of consumer switches.

Table 8.31: UK retail switching rations at an operator level, FY2023

Mobile operator	*(%)*
Asda Mobile	[0-5]
BTEE	[20-30]
iD Mobile	[0-5]
Lebara	[5-10]
Lyca Mobile	[0-5]
Other	[0-5]
Sky Mobile	[5-10]
VMO2 + Tesco Mobile	[40-50]
VMO2	[30-40]
Tesco Mobile	[5-10]
VUK	[10-20]
Total	**100**

Source: CMA analysis of the GfK data from Figure 15.15 of the FMN.

8.226 Table 8.32 sets out the proportion of VUK's customers that switched to another MNO at the network level by allocating to each MNO the switches to themselves as well as the switches to the MVNOs hosted on their respective networks in FY2023. It shows [10-20]% of VUK's customers switched to 3UK, at the network level.

Table 8.32: VUK retail switching ratios at a network level, FY2023

MNO	*(%)*
BTEE	[30-40]
3UK	[10-20]
VMO2	[50-60]
Total	**100**

Source: CMA analysis of the GfK data from FMN, Figure 15.14.
Note: The CMA excluded 'other'.

8.227 Table 8.33 sets out the proportion of VUK's customers that switched to another mobile operator (ie switching at an operator level) in FY2023. It shows [10-20]% of VUK's customers switched to 3UK, at an operator level. VMO2 + Tesco Mobile ([40-50]%) and BTEE ([20-30]%) accounted for the highest proportion of 3UK consumer switches. Sky Mobile accounted for [5-10]% and no other independent MVNO accounted for more than 5% of consumer switches.

Table 8.33: VUK retail switching ratios at an operator level, FY2023

Mobile operator	*(%)*
Asda Mobile	[0-5]
BTEE	[20-30]
iD Mobile	[0-5]
Lebara	[0-5]
Lyca Mobile	[0-5]
Other	[0-5]
Sky Mobile	[5-10]
VMO2 + Tesco Mobile	[40-50]
VMO2	[30-40]
Tesco Mobile	[5-10]
3UK	[10-20]
Total	**100**

Source: CMA analysis of the GfK data from Figure 15.14 of the FMN.

8.228 The Parties submitted that GfK data should be favoured over the MNP data as it is more representative of the UK population compared to the MNP data that is 'insufficiently representative of switching in the pre-paid segment'.[590] As set out above we have some concerns with the GfK data but also recognise there are some limitations to the MNP data. However we note that overall the GfK data is broadly consistent with the MNP data. Similar to the MNP data, the GfK data shows that the Parties provide a constraint on each other for consumers, while BTEE and VMO2 + Tesco Mobile provide a strong constraint on the Parties. Sky Mobile accounts for the highest proportion of the Parties' customers switching out of the independent MVNOs but is significantly smaller than the MNOs.

Diversion ratios

8.229 In general, we note that switching rates provided by the MNP and GfK data are not diversion ratios. Such switching rates do not inform us as to why customers switch, only that they do switch, and we consider customers could switch for different reasons including price and non-price factors (such as network quality), as set out in paragraphs 8.62 to 8.64.

8.230 A diversion ratio isolates the effect of a price rise, quality reduction or removal of an option on the sale of a product. Specifically, a diversion ratio represents the proportion of sales that would divert from one product to another in the event of a price increase, quality reduction or removal of an option, for the first product, holding all else constant. Higher diversion ratios are associated with closer competition between two firms.

8.231 We have considered diversion ratios from:

(a) the CMA customer survey; and

(b) the CMA's econometric analysis.

[590] Parties' initial submission, 1 May 2024, paragraph 3.7; Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the CMA's RFI.

CMA customer survey

8.232 As discussed at paragraph 8.19(b), we conducted a survey of new joiners to the Parties (the CMA customer survey). As part of the CMA customer survey, we asked respondents questions aimed to measure price diversion, quality diversion, and forced diversion.

8.233 The Parties' customers were asked what they would do if:

(a) there was a 10% price increase in the tariffs they are currently purchasing;

(b) the network they were using was a bit less reliable; or

(c) their current provider ceased offering its services.

8.234 Table 8.34 shows that in the event of a 10% price increase, 19% of 3UK's customers that would change provider would switch to VUK. In the event 3UK's network became a bit less reliable, 19% of 3UK's customers that would change provider would switch to VUK. In the event that 3UK ceased offering mobile services, 17% of its customers would switch to VUK.

8.235 Table 8.34 also shows that for 3UK customers that would change provider in the event of a price increase or if its network was a bit less reliable, the highest proportion of customers would switch to BTEE, followed by VMO2 + Tesco Mobile. If 3UK ceased offering mobile services the highest proportion of customers would switch to VMO2 + Tesco Mobile, followed by BTEE. Of the 3UK customers that would switch providers, independent MVNOs account for between 15-19% of switching with Lebara and iD Mobile accounting for the majority across the three metrics.

Table 8.34: CMA customer survey – response to diversions questions – 3UK

%

Response		Price diversion*	Quality diversion†	Forced diversion ‡
Chosen the same package with provider		37	33	N/A
Chosen different package with provider		23	N/A	N/A
Chosen a different provider		20	48	97
Of which:				
	Asda Mobile	*1*	*0*	*0*
	BTEE	*26*	*27*	*24*
	iD Mobile	*7*	*4*	*4*
	Lebara	*10*	*7*	*6*
	Lyca Mobile	*0*	*1*	*1*
	Sky Mobile	*1*	*5*	*3*
	VMO2 + Tesco Mobile	*24*	*24*	*27*
	VMO2§	*22*	*22*	*23*
	Tesco Mobile	*2*	*3*	*4*
	VUK	*19*	*19*	*17*
	Other 3UK brand	*0*	*1*	*2*
	Other	*1*	*0*	*1*
	Don't know	*10*	*11*	*13*
	Total¶	***100***	***100***	***100***
Not purchased		2	2	3
Don't know/Unclear answer		18	18	N/A
Total		**100**	**100**	**100**

Source: CMA analysis of CMA customer survey.

Base sizes: n = 793 (price diversion), n = 804 (forced and quality diversion).

Note: For the analyses of the quality and price diversion questions, some respondents stated they would not divert (questions 10, 11 or 12 of the CMA customers survey) but gave a diversion destination in question 13. They have been removed from the diversion calculation on the basis that we do not have sufficient information to interpret their responses. They are included in the final 'Don't Know/Unclear answer' row of the table.

** CMA analysis of question 10 and 11 of the CMA customer survey.*

† CMA analysis of question 12 of the CMA customer survey.

‡ CMA analysis of question 13 of the CMA customer survey.

§ Includes GiffGaff.

¶ The sum of each individual provider percentage may not add to 100% due to rounding.

8.236 Table 8.35 shows that in the event of a 10% price increase, 14% of VUK's customers that would change provider would switch to 3UK. In the event VUK's network became a bit less reliable, 9% of VUK's customers that would change provider would switch to 3UK. In the event that VUK ceased offering mobile services, 9% of its customers would switch to 3UK.

8.237 Table 8.35 also shows that for VUK customers that would change provider in the event of a price increase or if its network was a bit less reliable the highest proportion of customers would switch to BTEE, followed by VMO2 + Tesco Mobile. If VUK ceased offering mobile services customers would equally switch to BTEE and VMO2 + Tesco Mobile. Of VUK's customers that would switch providers, independent MVNOs would account for between 13-18% of switching with iD Mobile having the highest proportion in relation to a price increase.

Table 8.35: CMA customer survey – response to diversions questions – VUK

%

Response		*Price diversion**	*Quality diversion†*	*Forced diversion‡*
Chosen the same package with provider		35	29	N/A
Chosen different package with provider		26	N/A	N/A
Chosen a different provider		20	50	96
Of which:				
	Asda Mobile	*0*	*0*	*0*
	BTEE	*28*	*31*	*27*
	iD Mobile	*9*	*4*	*4*
	Lebara	*4*	*3*	*3*
	Lyca Mobile	*1*	*1*	*2*
	Sky Mobile	*3*	*4*	*4*
	VMO2 + Tesco Mobile	*24*	*30*	*27*
	VMO2§	*22*	*26*	*23*
	Tesco Mobile	*2*	*4*	*4*
	3UK	*14*	*9*	*9*
	Other VUK brand	*7*	*7*	*8*
	Other	*0*	*1*	*1*
	Don't know	*9*	*10*	*14*
	Total¶	***100***	***100***	***100***
Not purchased		1	2	4
Don't know/Unclear answer		18	18	N/A
Total		**100**	**100**	**100**

Source: CMA analysis of CMA customer survey.
Base sizes: n = 708 (price diversion), n = 723 (forced and quality diversion).
Note: For the analyses of the quality and price diversion questions, some respondents stated they would not divert (questions 10, 11 or 12 of the CMA customer survey) but gave a diversion destination in question 13. They have been removed from the diversion calculation on the basis that we do not have sufficient information to interpret their responses. They are included in the final 'Don't Know/Unclear answer' row of the table.
** CMA analysis of question 10 and 11 of the CMA customer survey.*
† CMA analysis of question 12 of the CMA customer survey.
‡ CMA analysis of question 13 of the CMA customer survey.
§ Includes GiffGaff.
¶ The sum of each individual provider percentage may not add to 100% due to rounding.

8.238 Overall, we consider the CMA customer survey results show that BTEE and VMO2 + Tesco Mobile provide a strong constraint on both Parties across price and network quality. The data also shows the Parties provide a constraint on each other. Lebara and iD Mobile provide some constraint on 3UK, while iD Mobile provides some constraint on VUK (particularly in relation to price). Based on this data, other large independent MVNOs, including Sky Mobile, provide a limited constraint on the Parties.

CMA's econometric analysis

8.239 We have undertaken econometric analysis of purchases of SIM-only tariffs in the UK in the first half of 2023 (see Appendix D for details). As part of this, we have calculated operator-level price diversion ratios.[591] Compared to other estimates of

[591] Note that an operator price diversion ratio is different to a brand level price diversion ratio as considers switching following a price rise for all tariffs owned by the operator not just tariffs in a given brand. Additionally, the CMA has computed quality diversion ratios. For details see CMA Appendix D, Diversion Ratios.

diversion the econometric analysis has the advantage that it is not based on hypothetical preferences about what a consumer would do (stated preferences) but instead on the observed choices and switching behaviour of real subscribers in the UK.[592] The econometric model can then be used to help explain observed switching and consumer behaviour. In doing so it allows for flexibility in the way different consumers value different aspects of their phone contracts.

8.240 As set out in Table 8.36, we find the following price diversion ratios between the Parties:

(a) VUK to 3UK of 16%; and

(b) 3UK to VUK of 16%.

8.241 The price diversion ratios from each Party to the other mobile operators are:

(a) From 3UK to:

(i) BTEE: 24%;

(ii) VMO2 + Tesco Mobile: 37%;

(iii) Sky Mobile: 8%; and

(iv) Other: 7%.[593]

(b) From VUK to:

(i) BTEE: 26%;

(ii) VMO2 + Tesco Mobile: 38%;

(iii) Sky Mobile: 8%; and

(iv) Other: 6%.

Table 8.36: CMA's econometrics operator diversion ratios

	Operator	To: BTEE	SKY	VM02	TESCO	VM02+Tesco Mobile	OTHER	3UK	VUK
From:	*3UK*	24%	8%	28%	10%	37%	7%	-	16%
	VUK	26%	8%	29%	9%	38%	6%	16%	-

Source: CMA analysis of Ofcom Provider Database, Ofcom Connected Nations, Pure Pricing Data and Opensignal Data.

8.242 The results from the econometric analysis are broadly similar to the price diversion ratios from the CMA customer survey and show the Parties providing a

[592] In particular we use a flexible model of subscriber demand to estimate price diversion ratios with a sub-sample of a dataset of choices from about 5% of the UK population in January-June 2023. See Appendix D for details.
[593] Other includes all other brands that offered pay monthly sim-only in June 2023 (see Appendix D for details).

competitive constraint on each other. Compared to the CMA's survey results, the econometric results indicate higher price diversion ratios to VMO2 + Tesco Mobile and Sky Mobile from both Parties.

Evidence from the Parties' internal documents

8.243 Many of the Parties' internal documents monitor competition across a range of tariffs ([✂]), parameters ([✂]) and KPIs ([✂]), and in doing so capture all providers typically referenced in industry reports and data (eg Enders Analysis reports, [✂], and Ofcom mobile reports). Although this demonstrates that the Parties track a wide group of competitors, we consider this provides limited evidence of the strength of constraint on each of the Parties. The Parties operate in a highly differentiated market, with a wide range of tariffs, and competitors' strengths, strategies and customer focuses vary from one segment to another, and are discussed in multiple different forums. In this context, it is to be expected that the Parties will monitor trends across the whole industry. However, a competitor which the Parties track in order to assess the constraint on their value offering (eg through sub-brands) is not necessarily a strong constraint on their higher end offering, and vice versa.

8.244 It follows that we place greater weight on documents in which the Parties emphasise certain competitors, react to competitors' behaviour, benchmark their prices against competitors or specifically comment on the strength of constraint from competitors.

8.245 We consider that internal documents in relation to competitive monitoring in the consumer retail segment do not constitute a 'bright line' source of evidence and should therefore be assessed and interpreted in light of other evidence we have gathered in the course of this investigation.

8.246 We have therefore sought to assess whether the evidence from the Parties' internal documents is consistent with other evidence in relation to the closeness of competition between the Parties and the competitive constraints from the other MNOs and MVNOs.

8.247 Our analysis of the Parties' internal documents set out in Appendix C, shows that:

(a) the Parties compete closely with each other and also with the other MNOs, including in terms of their price and brand positioning. This also holds true in relation to the business retail segment. The price positioning of other MNOs plays a critical role in terms of how the Parties [✂]; and

(b) with the exception of Sky Mobile and Tesco Mobile – although the latter cannot be treated as a fully independent competitor from VMO2 - which are emphasised in the Parties' internal documents, the overall competitive performance or strength of other MVNOs (including [✂]) is not monitored or commented on with the same intensity as other MNOs. In response to the Provisional Findings, the Parties submitted that '[✂]'[594] and that the Provisional Findings 'do not to attach enough weight to VUK's internal documents clearly identifying MVNOs such as [✂].[595] We note that the Parties mention a range of competitors in their internal documents, however based on our overall review of the internal documents we consider that not all competitors are monitored to the same degree.

(c) Further, the Parties' internal documents also contain evidence that MVNOs are differentiated and underrepresented in some sub-segments in contrast with most of the MNOs which use their sub-brands, in conjunction with their primary offer, to achieve presence across the board. As an overarching point, the Parties rely on [✂] which we consider overstates the constraint exercised by MVNOs, individually and in aggregate. We also note the Parties' approach of grouping MVNOs tends to treat MVNOs as homogenous whereas in a differentiated product market, each MNVO provides a different level of constraint and grouping them together can be misleading and would likely overstate the competitive pressure that they are exerting. Finally, the Parties' internal documents relating to the business retail segment do not feature MVNOs (as part of the competitive landscape).

Evidence from MNOs and MVNOs

8.248 In this section we have considered evidence from MNOs and MVNOs on:

(a) the closeness of competition between the Parties;

(b) the competitive constraint from MNOs; and

(c) the competitive constraint from MVNOs.

MNOs' and MVNOs' evidence on closeness of competition between the Parties

8.249 All third parties that responded to the competitor questionnaire considered that the Parties are competitors in the consumer retail segment. In particular, we asked competitors to list who they believe VUK and 3UK's competitors in retail mobile services to consumers in the UK are and to indicate on a scale of 1 to 5 (where 1 is very weak and 5 is very strong) how strongly they believe each competitor listed competes with VUK and 3UK:

(a) three out of nine competitors stated that 3UK is a very strong competitor to VUK, four out of nine competitors stated that 3UK is a strong competitor to

594 Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 8.25.
595 Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 8.31.

VUK, and two out of nine competitors stated that 3UK is neither a strong nor weak competitor; and

(b) four out of nine competitors stated that VUK is a very strong competitor to 3UK, four out of nine competitors stated that VUK is a strong competitor to 3UK, and one out of nine competitors stated that VUK is neither a strong nor weak competitor to 3UK.

8.250 3UK and VUK are recognised by third party competitors as:[596]

(a) being particularly close competitors in the unlimited data segment;

(b) having sub-brands, SMARTY and VOXI, which directly compete in the pre-paid subsegment; and

(c) having similar products, along with contract types and customer demographics.

8.251 In the business retail segment, third party competitors consider that VUK and 3UK currently compete closely (where 5 is very closely and 1 is not closely) in the SoHo and small SME subsegments but less closely for larger businesses. In particular:[597]

(a) all (four) competitors considered that VUK and 3UK currently compete very closely/closely in the SoHo segment while three of the competitors also considered that VUK and 3UK currently compete very closely/closely in the small SME segment;

(b) half of competitors considered that VUK and 3UK neither compete closely nor not closely in the medium SME segment, while the other half considered that they do not compete closely; and

(c) all competitors considered that VUK and 3UK currently do not compete closely in the corporate segment. Three of the competitors also considered that they do not compete closely in the public sector with the other saying neither closely nor not closely.

MNOs' and MVNOs' evidence on the competitive constraint from MNOs

8.252 We consider that, as set out in Appendix C, BTEE's internal documents show it currently provides a competitive constraint on the Parties.

[596] Responses to the CMA's questionnaire from [✂]; [✂]; and [✂]. [✂] call note. We note however that [✂] considered VUK's strategy is focused more on enterprise customers while 3UK is focused more on younger users. [✂] call note.
[597] CMA analysis of responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; and [✂].

(a) BTEE considers itself to have the best network in the UK and [✂] on 5G, which allows it to maintain a price premium to competitors;

(b) BTEE considers that it leads on price increase initiatives and expects other MNOs (including the Parties) to follow its lead;

(c) BTEE considers that [✂]; and

(d) BTEE considers [✂].

8.253 We consider that, as set out in Appendix C, VMO2's internal documents show it currently provides a competitive constraint on the Parties.

(a) VMO2 operates a [✂] strategy, [✂] to compete [✂] most internal documents state has premium brand positioning and competes at mid-high price points;

(b) VMO2 actively monitors the pricing initiatives of its competitors, and often implements its own price initiatives and price adjustments based on this;

(c) VMO2 considers its network performance [✂]; and

(d) VMO2 considers that [✂] and sees this as an important strategy to help it grow.

8.254 All third party competitors that responded to our competitor questionnaires consider that BTEE and VMO2 are competitors to the Parties in the consumer retail segment. In particular, we asked competitors to indicate on a scale of 1 to 5 (where 1 is very weak and 5 is very strong) how strongly they believe each competitor competes with 3UK and VUK:

(a) All competitors stated that BTEE is a strong/very strong competitor to both 3UK and VUK;[598] and

(b) All competitors stated that VMO2 is a strong/very strong competitor to 3UK,[599] while eight out of nine stated that VMO2 is a strong/very strong competitor to VUK and one out of nine stated that VMO2 is neither a strong nor weak competitor to VUK.

8.255 Table 8.37 sets out third party competitor views from the competitor questionnaire response of the strengths and weaknesses of BTEE and VMO2. Both MNOs were recognised as having a large presence in the consumer retail segment and strong brand reputation. However, both MNOs were also perceived as being expensive

598 Six out of nine respondents stated that BTEE is a very strong competitor to 3UK, and seven out of nine stated that it is a very strong competitor to VUK.
599 Two out of nine respondents stated that VMO2 is a very strong competitor to 3UK, and four out of nine stated that it is a very strong competitor to VUK.

and slow to change/innovate. BTEE was viewed as having strong network quality and operating in the premium end of the market with a lack of lower value offerings/sub-brands. VMO2, on the other hand, was recognised as having the lowest ranked network quality but offering better prices through its sub-brand Giffgaff.

Table 8.37: Third party competitor views of strengths and weaknesses of BTEE and VMO2

MNO	*Strengths*	*Weaknesses*
BTEE	Large spectrum capacity Only network to be ranked 'Very Good' by umlaut Fastest network speeds Largest 5G population coverage Better coverage and faster data speeds, and better 5G roll-out than the Parties Strong brand with strong network and innovation association based on EE being first to launch 4G Cross-sell mobile to largest broadband base Strong relationship with handset vendors	Perceived as expensive High price (premium product) Questionable brand appeal in older demographics Slow to change Lack of sub-brand to target specific customer segments – eg digital first or lower value No rewards programme
VMO2	Strong consumer brand recognition Strong rewards programme: O2 Priority Free EU roaming Handset innovation heritage Cross-sell O2 mobile to Virgin broadband base Ability to attract different customer segments through sub-brand MVNO – Giffgaff which is a digital first business and offers better prices Flexible tariffs	Perceived as expensive Lowest ranked network quality Less innovative than EE and VUK Similar pricing to VUK and EE Outperformed in a number of network performance metrics (voice, data and crowdsourcing) Lowest mobile spectrum share No speed tiering capability

Source: CMA analysis of third party responses to the CMA's questionnaire from: [✂], [✂], [✂], [✂], [✂], [✂], [✂]; [✂]; and [✂].

8.256 Further, MNO and MVNO views expressed in calls with the CMA are consistent with these questionnaire responses:

(a) BTEE is seen as having strong network quality[600] and operating in the premium end of the market, but unlike all of the other MNOs, BTEE does not have a sub-brand positioned in the value market. BTEE's focus is on [✂].[601] Its pricing is aligned with the [✂].[602]

(b) VMO2, on the other hand, is recognised as having the lowest ranked network quality,[603] and an established position in the sub-brand space with Giffgaff and Tesco Mobile which are challengers to MVNOs and looking to serve a different set of customers to the O2 brand.[604] O2 is positioned towards the premium end of the market with a focus on service quality.[605]

8.257 MNO and MVNO internal documents also show that BTEE and VMO2 provide a competitive constraint to the Parties (as set out in Appendix C).

600 Notes of calls with: [✂]; and [✂].
601 [✂] meeting slides.
602 [✂] call note.
603 Notes of calls with: [✂]; and [✂].
604 Notes of calls with: [✂]; and [✂].
605 Note of call with [✂]

MNOs' and MVNOs' evidence on the competitive constraint from MVNOs

8.258 We consider that the evidence received from other MNOs and MVNOs shows that independent MVNOs are differentiated, each having different strategies and consumer focuses. The majority of independent MVNOs target the value end of the market and therefore do not provide a constraint on the MNOs' main brands (with the main exception of Sky Mobile).[606] For example:

(a) Sky Mobile competes against all four MNOs and their sub-brands, and there are significant overlaps in their target customer bases. It competes with MNOs in the lower-value end of the PAYM segment and has been particularly successful in competing for customers in the PAYM handset segment.[607] Its market position is built on cross-selling to its existing broadband and pay-TV subscriber base,[608] with the majority ([✂]%) of its mobile customers also procuring another Sky product.[609] Sky Mobile does not offer pre-paid, PAYM data-only, business or unlimited data tariffs [✂].[610] Sky Mobile however launched an unlimited data plan in Q3 2024,[611] [✂].[612] As set out in Appendix C, Sky Mobile's documents also show that its competitive strategy is to drive sustainable growth through balancing price competitiveness with its cost structure. It also aims to drive cross selling [✂].

(b) Lebara has positioned itself to provide a 'value' proposition, where the MNOs' main brands are not seen as competitors.[613] It does not offer PAYM SIMO, PAYM handset, PAYM data-only or business tariffs.[614]

(c) Lyca Mobile is a low-cost provider with its customer base being primarily those seeking value or those without a pre-existing relationship with a brand in the market.[615] It does not offer PAYM handset, PAYM data only or business tariffs.[616] It recently launched PAYM SIMO tariffs with a range of contract lengths.[617]

(d) iD Mobile considers that it attracts consumers from across the market and does not have a particular target segment, although most of its customer base is in the PAYM handset segment. It aims to be a disrupter and a value

[606] Notes of calls with: [✂]; [✂]; and [✂].
[607] [✂] meeting slides. CMA, Phase 1 Decision, 29 April 2024, Tables 4 and 6 also showed that in 2022 Sky Mobile had a [0-5]% share in subscribers in the overall consumer segments compared to a [0-10]% in the PAYM handset subsegment. Sky Mobile told us that [✂].
[608] Sky Mobile submission to the CMA.
[609] Sky Mobile call note.
[610] Sky Mobile call note; and Sky Mobile response to the CMA's questionnaire.
[611] Pay Monthly Contract & Sim Only Plans.
[612] Sky Mobile meeting note.
[613] Lebara call note. See also Sky Mobile meeting.
[614] Lebara response to the CMA's questionnaire.
[615] Lyca Mobile call note. See also Sky Mobile meeting slides.
[616] Lyca Mobile response to the CMA's questionnaire.
[617] Lyca Mobile response to the CMA's RFI.

player, delivering simplicity, flexibility and control to its customers.[618] It does not offer businesses tariffs.[619]

(e) Utility Warehouse offers selected PAYM SIMO and PAYM handset plans but considers its offering to be [✂].[620] It also has a small business offering.[621] It looks to offer discounts to customers when they purchase a bundle of its other products including broadband, energy and insurance. Its predominant route to market is word-of-mouth which means it considers itself to be [✂].[622]

(f) Asda Mobile only offered pre-paid tariffs prior to March 2024, but it has since launched a PAYM service. [✂]. Its main competitors are the other MVNOs that also target price-conscious customers. It tends not to compete with MNOs, which typically focus on less price-sensitive customers with higher value and data tariffs, and additional extras.[623]

8.259 We also note that Tesco Mobile, whilst not a wholly independent competitor to VMO2, began as a pre-paid only provider but has since started offering a wide range of pre-paid and PAYM plans. It positions itself as a value player, with its price position below the MNOs but above the MNO sub-brands and some other MVNOs.[624] In the business segment it only offers SoHo tariffs.

8.260 We consider that the Parties' comments at a meeting during our inquiry further support that MVNOs are differentiated from MNOs, each having different strategies and consumer focuses. Specifically, VUK noted that MVNO brands 'tend to be more positioned towards the convenience, value for money space'. 3UK also said that there are certain customer segments in the market that find the MNOs' offerings more attractive than MVNOs' offerings, while MVNOs have been opportunistic 'COVID happened, cost of living crisis happened, and they [MVNOs] went after a value pitch'.[625]

8.261 Third party competitors that responded to the CMA's merger investigation questionnaire identified several independent MVNOs as competitors to the Parties in the consumer retail segment. However, with the exception of Sky Mobile, most independent MVNO competitors (Lebara, Lyca Mobile and iD Mobile) were only mentioned by around half of competitors, with Asda Mobile and Utility Warehouse only being mentioned by one. Of the competitors mentioned:

618 iD Mobile call note.
619 iD Mobile response to the CMA's questionnaire.
620 Utility Warehouse call note.
621 Utility Warehouse response to the CMA's questionnaire.
622 Utility Warehouse call note and [✂] meeting slides.
623 Asda Mobile call note.
624 Tesco Mobile call note.
625 Phase 1 Decision meeting transcript.

(a) No independent MVNO was considered a very strong competitor to VUK. Sky Mobile was considered a strong competitor by four competitors,[626] Lebara was considered strong by two competitors,[627] whilst Lyca Mobile was considered strong by only one competitor.[628] Sky Mobile was considered a weak competitor by one competitor.[629] Lebara and Lyca Mobile were considered very weak in comparison to VUK by one competitor.[630]

(b) Only Sky Mobile was considered a very strong competitor to 3UK by one competitor.[631] In addition, it was considered a strong competitor by four other competitors.[632] Lyca Mobile and iD Mobile were generally seen as slightly stronger competitors to 3UK than they were to VUK with one competitor considering Lyca Mobile and iD Mobile as a strong competitor to 3UK.[633]

8.262 MVNOs that responded to the CMA's merger investigation questionnaire also indicated how strong a competitor (where 1 is very weak and 5 is very strong) they believe that they are to VUK and 3UK in the consumer retail segment for various tariff types:

(a) in the pre-paid subsegment, four independent MVNOs considered themselves very strong competitors to both VUK and 3UK;[634]

(b) in the PAYM handset subsegment, only one independent MVNO, Sky Mobile, considered itself a strong competitor to VUK. Sky Mobile was also the only independent MVNO to consider itself as a strong competitor to 3UK;[635]

(c) in the PAYM data-only subsegment, no MVNOs considered themselves strong competitors to either of the Parties;

(d) in the PAYM SIMO subsegment, only one MVNO considered itself a strong competitor to both of the Parties[636] and one MVNO considered itself a very strong competitor to both of the Parties;[637] and

(e) in the unlimited data subsegment, two MVNOs ([✂] and [✂]) considered themselves a strong competitor to VUK and one MVNO ([✂]) considered itself a very strong competitor to VUK.[638] One MVNO considered itself a

626 Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; and [✂].
627 Responses to the CMA's questionnaire from: [✂]; and [✂].
628 [✂] response to the CMA's questionnaire.
629 [✂] response to the CMA's questionnaire.
630 [✂] response to the CMA's questionnaire.
631 [✂] response to the CMA's questionnaire.
632 Responses to the CMA's questionnaire from: [✂], [✂], [✂] and [✂].
633 Responses to the CMA's questionnaire from: [✂], [✂], [✂] and [✂].
634 CMA analysis of responses to the CMA's questionnaire from: [✂]; [✂], [✂] and [✂].
635 [✂] response to the CMA's questionnaire.
636 [✂] response to the CMA's questionnaire.
637 [✂] response to the CMA's questionnaire.
638 [✂] response to the CMA's questionnaire.

strong competitor to 3UK[639] and one MVNO considered itself a very strong competitor to 3UK.[640,641]

8.263 We note that Tesco Mobile was mentioned by two thirds of respondents.[642] Tesco Mobile was generally seen as a slightly stronger competitor to 3UK than to VUK, with only one competitor noting it as a strong competitor to VUK,[643] and two competitors considered Tesco Mobile as a strong competitor to 3UK.[644]

8.264 [✂] considered itself to be a very strong competitor to both Parties in the pre-paid subsegment and a very strong competitor to 3UK in the PAYM handset segment.[645]

8.265 MNO and MVNO internal documents (as set out in Appendix C) also show that:

(a) MVNOs are less expensive than MNOs' main brands (ie EE, O2, and Vodafone), and along with 3UK's Three brand and MNO sub-brands, price aggressively, particularly in value segments;

(b) MVNOs compete on lower data allowances than MNOs;

(c) Sky Mobile provides some constraint to the Parties across a wider range of tariffs than other MVNOs; and

(d) Tesco Mobile, whilst not a wholly independent competitor to VMO2, is cheaper than the MNOs' main brands (except the Three brand which it is similarly priced) but more expensive than most MVNOs and competes across a wider range of tariffs than other MVNOs.

8.266 Several MVNOs also considered that their ability to compete in the retail market is dependent on the wholesale terms MNOs offer them.[646] According to one MVNO's submissions its average wholesale payment to its MNO host was c. [✂]% of its ARPU per retail subscriber.[647] The Parties submitted that MVNOs have secured tracking clauses so that their prices can remain in line with those of their host MNOs, typically receive parity of access to the same network capabilities as the host MNO, and do not face the same inflationary pressure as MNOs.[648] We assess the effect of wholesale competition on MVNOs in Chapter 9 and paragraphs 8.292 and 8.293 below.

639 [✂] response to the CMA's questionnaire.
640 [✂] response to the CMA's questionnaire.
641 The CMA notes that several MVNOs only offer unlimited data as part of their PAYG offerings.
642 We note that VMO2 and Tesco Mobile are not fully independent.
643 [✂] response to the CMA questionnaire.
644 Responses to the CMA questionnaire from third parties: [✂]; [✂], [✂]; and [✂].
645 [✂] response to the CMA questionnaire.
646 Notes of calls with: [✂]; [✂]; and [✂].
647 [✂] submission.
648 Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 8.4(a).

8.267 In response to the Provisional Findings the Parties submitted that MVNOs offer some of the cheapest tariffs across the market, including for unlimited and high data allowances.[649] As discussed above, we consider that independent MVNOs are differentiated having different strategies and consumer focuses, with the majority targeting the value end of the market. Therefore, even if MVNOs compete aggressively on price across a range of data allowances, they provide a limited constraint on the Parties outside the segments they each target.

8.268 Overall, we consider that the evidence from MNOs and MVNOs shows that:

(a) the Parties are close competitors in the consumer retail, SoHo and small SME subsegments but compete less closely for larger businesses.

(b) BTEE and VMO2 compete closely with the Parties. BTEE positions itself at the premium end of the market, with a high price and high network quality offering and does not have a sub-brand positioned in the value market. Although VMO2 is considered to have the lowest network quality, its main brand still competes with the other MNOs' main brands and it also has a sub-brand which competes in the value market with the Parties' sub-brands and MVNOs.

(c) MVNOs are differentiated, each having different strategies and consumer focuses. The majority of MVNOs (including Lebara, Lyca Mobile, and iD Mobile) target the value segment of the market and therefore provide no or only a limited constraint on the Parties outside the value segment. Sky Mobile, and to a lesser extent Tesco Mobile, are the main exceptions to this as they offer a wider tariff selection and position themselves to compete more against the MNOs' main brands.

Evidence from business customers

8.269 We sent questionnaires to business customers of the Parties and received responses from 2 SoHo, 16 SME, and 14 corporate or public sector customers. Overall, of the respondents that answered the question about which mobile operators they considered or approached when they most recently considered their options:[650]

(a) VUK was mentioned by 18 out of 27 respondents, while 3UK was mentioned by 12.[651] 3UK was not mentioned by any VUK customer; and

[649] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 section 8.
[650] Third party responses to the CMA's questionnaire, questions 2 and 5.
[651] Correcting for where a customer forgot to mention the supplier it was already using. Responses to the CMA's questionnaire: ('[✂]': [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂] / '[✂]': [✂], [✂], [✂], [✂], [✂], [✂], [✂]) and responses to the CMA questionnaire ([✂]: [✂], [✂], [✂], [✂], [✂], [✂], [✂] / '[✂]': [✂], [✂], [✂]).

(b) BTEE and VMO2 were mentioned by 20 and 10 respondents, respectively.

Third party views on the impact of the Merger in the supply of retail mobile services

8.270 We asked third party competitors to provide their views on how the Merger may impact competition in the supply of retail mobile services. Almost all of the competitor respondents expect it to worsen competition.[652] In particular, competitors said that:

(a) it is a 4 to 3 merger;[653]

(b) the Merger creates a 'giant MNO that becomes even more isolated from MVNO demands in consumer interests';[654]

(c) 'combining [VUK] and [3UK] to create a [Merged Entity] with c.61% of UK mobile capacity, will significantly lessen competition in the UK retail mobile market';[655]

(d) the Merger is likely to lead to a reduction in choice;[656]

(e) the Merger will likely lead to the removal of an aggressive priced provider in 3UK;[657]

(f) the Merger is likely to result in the discontinuation of the Parties' retail fighting brands (VOXI and SMARTY), to the detriment of consumers. This would be consistent with previous UK mergers involving MNOs that led to the shutting down of MVNO brands, such as Plusnet following the BTEE merger and Virgin Mobile following the VMO2 merger.[658]

(g) with only three MNOs active in the UK, the Merger would impact the current MVNO pool and potentially lead to prohibitive or less favourable terms to choose from for new / potential MVNOs. This could deter new players from entering the supply of retail mobile services, leaving consumers with less choice and potentially lower quality services and higher prices;[659]

(h) a converged entity of greater or similar scale to BTEE and VMO2 will potentially have less incentive to disrupt the market, and this could potentially result in higher retail prices over time. This, combined with an increased risk

652 Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂] and [✂].
653 Responses to the CMA's questionnaire from [✂] and [✂].
654 [✂] response to the CMA's questionnaire.
655 [✂] response to the CMA's questionnaire.
656 [✂] response to the CMA's questionnaire.
657 [✂] response to the CMA's questionnaire.
658 [✂] response to the Remedies Notice.
659 [✂] response to the CMA's questionnaire.

that services to MVNO providers may be constrained by a reduced appetite in the remaining MNOs to provide service via this route is likely to see reduced competition in the eyes of customers.[660]

8.271 One MVNO submitted economic analysis suggesting that the Merger would create upwards pricing pressure of 28% on its wholesale price which would translate into upwards pricing pressure of 12% on its retail price.[661]

8.272 Three competitor respondents expected the Merger to improve competition. One noted that cost savings on fixed services and teams could be invested and passed through in pricing.[662] Another noted that it would reduce consumer confusion and operators could focus more on quality and differentiation rather than more of the same vanilla price-based propositions.[663] Another submitted that, subject to Beacon 4.1 and the related spectrum transfer, the Merger would deliver the best outcome for UK consumers and businesses.[664]

8.273 As set out in Appendix C, Views on the impact of the Merger:

(a) one third party's ([✂]) internal documents show that it considers that the Merger may result in synergies for the Merged Entity, and there are some documents which suggest it may lead to a [✂].

(b) Another third party's ([✂]) internal documents show that it considers that the Merger may create synergies for the Merged Entity but that it considers that its own competitive position [✂].

8.274 We also asked business customers to provide their views on how the Merger may impact competition in the supply of retail mobile services in the UK. While views expressed were more mixed, we note that a number (7 out of 18) of the SoHo and SME business customer respondents expected competition to worsen as a result of the Merger,[665] while a smaller number (3 out of 18) expected competition to improve.[666]

8.275 Third party views on the potential for REEs resulting from the Merger are discussed in Chapter 14.

660 [✂] response to the CMA's questionnaire.
661 [✂] submission.
662 [✂] response to the CMA's questionnaire.
663 [✂] response to the CMA's questionnaire.
664 [✂] submission.
665 Responses to the CMA's questionnaire from: [✂]; [✂]; [✂]; [✂]; [✂]; [✂]; [✂] and [✂].
666 Responses to the CMA's questionnaire from: [✂]; [✂] and [✂].

Conclusions on closeness of competition and current competitive constraints

8.276 For the reasons set out above, we conclude that the Parties compete closely in the supply of retail mobile services and that this would continue in the future absent the Merger. In particular:

(a) VUK and 3UK are the third and fourth largest mobile operators in the supply of retail mobile services by revenue and subscribers, respectively. 3UK has been marginally gaining market share by revenue and subscribers and VUK has been gaining market share by revenue but marginally losing share by subscribers;

(b) VUK's network quality has historically been in second place behind BTEE. More recently, due to improvements in 3UK's network, VUK's network quality appears broadly similar to 3UK's on some measures and slightly behind 3UK's on others (notably 5G), however, it has established plans to continue to improve this network performance. 3UK has seen improvements in its network quality and is particularly strong in NSA 5G where it has the fastest 5G speeds where it has rolled it out;

(c) most competitors consider each Party to be a strong/very strong competitor to the other;

(d) the Parties compete particularly closely in some subsegments, including in the unlimited data, pre-paid and SoHo subsegments; and

(e) the diversion data shows that the Parties provide a constraint on each other.

8.277 We conclude that both BTEE and VMO2 compete closely with the Parties, and that this would likely continue in the future, absent the Merger. We consider that they both have a large presence in the supply of retail mobile services, high diversion from customers of the Parties, and strong brands, particularly BTEE which has consistently had the highest network quality.

8.278 However, there is also some evidence to suggest that both BTEE and VMO2 compete less aggressively than the Parties in some respects. BTEE positions itself towards the premium end of the market and third parties see it as more expensive. Whereas VMO2 operates a dual-brand strategy, using Giffgaff to compete in the value subsegment and O2 in the premium subsegment, while having the lowest network quality in the market. Both are viewed by third parties as being less innovative/slower to change than the Parties. BTEE and VMO2 have also both been losing share by both revenue and subscribers, whilst the Parties have been gaining share by revenue and have had stable shares by subscribers in the 2020 to 2023 period.

8.279 We conclude that some independent MVNOs currently exercise some constraint on the Parties, namely Sky Mobile and, especially in the value segment, Lebara and iD Mobile. Overall, however, we consider that the constraint from MVNOs is limited. We also consider that in a differentiated product market, comparing market shares of one operator with the aggregated share of a large number of other operators can be misleading and would likely overstate the competitive pressure that MVNOs are exerting. This is because:

(a) all independent MVNOs individually have a very small share of supply of less than 5% by subscribers and by revenue in 2023 and are dependent on wholesale contracts to compete. Most MVNOs are also not considered by third parties to be a strong/very strong competitor to the Parties.

(b) MVNOs typically only compete in some segments. Most MVNOs, including Lebara and iD Mobile, appear to generally cater more towards cost-sensitive consumers. A significant exception to this is Sky Mobile, which is the largest independent MVNO and particularly competes in the PAYM handsets segment. It has had a strong competitive strategy and recent growth. However, its share of supply in the overall retail segment is small (less than 5% by subscribers and revenue) and it does not offer pre-paid or business, and only started offering unlimited tariffs in 2024.

Post-Merger constraints

8.280 In this section we present evidence on post-Merger constraints, excluding consideration of any efficiencies claimed by the Parties:

(a) we firstly consider how the Merger may impact the Merged Entity’s incentives and the competitive constraint from MNOs and MVNOs; and

(b) we then assess quantitative evidence on the impact of the Merger on prices.

8.281 We consider the effect of any potential efficiencies in Chapter 14.

How the Merger may impact the Merged Entity’s incentives and the competitive constraint from MNOs and MVNOs

8.282 We have considered how the Merger, excluding consideration of any efficiencies, would affect:

(a) the post-Merger competitive incentives of the Merged Entity;

(b) the post-Merger constraint from MNOs; and

(c) the post-Merger constraint from MVNOs.

Post-Merger competitive incentives of the Merged Entity

8.283 In this section we consider the impact of the Merger on the competitive incentives of the Merged Entity.

8.284 We consider that, excluding consideration of any efficiencies, the Merger is likely to weaken the incentives of the Merged Entity to compete on parameters of competition, including price and network quality. This is for the following reasons:

(a) The Merger will lead to the removal of the constraint which the Parties currently exert on each other. When a firm merges with a competitor that previously provided a competitive constraint, this can allow the merged entity to profitably raise prices or to degrade quality on its own and without needing to coordinate with its rivals.[667] Absent a merger, firms face a trade-off when considering whether to raise prices or reduce quality. On the one hand, the firm will incur a cost because some customers will switch away, and the firm will lose the profits it would have earned on those customers. On the other hand, the firm also gains, because it makes a bigger profit on the customers that remain (because of the higher price, or the lower cost associated with reduced quality, range or service). After the Merger, it would no longer be as costly for the Merged Entity to raise prices or reduce quality because:

(i) It would recoup the profit on recaptured sales from those customers who would switch to the products of the other Party;[668] and

(ii) The Merged Entity would also recoup some profit on recaptured sales to MVNOs of the other Party. As discussed at Chapter 9, both VUK and 3UK are wholesale suppliers to several of the largest MVNOs.

(1) 3UK supplies wholesale services to iD Mobile. As set out in Table 8.35, according to the CMA customer survey the price diversion ratio between VUK and iD Mobile is 9%; and

(2) VUK supplies wholesale services to Lebara, Asda Mobile and TalkTalk. We note that the price diversion ratio between 3UK and Lebara, as set out in Table 8.34, is 10%, between 3UK and Asda is 1%, whilst no 3UK customers said they would switch to TalkTalk in response to the CMA customer survey.[669]

(b) As discussed in the Parties' competitive position section above, we consider that smaller MNOs may have stronger incentives to be competitive on prices and innovate to increase their customer base. The Merged Entity would have

667 CMA129, paragraph 4.1.
668 CMA129, paragraphs 4.6-4.7.
669 FMN. We note that this is consistent with the fact that [✂].

a significantly larger customer base compared to each Party on a standalone basis, and therefore may have lower competitive incentives.

(c) We further note that, to the extent the Merger reduces the post-Merger constraint from MNOs and/or MVNOs this would further reduce the Merged Entity's competitive incentives. This is considered in the following sections.

Post-Merger constraint of MNOs

8.285 We have considered how the constraint from MNOs may change as a result of the Merger, and in particular:

(a) the post-Merger competitive incentive of MNOs;

(b) how the Merged Entity's participation in MBNL and Beacon could impact the constraint which BTEE and VMO2 are able to exert post-Merger; and

(c) the impact of post-Merger spectrum asymmetries on the constraint from MNOs.

Post-Merger competitive incentives of MNOs

8.286 In this section we first consider how, absent consideration of efficiencies, other MNOs may react to a price rise by the Merged Entity.

8.287 As a starting point, we note that the supply of retail mobile services is oligopolistic in nature given it is highly concentrated (as set out at section in the Customer bases section above), there are barriers to entry (as explained in Chapter 13), and MNOs closely monitor and react to each other's behaviour.[670]

8.288 We consider that in oligopolistic markets, a merger which leads to the elimination of the competitive constraint that the merging parties previously exerted upon each other and on their rivals, may result in rivals themselves having lower incentives to compete. The reason for this is as follows:

(a) As discussed above, the Merger will lead to the removal of the constraint which the Parties currently exert on each other, and therefore may increase the Merged Entity's incentives to raise prices.

(b) If the Merged Entity were to act on these incentives and raise prices, its rivals would experience an increase in demand for their services. This is both because more customers would switch to them from the Merged Entity and fewer customers would switch away from them to the Merged Entity. This increase in demand may provide them with incentives to also raise their

[670] For example, Vodafone internal documents; and CK Hutchison internal document.

prices. BTEE and VMO2, in particular, may respond to this weakening of competitive pressure by increasing their own prices given that they both have large customer bases and are mainly focused on value generation rather than achieving subscriber growth (as evidenced by their declining market shares by gross adds, and their respective commercial strategies as set out in the Customer bases section above). Consistent with this, several third parties told the CMA that they expected BTEE and VMO2 would respond to a price increase by the Merged Entity by also increasing their prices or would have a reduced incentive to price aggressively.671

(c) The Merged Entity's expectation that VMO2 and BTEE may follow its unilateral price rises due to reduced competitive pressure may also influence its incentives to raise prices. This is because the Merged Entity may expect price rises to be more profitable as they would result in it losing fewer customers to BTEE and VMO2.

(d) Even if the Merged Entity increased prices due solely to the removal of the constraint the Parties currently exert on each other and not on the expectation that VMO2 and BTEE would follow, if VMO2 and BTEE responded to this price rise by increasing their own prices, there may be some positive feedback on the Merged Entity's own prices.[672] This is because the Merged Entity would face weaker constraints, both due to the loss of competition between the Parties as well as the weakening of the constraint from BTEE and VMO2.

8.289 The nature of strategic price interactions between the MNOs is illustrated by the Parties' and third party internal documents (as set out in Appendix C, Competitive strategies) that show MNOs monitor each other, acknowledge that the prices of others will impact them, and set their prices taking into account other competitors' prices. For example, in the case of inflation-linked price rises:

(a) BTEE was first to introduce a price rise of CPI+3.9% in September 2020.

(b) After considering their options, the other MNOs introduced similar price rises. VUK and 3UK increased prices by CPI+3.9% in December 2020 and November 2022 respectively, while VMO2 introduced RPI+3.9% in March 2021.[673]

(c) This price rise was maintained for a sustained period of time despite MVNOs largely not also increasing their prices. iD Mobile (in November 2022) was

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671 Responses to the CMA's questionnaire from: [✄] and [✄].
672 This effect is the consequence of the 'strategic complementarity' of prices, and is a general characteristic of standard price-setting models of oligopoly competition.
673 See Ofcom 'Prohibiting inflation-linked price rises', December 2023, paragraph 2.9, accessed by the CMA on 18 June 2024.

the only independent MVNO to introduce a CPI+3.9% price rise, but excluded its SIMO plans.[674]

8.290 We consider that this evidence of pricing behaviour is particularly significant as it occurred in the current market structure (with four MNOs including the lowest priced MNO, 3UK). This suggests that the MNOs may be even more likely to react to competitors' price rises by increasing their own prices if there was less competitive pressure on them.

8.291 The Parties submitted that both 3UK and VUK had [✂] rationales for implementing the CPI+3.9% price rises and this does not substantiate that one MNO raising prices would lead to the other MNOs raising their prices in the same way.[675] The Parties submitted the following rationales:

(a) For VUK:[676]

(i) [✂];

(ii) [✂];

(iii) [✂]; and

(iv) [✂].

(b) For 3UK, [✂]. The Parties submitted 3UK considers [✂], with [✂].[677]

8.292 We consider that although the above factors may have affected the Parties' decision to introduce a price increase, the documents set out in Appendix C, Competitive strategies illustrate the nature of strategic price interactions between the MNOs. They show that MNOs monitor each other's pricing, acknowledge that competitors' prices will impact them, and set their prices taking into account other competitors' prices.

8.293 For the reasons set out above, we consider that BTEE and VMO2 may respond to a price rise by the Merged Entity by increasing their own prices. This could, in turn, weaken the constraint faced by the Merged Entity and make it more profitable for it to raise prices.

8.294 The Parties submitted that post-Merger, BTEE and VMO2's incentives to compete will increase. The Parties have submitted this based on the investments to the joint

[674] See Consumer Price Index | iD Mobile, accessed by the CMA on 10 June 2024. We note that Tesco Mobile also introduced a CPI+3.9% price increase in 2023.
[675] Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 9.22.
[676] Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 9.23.
[677] Annex 1 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 9.25.

network the Merged Entity plans to make and the Beacon 4.1 spectrum trade, resulting in BTEE and VMO2 having stronger incentives to invest in their network to limit the loss of customers to the Merged Entity.[678] We consider the likelihood and timing of any improvements of the Merged Entity's network quality – and the potential responses to any such investments by the other MNOs – in Chapter 14.

Merger impact on the constraint exerted by BTEE, through the Merged Entity's participation in MBNL, and VMO2, through the Merged Entity's participation in Beacon

8.295 As set out in Chapters 10 and 11 we have concluded that the Merged Entity's involvement in the MBNL and Beacon network sharing arrangements would not harm BTEE and VMO2's ability to exert a competitive constraint in the retail market.

The impact of post-Merger spectrum asymmetries on the constraint from MNOs

8.296 We have considered whether the Merger may result in BTEE and/or VMO2 becoming weaker competitors due to the Merged Entity having a particularly high relative share of spectrum.

8.297 A number of third parties have raised concerns about the impact of the Merger on competition through the creation of spectrum or capacity asymmetries:

(a) BTEE submitted that the Merger would result in the Merged Entity having a disproportionate share of UK mobile capacity due to its strength in sites and spectrum share, which will distort competition and investment incentives.[679] BTEE raised concerns that the Merged Entity will have the ability to use excess capacity to deter investment, reducing overall market investment incentives. This is because the Merged Entity 'could deploy capacity quickly to defeat sunk, long-term investments by rivals. Knowing this, rival MNOs will be less likely to invest in the first place. In turn this reduces VF3's need to invest in future. This effect compounds the risks of a less effective MBNL'.[680] It submitted that capacity asymmetry, rather than spectrum asymmetry, is the correct metric for assessing the competition concerns it has and also provided its own estimates of capacity share pre and post-Merger.[681]

(b) BTEE also raised a concern about the spectrum asymmetry in low bands[682] (including post the Beacon 4.1 spectrum trade), as the asymmetry in those

678 Parties' initial submission, 1 May 2024, paragraph 3.31, and Annex 1 to the Parties' response to the AIS and working papers.
679 BTEE response to the CMA's preliminary invitation to comment.
680 BTEE meeting slides.
681 BTEE response to the provisional findings, 4 October 2024, paragraphs 3.13-3.17.
682 Low band frequencies are 700-1400MHz. BTEE meeting note.

bands means that [✂].[683] It also noted that low-band capacity constraints have limited its ability to compete effectively on two key dimensions of network quality: (i) 4G capacity, and (ii) capacity to service rural areas.[684]

(c) Another third party submitted that the Merger would result in asymmetric spectrum holdings between the MNOs that would give rise to a material loss of competition in mobile services.[685]

8.298 Ofcom has previously identified similar potential competition concerns in relation to spectrum awards.[686] It identified that competition may be weaker due to asymmetry in spectrum because an operator with a high relative share of spectrum:[687]

(a) may be able to offer superior services that its competitors are unable to replicate, which could weaken competition in the longer term;

(b) could credibly threaten to respond with aggressive price cuts if competitors sought to grow their market share through lower prices, reducing the incentive of competitors to compete aggressively on price; and/or

(c) could use its spare spectrum to launch new services before its competitors, leaving its other services unaffected. Whereas competitors might need to re-purpose some of their existing spectrum, potentially to the detriment of their legacy services which could result in weaker competition in the longer term.

Our assessment

8.299 In general, we note that if a merger enables a firm to price aggressively, offer higher quality or new services that its competitors find challenging to match, the overall effect on the market will typically be pro-competitive. In light of this we would need clear evidence if we were to consider the effects described in paragraphs 8.295 to 8.296 above to be negative for competition. Further, we note Ofcom has been sparing in its use of spectrum caps and considers that the level of intervention should be the 'minimum necessary to achieve [its] policy objectives'.[688]

8.300 We note the following points which relate to our framework of assessment:

[683] BTEE meeting slides; BTEE submission; and BTEE response to the provisional findings, 4 October 2024, paragraphs 3.6-3.7.
[684] BTEE response to the provisional findings, 4 October 2024, paragraph 3.4.
[685] [✂] submission.
[686] Ofcom award of the 700MHz and 3.6-3.8 GHz spectrum bands, March 2020, paragraphs 4.52-4.53.
[687] Ofcom award of the 700MHz and 3.6-3.8 GHz spectrum bands, March 2020, paragraph 4.27.
[688] Ofcom award of the 700MHz and 3.6-3.8 GHz spectrum bands, March 2020, paragraphs 4.22, 4.193-4.194, and 5.33.

(a) We have focused on spectrum asymmetry in our assessment rather than capacity asymmetry because:

(i) as submitted by Ofcom, spectrum shares give an indication of the relative potential of an MNO to provide capacity on the market and an indication of an MNO's future capabilities, whereas capacity shares show what is currently delivered.[689] Capacity shares are determined by the amount of spectrum deployed by an operator, the number of sites an operator has, and the technology used at each site.[690]

(ii) in response to changes in demand or competition, MNOs can address shortages of capacity by deploying more spectrum or building more sites but given the limited opportunities to acquire new spectrum in the future, spectrum shares are more likely to be enduring.[691] Therefore, spectrum shares are more likely to be indicative of MNOs' longer term ability and incentive to respond to changes in demand or competition.

(iii) the concerns raised by third parties relate to the Merged Entity being able to deploy additional capacity quickly to deter investment, and we consider the Merged Entity would most likely be able to do this through deploying additional spectrum.

(b) In previous spectrum auctions Ofcom has considered that in a four-player market asymmetry concerns may arise if one MNO has a share of around 40% and the other three MNOs each have 20% of overall spectrum on average.[692] We do not consider these to be relevant thresholds for our assessment given these thresholds were in the context of a four-player market and we consider that in a three-player market, the thresholds that may raise competition concerns would be higher.

8.301 Notwithstanding this, we also have some concerns in relation to how the capacity shares submitted by [✂] were calculated:

(a) [✂]. Ofcom noted that it does not expect this to be an enduring constraint and therefore should be included in any capacity calculations.[693]

(b) the assumptions [✂] has used on the site numbers of each MNO and spectral efficiencies differ to those used by the Parties,[694] and therefore may result in the capacity shares it has calculated being incorrect.

689 Ofcom response to the CMA's email.
690 BTEE meeting note and Ofcom response to the CMA's email.
691 Ofcom response to the CMA's email of 24 October.
692 Ofcom award of the 700MHz and 3.6-3.8 GHz spectrum bands, March 2020, paragraph 4.76-4.81.
693 Ofcom response to the CMA's email.
694 Ofcom response to the CMA's email.

(c) while with respect to the number of sites, there is also uncertainty in relation to both how many sites VMO2 would get access to through the Beacon 4.1 agreement and the timing of this (as discussed further in Chapter 10).

8.302 Further, while the Merger will deliver some capacity uplift in the early years, the full merged network will take around eight years to roll out (see Chapter 16 for more details). Therefore, BTEE and VMO2, to the extent they are concerned that the Merged Entity would have a level of capacity against which they cannot compete, would have the option to upgrade their own networks and add more sites at the same time that the Parties are integrating their networks. We also note that BTEE is the largest provider by revenue and part of the BT Group, while VMO2 is the second largest provider by revenue and also offers fixed cable and fibre services and therefore both are large and well-resourced businesses.

8.303 Therefore, we have firstly considered the extent of spectrum asymmetry between MNOs across all types of spectrum before considering spectrum asymmetry within low-band spectrum (as we received specific third party concerns about this).

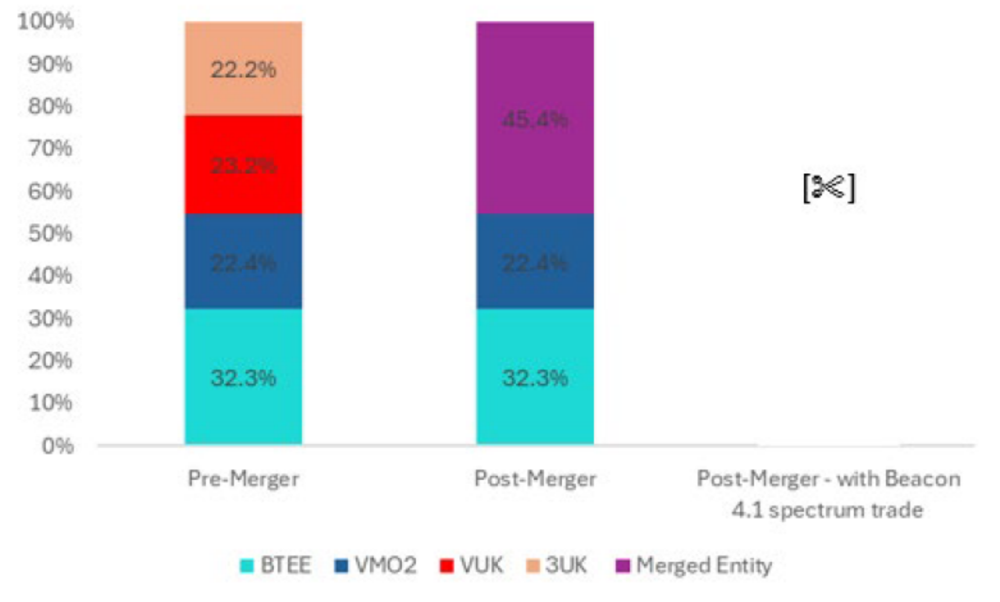
8.304 As set out in Figure 8.16, the overall spectrum shares are as follows:

(a) Pre-Merger: 23.2% VUK, 22.2% 3UK, 32.3% BTEE, and 22.4% VMO2;

(b) Post-Merger: 45.4% Merged Entity, 32.3% BTEE, and 22.4% VMO2; and

(c) Post-Merger with Beacon 4.1 spectrum trade: [✂]% Merged Entity, 32.3% BTEE, and [✂]% VMO2.

Figure 8.16 Overall spectrum shares by MNO pre-Merger, post-Merger and post-Merger with Beacon 4.1



Source: CMA analysis of Ofcom's [Frequency allocations: mobile and wireless Broadband below 5 GHz] and Parties' response to the CMA's RFI).
Notes: We have not included 3UK's holdings in the 3800 - 4200 MHz band as it is not usable for mobile services (FMN), [✂]MHz of VUK [✂] spectrum as it is not suitable for telecommunications (RFI [✂]), and allocations expiring on 15 October 2024 and 31 December 2025.

8.305 We consider that these shares show that after the Merger, the Merged Entity would have the greatest share of total spectrum both with and without the Beacon 4.1 spectrum trade.

(a) Without the spectrum trade, the Merged Entity's spectrum share is 13 percentage points greater than the next competitor (BTEE) and 23 percentage points greater than the competitor with the least spectrum (VMO2).

(b) With the spectrum trade, the Merged Entity's spectrum share is [✂] percentage points greater than [✂] (BTEE) and [✂] percentage points greater than [✂] (VMO2). We note that these differences are smaller than the current asymmetry where BTEE has 9 percentage points greater spectrum than its next competitor (VUK) and 10 percentage points more spectrum than the competitor with least spectrum (3UK). We note that, in line with the reasoning in Chapter 10, our approach to contractual protections, we have taken account of the spectrum trade in our competitive assessment where appropriate.

8.306 We note that Ofcom has told us that:

(a) Its concerns around spectrum asymmetry in general have reduced. '[✂]'.[695]

(b) There is uncertainty about how much data customers will use in the future. However, capacity on the C-band spectrum is large compared to current usage levels and there would need to be a very high increase in demand for capacity to become an issue.[696]

8.307 In terms of spectrum shares in low band holdings, as set out in Figure 8.17 these are:

(a) Pre-Merger: [✂]% VUK, [✂]% 3UK, [✂]% BTEE, and [✂]% VMO2;

(b) Post-Merger: [✂]% Merged Entity, [✂]% BTEE, [✂]% VMO2; and

(c) Post-Merger with Beacon 4.1 spectrum trade: [✂]% Merged Entity, [✂]% BTEE, and [✂]% VMO2.

Figure 8.17: Low band spectrum shares by MNO pre-Merger, post-Merger and post-Merger with Beacon 4.1

[✂]

Source: [✂] response to the CMA's 23 July 2024; and Parties response to the CMA's RFI. Parties' response to RFI; and CMA analysis of Ofcom's Frequency allocations: mobile and wireless Broadband below 5 GHz.
Notes: We have not included allocations expiring on 15 October 2024.

8.308 We consider that these shares are more asymmetric compared to the overall spectrum shares, although post spectrum trade the Merged Entity's share is only [✂] percentage points greater than the next competitor (VMO2).

8.309 We have considered the extent to which these spectrum asymmetries are likely to have an impact on the competitiveness of operators with little low frequency spectrum. We consider that this impact is likely to be limited because:

(a) Ofcom also considered the possibility of spectrum asymmetries in low frequency spectrum in its award of the 700 MHz and 3.6-3.8 GHz spectrum bands but decided that MNOs with little low frequency spectrum (BTEE and 3UK at the time) would likely remain strong competitors even if they did not win any low frequency spectrum in the award. This was because although low band frequency is important for indoor coverage, this is only one factor customers consider when choosing a provider and MNOs were already performing similarly on indoor coverage where data-intensive uses can be provided by other means (ie Wi-Fi), while it was not clear that low band

[695] Ofcom call note.
[696] Ofcom call note and Ofcom response to the CMA's email of 24 October.

spectrum was essential for 5G. It therefore decided not to impose a specific cap on low frequency spectrum in the award.[697]

(b) We are advised by Ofcom that [✂].[698]

(c) IoT can be provided using alternative solutions. BTEE submitted that [✂].[699] It also noted that in principle 700 MHz would be an alternative to 800 MHz [✂] for IoT purposes, but it is not currently useable as 'no ecosystem exists'.[700] Ofcom does not rule out the possibility that an IoT ecosystem for 700 MHz will become available, while other technologies, such as LoRaWAN and satellite connectivity, can also be deployed on alternative frequencies to provide IoT services to customers. Therefore, it considers that the provision of IoT services in the UK is not limited to, or reliant on, solutions in the 800 MHz spectrum band.[701]

(d) Ofcom is preparing for an auction of an additional 25 MHz of SDL spectrum at 1.4 GHz [✂].[702]

(e) Ofcom also considers it is not clear that future use cases for low band (such as IoT) will have a significant impact on the future shape of competition for mobile services.[703]

8.310 BTEE submitted that we appear to accept the Parties' submission that 1800 MHz spectrum sharing would promote competition by alleviating 4G congestion on 3UK's network, and that this appears inconsistent with our assessment of BTEE's concerns relating to low-band spectrum constraints.[704] We do not agree that such an inconsistency exists. We have considered the Parties' submissions on 1800 MHz spectrum sharing as part of our broader assessment of rivalry-enhancing efficiencies and consider that it will help alleviate congestion in areas where 3UK is currently experiencing mid-band congestion.[705] Likewise, we do not rule out that additional low band spectrum would allow [✂]. However, for the reasons set out above, we consider that the impact of spectrum asymmetries on the competitiveness of operators with little low frequency spectrum is likely to be limited.

8.311 On balance, we consider that low-band spectrum asymmetry is unlikely to significantly reduce the competitiveness of MNOs, because, although low band frequency can be important in relation to some aspects of network quality, MNOs

697 Ofcom award of the 700MHz and 3.6-3.8 GHz spectrum bands, March 2020, paragraphs 4.112-4.113.
698 Ofcom response to the CMA's email of 24 October.
699 BTEE response to the provisional findings, 4 October 2024, paragraph 3.8.
700 BTEE submission; and BTEE response to the issues statement, 16 May 2024, paragraph A1.19.
701 Ofcom response to the CMA's email of 24 October.
702 Ofcom response to the CMA's email of 24 October.
703 Ofcom response to the CMA's 23 July 2024 letter.
704 BTEE response to the provisional findings, 4 October 2024, paragraph 5.28.
705 See Chapter 14.

have a range of strategies available to them to address limited low band spectrum holdings, including using different configurations of spectrum and site densification. There are also other aspects of network quality where low band spectrum is less important, and therefore an MNO with relatively less low-band spectrum can also compete on these aspects. Further, BTEE, [✂] has also consistently been ranked as having the best overall network quality of the MNOs (as discussed in paragraph 8.181 above). In relation to low-band spectrum asymmetry's impact on competing to supply IoT services, there are alternative solutions to provide this and it is not clear that future use cases will significantly impact competition in mobile services in the future.

8.312 Overall, our view is that we do not consider that spectrum asymmetry is likely to materially reduce the competitive constraint of the other MNOs post-Merger. This is because we consider that it is likely that the spectrum trade under Beacon 4.1 will occur following the Merger (as discussed in Chapter 10), and therefore the degree of overall spectrum asymmetry will be less than the current asymmetry. We do not consider that asymmetries within low-band spectrum would significantly weaken the competitive position of other MNOs.

Post-Merger constraint from MVNOs

8.313 We have considered the impact of the Merger on the constraint from MVNOs. Our view is that:

(a) As outlined in paragraph 8.252, the competitiveness of an MVNO will be significantly impacted by the terms it is able to secure from its MNO host.

(b) As set out in Chapter 9, we consider there is scope for an SLC as a result of the Merger in the supply of wholesale mobile services in the UK. We consider it likely that the Parties would both compete for large MVNO opportunities that may be up for renegotiation in the near future absent the Merger. We note that, in the next two years, MVNO contracts serving almost 30% of the MVNO market, including MVNOs currently hosted by the Parties ([✂] and [✂])[706] may be subject to renewal. This may lead to MVNOs receiving worse price and/or non-price terms. A number of MVNOs expressed this concern to us.[707]

8.314 On this basis, our conclusion is that the Merger may lead to MVNOs receiving worse terms from MNOs and therefore being less of a constraint at the retail level post-Merger.

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706 Based on CMA analysis, retail market shares by subscribers of the MVNO market only.
707 Responses to the CMA's questionnaire from: [✂], [✂] and [✂].

Conclusion on Merger impact on the Merged Entity's incentives and the competitive constraint from MNOs and MVNOs

8.315 Overall, before consideration of any potential efficiencies, we consider that the Merged Entity would have greater incentives to raise prices or degrade non-price aspects of its offerings in retail mobile services because:

(a) the Merger removes the competitive constraint between the Parties;

(b) the Merged Entity will also recapture some MVNO sales;

(c) BTEE and VMO2 may react to a price rise by the Merged Entity by also increasing their prices, which would result in it being more profitable for the Merged Entity to raise prices as it would result in it losing fewer customers to BTEE and VMO2;

(d) the Merged Entity would have a significantly larger customer base compared to each Party on a standalone basis, and therefore may have a weaker incentive to be competitive on prices and innovate to increase its customer base; and

(e) the Merger is likely to result in a reduction in wholesale competition which could reduce the competitiveness of MVNOs. A reduction in the competitiveness of MVNOs would reduce the constraint they pose on the Merged Entity, allowing it to increase prices further.

8.316 We consider that the constraint posed by BTEE and VMO2 is not likely to be weakened due to the Merged Entity participating in both network sharing agreements or spectrum asymmetries.

Quantitative evidence on the impact of the Merger on prices

8.317 In this section we consider quantitative evidence on the impact of the Merger on prices, excluding consideration of any efficiencies which are considered in Chapter 14 below, namely:

(a) Previous concentration studies;

(b) the CMA's GUPPI analysis;

(c) the CMA's merger simulations; and

(d) the Parties' merger simulations.

Previous concentration studies

8.318 The Parties submitted a 2023 review of research by Compass Lexecon,[708] 3UK's economic advisors for the Merger, which considered studies on previous four-to-three MNO mergers in various countries. The review concluded that these mergers typically had little impact on prices, usually having no effect or resulting in increased prices for some customers for a short period of time. We note that most, if not all, the mergers considered by Compass Lexecon involved commitments by the merging parties to address competition concerns identified as arising from the merger; and hence are not necessarily probative of merger outcomes in the absence of remedies. We also note that the Compass Lexecon study represents 'meta-research' involving a substantial measure of judgement about previous studies.

8.319 We also observe that there is conflicting economic evidence about the overall competitive effects of four-to-three MNO mergers.[709] A recent price-concentration study by Lear et al. (2024) commissioned by the European Commission for its 'Protecting competition in a changing world' report found 'a strong and significant positive relationship between market concentration and prices'. The study covered 29 countries (23 EU countries as well as Canada, USA, Japan, South Korea, Australia and New Zealand) from 2009-2019. In particular, it estimated that 'one additional MNO is associated with a reduction in average revenues per user (ARPU) by 7%. The impact is mostly driven by EU countries, in which one additional MNO is associated with a 9% reduction in ARPU'.[710] The Parties submitted that the results from the study were neither robust nor clear-cut, due to it using ARPU to measure price and market-wide capex to measure investment, and its focus on the 4G era.[711]

8.320 The Merger Assessment Guidelines,[712] reflecting the relevant case law, note that the CMA's task in analysing mergers is context specific, and in particular: (i) each case turns on its own facts; and (ii) the characteristics of one market may be very different from those of another.[713] The effect of the Merger will turn on its specific circumstances, rather than the outcome of empirical studies.[714]

8.321 Moreover, we believe that differences in the characteristics of mobile markets (such as geographic, demographic and regulatory differences) across countries limits the probative value of any analysis of the effects of mergers outside the UK

[708] Padilla et al. (2023), Do four-to-three mobile mergers harm consumers? A review of post-merger effects and concentration studies (referred to in FMN).
[709] Business and Trade Committee, Oral evidence: Three-Vodafone merger: implications for competition, HC 1869, 17 October 2023.
[710] European Commission report 'Protecting competition in a changing world', 2024, pages 124-126.
[711] Parties' response to the Provisional Findings, 4 October 2024, Annex 1 paragraph 9.12.
[712] CMA129
[713] *Ecolab Inc. v Competition and Markets Authority* [2020] CAT 12, quoted at CMA129, footnote 13.
[714] This was also noted by Ofcom in Ofcom's future approach to mobile markets and spectrum, Conclusions paper, December 2022, paragraph 5.33.

in assessing the effects of this Merger. While we note the evidence from international studies of the mobile sector, we have taken a cautious approach to placing weight on any comparisons of the UK mobile industry to other countries' markets in our assessment of the Merger.

CMA analysis on the impact of the Merger on prices

8.322 We note that it is difficult to estimate the impact of a Merger on retail pricing with precision in this industry for a range of reasons – these include the interaction between the retail and wholesale markets, operators making decisions about both price and quality simultaneously, and the profitability of customers changing over their tenure. However, to understand the likely magnitude of the impact of the Merger on the prices of retail mobile services (in the absence of efficiencies) we have applied two complementary economic techniques, namely:

(a) **Gross Upwards Price Pressure Index (GUPPI).** This is a commonly used measure which combines information on diversion ratios and margins to give an indication of the incentives for parties to raise their price as a result of the Merger. It does not attempt to predict the exact extent of post-Merger price rises, rather to measure the extent of the upward price pressure.[715]

(b) **Merger simulation.** This is a more complex quantitative technique which, by building on our econometric model, seeks to predict the impact of the Merger on prices. Merger simulation has previously been used by other competition authorities and in academia to study mergers in telecoms.[716] Unlike GUPPI, merger simulations allow competitors to react to price changes by the Merged Entity.

8.323 We make three initial comments on our overall approach:

(a) First, our analysis focuses on assessing the impact of the Merger on prices and we hold quality fixed. We consider that trying to model the impact of a Merger on both price and quality presents significant challenges. These include, but are not limited to, mapping firms' investment to realised changes in network quality and modelling the impact of quality changes on consumers' behaviour. We note that the Parties have undertaken two merger simulations which, unlike our analysis, have the stated goal of modelling the impact of the Merger on prices and quality. However, as outlined in Appendix F, we have concerns about these approaches.

(b) Second, we consider that both our GUPPI and merger simulation are likely to understate the impact of the Merger on prices. This is because neither takes

[715] CMA Retail Merger Guidance (**CMA62**), 10 April 2017, paragraph 5.12.
[716] For a review see for example: Valletti, T., & Zenger, H. (2021). Mergers with Differentiated Products: Where Do We Stand? In Review of Industrial Organization (Vol. 58, Issue 1, pp. 179–212).

account of the impact of the Merger on the competitiveness of MVNOs through weakened wholesale competition or that post-Merger pricing will take into account the fact that in the event of a price increase certain MVNO sales (on the other Party's network) will be recaptured post-Merger.

(c) Third, the value of a customer to an operator varies considerably over their tenure. Initially the existence of high acquisition costs and discounts means the margin on a new customer is at its lowest level. However, as their tenure extends, including through contract renewals, the profitability of that customer increases (not least as acquisition costs are less relevant). This means that short-term margins may underestimate the longer-term value of a customer. We have focused on estimating the short-run impact of the Merger on new customers rather than attempting to explicitly model such complex multi-contract demand dynamics. However, to explore the possible effect that the Merger may have on consumers across multiple contracts, we draw on different types of margins in our analysis noting the profit earned on customers beyond their first contract is higher.

8.324 Our assessment is structured as follows:

(a) GUPPI analysis.

(b) CMA's Merger Simulation.

(c) Overall assessment of our pricing analysis.

GUPPI analysis

8.325 As set out above, GUPPI combines information on diversion ratios and margins. We have calculated GUPPI estimates using two methods:

(a) As set out in Appendix E, we have calculated the GUPPI for VUK and 3UK using diversion ratios from the CMA survey and a range of margin estimates provided by the Parties. Using acquisition margins, the GUPPI is [5-10]% for 3UK and [5-10]% for VUK.

(b) We have also calculated GUPPI based on diversion ratios and margins derived from the CMA's econometric analysis based on a sample of customers who are able to switch (as set out in Appendix D). These estimates are [5-10]% for 3UK and [0-5]% for VUK.

8.326 As set out above, we consider that the value of a customer is likely to vary considerably over their tenure and the relatively short-term margins which we have used in our analysis may underestimate the longer-term value of winning a customer. Therefore, we have also calculated GUPPIs using diversion ratios from the CMA survey and contribution margins, which are higher, and which we view as a better proxy for this longer-term value.[717] This shows that the GUPPI could be as high as [10-20]% for 3UK and [5-10]% for VUK.

8.327 Our view is that both approaches suggest that there is likely to be significant upwards pricing pressure as a result of the Merger in the absence of efficiencies.

CMA's Merger Simulation

8.328 As set out in Appendix D, we have undertaken a merger simulation based on our econometric model to analyse the impact of the Merger on prices. When interpreting these results, it is important to note the limitations and caveats of the demand model apply as set out in Appendix D. Further, the merger simulation model also depends on assumptions of how competition works in the market. Here we use a standard assumption that the market follows static, multiproduct differentiated price competition.

8.329 As shown in Table 8.38, the model predicts that the Merged Entity would raise the prices of 3UK's tariffs by 5.5% on average and VUK's tariffs by 2.6%. This translates into an annual price increase of £8.20 for the average 3UK customer and £5.36 for the average VUK customer. Rivals would respond to the Merged Entity raising prices by also raising prices. BTEE and VMO2 would increase prices by 0.6% and 0.4% respectively. Other providers such as Tesco Mobile and MVNOs would also raise prices.

Table 8.38: Merger simulation results from the CMA's subscriber demand model for MNOs

	Price change post-Merger (%)	*Estimated change in market share (percentage points)**
3UK	5.5%	-1.8pp
VFUK	2.6%	-1.3pp
BTEE	0.6%	+0.8pp
VMO2	0.4%	+0.9pp
Change in consumer welfare		-1.4%

Source: CMA analysis based on the CMA's estimated subscriber demand model for SIMO tariffs

8.330 In addition to considering the pricing impacts of the Merger we have estimated the impact of the Merger on consumer welfare. Table 8.38 reports that the Merger would lead to a 1.4% decrease in consumer welfare. We have calculated that this translates into an average annual reduction in the welfare of each subscriber of £2.41 (in 2023 GBP's). If we assume that the model's results hold for the whole consumer retail market (not just the SIMO segment on which the model is estimated) this would imply a loss of welfare for UK consumers of approximately

[717] Contribution margins measure revenues less variable costs (costs which vary by sales volumes) for all consumer retail subscribers. In contrast, the shorter-term margins used above only consider the revenues and variable costs associated with a subset of customers. Acquisition margins capture revenue and variable costs for new ('gross adds') subscribers over the average length of new customers' first contract, whereas the econometric margins are based on a sample of contestable customers (ie those who have just chosen a new contract or are out of contract). For more detail see Appendices D and E.

£216 million a year (in 2023 GBP's) resulting from the Merger excluding consideration of any cost efficiencies, product repositioning or network quality changes.[718]

8.331 An important input to the merger simulation is our estimated model of subscriber demand which allows for variation in valuations of tariffs by location, income and age. As such, we have also been able to consider how the change in welfare impacts different types of subscribers.

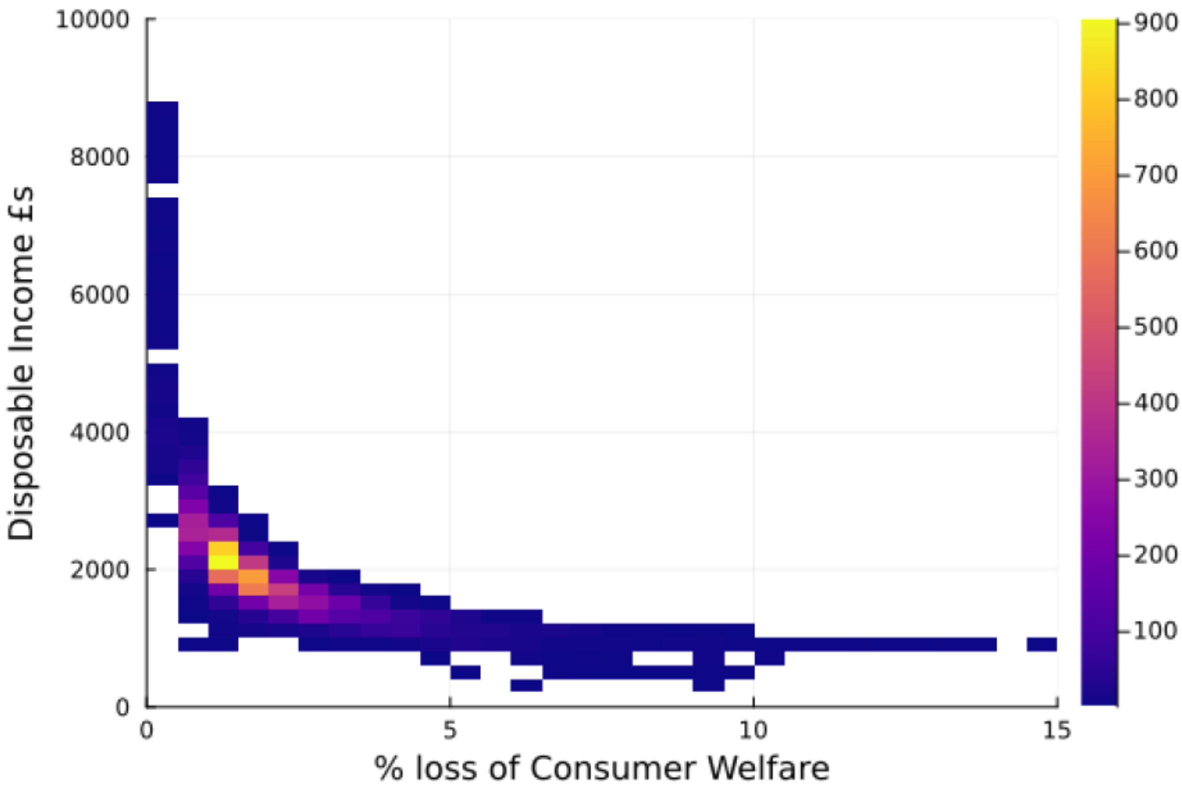
8.332 Figure 8.18 shows the estimated consumer welfare changes for different income groups. The Figure is a 2D histogram where the lighter colours indicate a higher number of consumers at a given point. The Figure shows a larger percentage fall in the welfare of subscribers with lower incomes.[719] This is driven by the fact that:

(a) in the estimated model lower income consumers are more price sensitive so dislike higher prices more and are more likely to switch to less desirable products post-Merger than higher income consumers; and

(b) in the sample there is a higher proportion of low-income consumers who subscribe to 3UK and thus face larger price rises.[720]

[718] This number multiplies the per subscriber consumer welfare change in the model by the number of subscribers in the UK retail market.
[719] In the Parties' response to Provisional Findings, they argue that this is largely driven by assumptions imposed on the model, Parties' response to the Provisional Findings, 4 October 2024, Annex 4 paragraph 3.52). This is incorrect. The model is able to estimate alternative the relationships between income and price sensitivity.
[720] In the 10k sample of subscribers used in these results subscribers of tariffs under the Three brand have a median monthly income of £[✂] which is only higher than other MNOs in the sample.

Figure 8.18: Impact on consumer welfare by subscribers' monthly disposable incomes



Source: CMA analysis based on the CMA's estimated subscriber demand model for SIMO tariffs

8.333 As set out above, we consider that the value of a customer may vary over their tenure and the relatively short-term margins used in our econometrics model may underestimate the longer-term value of winning a customer.

8.334 We also used an alternative methodology to compute the annual cost to UK consumers under alternative modelling assumptions and using different inputs (see Appendix D, for details). As part of this we have considered the impact of using contribution margins (as in the GUPPI analysis). This suggests an average price increase of 7.9% for the Merged Entity which translates into a far larger estimate of harm to UK consumers.

Overall assessment of our pricing analysis

8.335 We consider that our analysis, using a range of economic techniques, shows that the Merger is likely to have a material impact on retail prices.

(a) Our Merger Simulation suggests that, as a lower bound, the Merged Entity would raise the prices of 3UK's tariffs by 5.5% on average and VUK's tariffs by 2.6%. BTEE and VMO2 would also increase their prices by 0.6% and 0.4% respectively on average. We have found that this would imply an annual loss in welfare to UK consumers of approximately £216 million a year (in 2023 GBPs). We have further found that those consumers on the lowest incomes would see the greatest fall in their welfare.

(b) We note that the margins used in the Merger Simulation more closely reflect short-term margins and so may underestimate the impact of the Merger. Alternative analysis suggests that using a longer-term margin would result in price increases of 7.9% on average for the Merged Entity and the cost to UK consumers could therefore be significantly larger than the £216 million a year (in 2023 GBPs) reported above.[721]

(c) These results are consistent with our survey-based GUPPIs analysis which suggests that the Merger would lead to pricing pressure of between [5-10]% and [10-20]% for 3UK and between [5-10]% and [5-10]% for VUK.

(d) We further consider that these estimates are underestimates as they do not take account of the impact of the Merger on the competitiveness of MVNOs through weakened wholesale competition or that post-Merger pricing will account for the fact that in the event of a price increase certain MVNO sales (on the other Party's network) will now be recaptured post-Merger.

8.336 We consider that these price increases are significant as the Parties collectively have over 27 million subscriptions which would be directly affected by any price rises. We also note that an increase in prices would likely impact the whole retail market which in 2023 comprised almost 90 million mobile subscriptions, and generated £13.7 billion in revenues.

Parties' Merger Simulations

8.337 The Parties submitted two merger simulations to model the impact of the Merger on consumers. According to both of these models, excluding consideration of any efficiencies, the Merger would lead to increases in price.

(a) According to the quality focused model by Compass Lexecon, in the absence of efficiencies:

(i) On Day 0 of the Merger – the Merged Entity's average prices would be [✂]% higher, BTEE and VMO2's prices would be [✂]% lower and market prices would be [✂]% higher. Consumer welfare would be [✂]% lower.

(ii) In 2030 – the Merged Entity's prices would be [✂]% higher, BTEE and VMO2's prices would be unchanged and market prices would be [✂]% higher. Consumer welfare would be [✂]% lower.

[721] Row 5, Table D.10, Appendix D.

(b) According to the capacity focused model by Frontier Economics, in the absence of efficiencies, the Merged Entity's nominal prices would be [✂]% higher. BTEE and VMO2's prices would each be [✂]% higher. Market prices would be [✂]% higher.

8.338 The Parties submit that the models show that efficiencies are sufficient to offset any upwards pricing pressure. In particular they state that:

(a) The quality-focused model by Compass Lexecon predicts an average (ie market-wide) reduction in quality-adjusted prices of 15.4% when accounting for cost and quality efficiencies. The Parties state that this corresponds to a market-wide welfare gain of £1.8 billion per year.

(b) The capacity-focused model by Frontier Economics is consistent with this finding and predicts an average reduction in market-wide prices of -0.3%, when accounting for the congestion 'cost' felt by customers.

8.339 However, as explained in Appendix F:

(a) We have significant, wide-ranging concerns about the quality focused model developed by Compass Lexecon. We find that that the Parties' consumer choice survey falls short of requirements set out in the CMA's Survey Good Practice. As such, we have concerns about the survey-based approach used to be able to generate accurate willingness to pay estimates. Further we do not consider that the Parties' calibrated demand model is able to credibly capture real world consumer behaviour. Given these concerns, we do not place weight on any merger simulations that rely on them as key inputs. We further consider that the network quality improvements resulting from the Merger are imposed on the model rather than derived from it and would likely be less extensive in reality.

(b) In principle, the capacity-focused model by Frontier Economics provides a coherent but overly restrictive framework within which to understand the complex set of incentives faced by operators when they simultaneously choose both price and network capacity over the long-term. However, given the restrictive nature of the model and the stylised calibration approach, we do not believe that the Parties' capacity-focused model is well suited to extrapolate and predict actual firm behaviour or the impact of the Merger on consumer welfare.

Conclusion on the quantitative evidence on the impact of the Merger on prices

8.340 Our conclusion is therefore that the quantitative evidence shows that, in the absence of efficiencies, the Merger is likely to lead to a material increase in prices and decrease in consumer welfare. The evidence suggests that those consumers on the lowest incomes would see the greatest fall in their welfare.

Conclusion on horizontal unilateral effects in the supply of retail mobile services

8.341 For the reasons set out above, our conclusion in relation to this theory of harm is that the Merged Entity – and its competitors – are likely to have incentives to raise prices or degrade non-price aspects of their offerings (including by reducing network investment). This is because:

(a) Firstly, the Merger would remove the constraint between 3UK and VUK. We consider that the Parties compete closely with each other across the consumer segment and the SoHo business subsegment. This means that it will be less costly for the Merged Entity to raise prices/lower quality as customers who would have been lost to the other Party (and, to a lesser extent, MVNOs operating on the other Party's network) before the Merger, may be recaptured by the Merged Entity post-Merger.

(b) Secondly, we consider that the Parties, and in particular 3UK, also have strong incentives to be competitive on prices and innovate to increase their customer bases. The Merged Entity would have a significantly larger customer base compared to each Party, and in particular 3UK, on a standalone basis, and therefore may have weaker competitive incentives.

8.342 We also conclude that the other MNOs are close competitors to the Parties but there is also some evidence to suggest that both BTEE and VMO2 compete less aggressively than the Parties in some respects. Some independent MVNOs currently exercise some constraint on the Parties, namely Sky Mobile and, especially in the value segment, Lebara and iD Mobile. However, the constraint from MVNOs is limited because they are dependent on the wholesale terms that they receive from the MNOs and, to a large extent, cannot compete on network quality. As a result, MVNOs tend to focus on particular segments (with no or little presence in other segments).

8.343 We further conclude that the remaining competitive constraints the Merged Entity would face may be further reduced as a result of the Merger. This is because:

(a) the other MNOs may respond to a price rise by the Merged Entity by also increasing their own prices, which in turn could have some positive feedback on the Merged Entity's prices and therefore magnify the effect of the Merger on price (which is the most important parameter of competition) in the market; and

(b) the Merger may lead to the constraint from MVNOs being reduced due to the impact of the reduction in competition in the supply of wholesale mobile services.

8.344 Our quantitative analysis shows that, in the absence of efficiencies, the Merger is likely to lead to an increase in prices and decrease in consumer welfare. The evidence suggests that the decrease in welfare could be greatest for those on the lowest incomes.

8.345 Therefore, before consideration of any potential countervailing factors (which are discussed in later chapters of this report), we conclude that there is scope for an SLC as a result of the Merger due to horizontal unilateral effects in the supply of retail mobile services in the UK.

9. TOH2: HORIZONTAL UNILATERAL EFFECTS IN THE SUPPLY OF WHOLESALE MOBILE SERVICES

Introduction

9.1 This Chapter sets out our assessment of the impact of the Merger on the supply of wholesale mobile services in the UK.

9.2 Theories of harm describe the possible ways in which an SLC may be expected to result from a merger and provide the framework for analysis of the competitive effects of a merger.

9.3 One of the theories of harm that we have considered is horizontal unilateral effects in the supply of wholesale mobile services in the UK.

9.4 Horizontal unilateral effects can arise where one firm merges with a competitor that previously provided a competitive constraint, allowing the merged entity profitably to raise prices or degrade non-price aspects of its competitive offering (such as quality, range, service or innovation).

9.5 In order to assess this theory of harm, we have considered the extent of competition that currently exists in the supply of wholesale mobile services. This is because, in considering whether a lessening of competition resulting from a merger is substantial, we may take into account whether there is only limited competition in the market to begin with.[722]

9.6 The concern under horizontal unilateral effects essentially relates to the elimination of a competitive constraint by removing an alternative to which customers could switch. In differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors or where their products are close substitutes. We have therefore considered the extent to which the Parties are close competitors.

9.7 We do not need to find that the Parties are each other's closest competitors for unilateral effects to arise.[723] In particular, where we find evidence that competition mainly takes place among few firms, any two of them would normally be sufficiently close competitors, such that the elimination of competition between them would raise competition concerns, subject to evidence to the contrary.[724]

9.8 We have also considered whether there will be sufficient remaining good alternatives to constrain the Merged Entity post-Merger.[725] Where there are few

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[722] CMA129, paragraph 2.9.
[723] CMA129, paragraph 4.8.
[724] CMA129, paragraph 4.10.
[725] CMA129, paragraph 4.3.

existing suppliers, the merger firms enjoy a strong position or exert a strong constraint on each other, or the remaining constraints on the merger firms are weak, competition concerns are likely.[726]

9.9 Finally, we have considered the impact of the Merger on alternative constraints, namely:

(a) the extent to which the Merged Entity may have the ability and incentive post-Merger to disrupt the effective functioning of the MBNL network sharing agreement and whether this could have the effect of limiting the constraint exerted by BTEE in the wholesale market, and

(b) the impact of the Merger on the Beacon network sharing arrangements and whether this could affect the constraint exerted by VMO2 post-Merger in the wholesale market.

9.10 In this Chapter we have therefore considered:

(a) the extent of existing competition in the supply of wholesale mobile services;

(b) the extent to which the Parties are close competitors, ie whether they act as a competitive constraint on one another; and

(c) the alternative competitive constraints the Merged Entity would face following the Merger from other MNOs.

9.11 We have considered the effect of any potential efficiencies in Chapter 14, Rivalry-Enhancing Efficiencies.

9.12 This chapter is structured as follows:

(a) Market context.

(b) The Parties' main submissions.

(c) Our assessment of:

(i) market shares;

(ii) MVNO opportunity data;

(iii) competitive dynamics in recent large MVNO opportunities;

(iv) the level of existing competition for the supply of wholesale mobile services;

[726] CMA129, paragraph 4.3.

(v) MNOs’ competitive incentives and strategies; and

(vi) other third party submissions.

(d) Our conclusion.

Market context

9.13 Before setting out our assessment of the evidence, we provide an overview of the competitive process in the wholesale market and the parameters over which MNOs compete.

The competitive process

9.14 Access agreements for MVNOs, MVNEs and MVNAs[727] can be negotiated through formal tender processes or informal negotiations:

(a) Formal tender process: an MVNO issues a formal request for bids from MNOs. Once bids have been received, the MVNO typically identifies a subset of bidders it wants to engage with in more in-depth negotiations. There may be multiple rounds of bidding and negotiations. Based on data submitted by the Parties for the period Q1 2020 to Q1 2024, no more than [10-20]% of MVNO opportunities were formal.[728]

(b) Informal negotiations: based on data submitted by the Parties for the period Q1 2020 to Q1 2024, informal negotiations made up at least [80-90]% of MVNO opportunities.[729]

9.15 Formal tender processes are more likely to be used by larger MVNOs than smaller MVNOs. Of the five largest MVNO opportunities during this period, as set out in Table 9.4 below, [✂] involved formal tender processes or involved a process that was regarded as formal by MNOs (Sky Mobile [✂]) ([✂]%). In contrast, based on data submitted by the Parties for the period Q1 2020 to Q1 2024, just over [5-10]% of opportunities involving smaller MVNOs and new entrants involved formal tender processes.[730]

[727] MVNEs and MVNAs comprise a relatively small proportion of the supply of wholesale mobile services based on the number of opportunities submitted by the Parties.
[728] Based on the Parties’ data, excludes non-MVNOs. Includes opportunities where the Parties were aware of the nature of the process (ie formal or informal). Formal opportunities made up [✂]% ([✂]) of opportunities for VUK and [✂]% ([✂]) of opportunities for 3UK. See Vodafone response to the CMA’s s109 notice; and Vodafone response to the CMA’s s109 notice.
[729] Based on the Parties’ data, excludes non-MVNOs. Includes opportunities where the Parties were aware of the nature of the process (ie formal or informal). Informal opportunities made up [✂]% ([✂]) of opportunities for VUK and [✂]% ([✂]) of opportunities for 3UK. See Vodafone response to the CMA’s s109 notice; and Vodafone response to the CMA’s s109 notice.
[730] Includes opportunities where the Parties were aware of the nature of the process (ie formal or informal). Formal opportunities for small MVNOs and new entrants made up [✂]% ([✂]) of opportunities for VUK and [✂]% ([✂]) of

9.16 VMO2 told us that MVNOs rarely engage MNOs through formal tender processes. Instead MVNO terms are determined on a case-by-case basis through bilateral negotiation between the parties.[731]

9.17 MVNOs also engage with MNOs on possible contract extensions or renegotiations during the contract term. Sky Mobile submitted that these negotiations, which may take the form of informal discussions, are an important part of the competitive process before and during contract renewals.[732]

9.18 The Parties and third parties submitted that there is limited transparency over which MNOs are bidding or discussing a potential opportunity with an MVNO, or the terms offered:

(a) the Parties submitted that this allows MVNOs to increase uncertainty and extract better terms.[733]

(b) in the Main Party Hearing VUK noted that 'it's not a visible process. So I might be told, which is the case, that everybody else is participating. But I have no idea. So we always operate under the assumption that it is a competitive process.'[734]

(c) VMO2 told us that it typically does not know which other MNOs may also be engaged in any bidding process but assumes that all MNOs will have similar strategies and therefore that all MNOs will bid for any MVNO that is, or is likely to be, significantly successful in the UK mobile market.[735]

(d) An MVNO submitted that 'the uncertainty caused by the fact that other MNOs will be unaware of whether a particular competing MNO elects to accept an invitation to participate in a tender and (if so) the terms of its proposal, helps to ensure that the other MNOs which do participate are appropriately incentivised to submit proposals that are as competitive as possible'.[736]

9.19 However, there is some suggestion in the Parties' internal documents that it is possible to reverse engineer a rough estimate of agreed wholesale supply terms based on publicly available information on an MVNO's retail prices and published financial information.[737]

opportunities for 3UK. See Vodafone response to the CMA's s109 notice; and Vodafone response to the CMA's s109 notice.

731 VMO2 response to the CMA's RFI.

732 Sky Mobile, submission.

733 Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 6.1.

734 Vodafone Main Party Hearing transcript.

735 VMO2 response to the CMA's RFI.

736 [✂], response to the parties initial submission, 19 July 2024, paragraph 2.4.

737 CK Hutchison internal document.

9.20 Further, there seems to be some transparency over:

(a) which other MNOs may be participating in tenders: in around [10-20]% ([✂]) of MVNO opportunities in the data submitted by the Parties for the period Q1 2020 to Q1 2024, VUK and 3UK were aware of the other participants.[738]

(b) when MVNOs are due to come off contract and re-tender: both VUK and 3UK's internal documents suggest that the MNOs are aware of MNOs' larger MVNO customers and will make assumptions of when their contracts are up for renewal/due to expire.[739]

9.21 Based on the evidence above, we consider overall that there is limited transparency in the wholesale market. In particular, there is limited transparency over which MNOs are bidding and the terms offered, which increases the incentive of the MNOs which do participate to submit competitive offers.

Parameters of competition at the wholesale level

9.22 We understand that both price and network quality are important to MVNOs, although there may be some differences between MVNOs in the relative importance that they attach to these. This is supported by the views of MVNOs and MNOs:

(a) six out of 13 MVNOs (including three large MVNOs) stated that price was the most important factor when selecting an MVNO host.[740]

(b) five out of 13 MVNOs (including two large MVNOs) stated that network quality (including equal access to the network and latest technologies for retail customers of the MVNOs as for the MNO's retail customers) was the most important factor.[741]

(c) one out of 13 MVNOs stated that strategic fit was the most important factor.[742]

(d) one out of 13 MVNOs stated that technical ability to service was the most important factor.[743]

(e) [✂] told us that 'an MVNO's assessment is to a large extent based on commercials, network performance and how the MNO can service them. [✂] endeavours to evidence how it can be the best partner for the MVNO

[738] [✂].
[739] For example, Vodafone internal documents. VUK notes in its [✂] that the '[✂]'. For example, CK Hutchison internal document show existing MVNOs on other MNO's network and the assumed date of contract expiry.
[740] Responses to the CMA's questionnaire from: [✂], [✂], [✂], [✂], [✂] and [✂].
[741] Responses to the CMA's questionnaire from: [✂], [✂], [✂], [✂] [✂].
[742] [✂] response to the CMA's questionnaire.
[743] [✂] response to the CMA's questionnaire.

business. The bigger MVNOs [✂], whereas the smaller MVNOs tend to [✂].[744]

(f) BTEE told us that MVNOs want equal access to the mobile network as the MNO's retail customers and that MVNOs playing in different market segments have different requirements.[745]

(g) In comparing the MNOs' strengths and weaknesses in its internal documents, BTEE benchmarks MNOs against a range of criteria including wholesale strategy, market sentiment, price, mobile network leadership, convergence and MVNO capability.[746]

(h) We also set out in the section 'Competitive dynamics in MVNO opportunities' from paragraph 9.63 the views of some of the largest MVNOs, which suggest that both price and network quality are important to MVNOs. For example, during the Sky Mobile opportunity, MNOs were assessed against criteria including [✂].[747]

9.23 MVNOs told us that wholesale network quality is important because it forms part of the retail customer proposition and that it can include a range of dimensions:

(a) one large MVNO submitted that network quality is important because 'network quality perceptions affect brand perceptions'.[748]

(b) one large MVNO submitted that when it carried out renewal negotiations, a key factor in choosing a supplier going forward would be the ability to secure ongoing access to the latest mobile technologies as they were introduced.[749]

(c) one large MVNO stated that the aspects of network quality it considers are '4G and 5G coverage, voice quality, and throughput (ie speed) of data in Mb/s'.[750]

(d) another [✂] MVNO stated that it has 'a focus on strong network access and coverage'.[751]

9.24 One MVNO told us that while price and network quality are also key, ultimately the most important factor in determining whether it switches provider will be proposition and service to the customer. This included having a contact centre,

744 [✂] call note.
745 BTEE call note.
746 BTEE internal document.
747 Sky Mobile internal document.
748 [✂] call note.
749 [✂] response to the CMA's RFI.
750 [✂] call note.
751 [✂] call note.

and the ability of the MNO to support the MVNO doing the right thing for vulnerable customers.[752]

Parties' main submissions

9.25 In relation to 3UK, the Parties submitted that:

(a) the characterisation of 3UK as playing an important role in the wholesale market cannot credibly be supported in light of the evidence before the CMA. The reality is that 3UK [✂].[753]

(b) MVNOs' actions speak more tellingly and convincingly of their real views and motivations than any remarks they may have made to the CMA during its merger investigation. It is not plausible that MVNOs consider 3UK [✂].[754]

(c) 3UK is [✂] on network quality and this has not been redeemed [✂].[755]

(d) MVNOs have provided extensive feedback to 3UK that [✂]. For example, in the context of the Sky Mobile opportunity, Sky Mobile made clear to 3UK that [✂].[756]

(e) 3UK's track record in tenders and reputation for poor network quality means that it is [✂].[757]

(f) The view than 3UK has ambitions to grow its market share in the wholesale market disregards [✂]. It has [✂].[758]

9.26 In relation to VUK, the Parties submitted that VUK [✂].[759]

9.27 The Parties submitted that they are not close competitors, as demonstrated by:

(a) the limited overlap in MVNO opportunities and by internal documents.[760]

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752 [✂] call note.
753 Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; CK Hutchison internal document; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 3.1.
754 Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 3.4 and 3.11.
755 Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 3.10.
756 Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 3.5.
757 Annex 2 to the Parties' response to the AIS and working papers.
758 Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 3.26-3.27.
759 Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.17.
760 Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 1.7(b) and 4.1.

(b) the fact that in the 2020/21 Sky Mobile opportunity both 3UK and VUK lost on [✂].[761]

9.28 In relation to alternative competitive constraints, the Parties submitted that the wholesale market is currently dominated by BTEE, which has won almost all recent tenders, and VMO2, which hosts the largest MVNOs but whose ability to compete will be increasingly hampered by a lack of capacity.[762]

9.29 The Parties submitted that the Merger will have a pro-competitive effect on the wholesale market given:

(a) 3UK is not (and will not be) a credible player in the wholesale market.[763]

(b) the Joint Network Plan will deploy standalone 5G across the nation, giving the Merged Entity a greater ability to offer network capacity to MVNOs, and a greater incentive to monetise spare capacity by competing for more wholesale traffic. This, in turn, will provoke a competitive response from both BTEE, which already has the means to do so, and VMO2, whose ability to invest and compete will also be enhanced by the Beacon 4.1 Agreement which has been reached with the Parties.[764]

(c) MVNOs on the Merged Entity and VMO2's network will benefit from a more attractive offering.[765]

9.30 The Parties submitted that the CMA does not present any compelling evidence to demonstrate that MNOs, in particular larger MNOs, may have less incentive to compete aggressively due to concerns about cannibalisation (where cannibalisation refers to the switching of end-customers from the MNO to the MVNO). [766]

9.31 In relation to barriers to switching from one MNO to another, the Parties submitted that:[767]

(a) any barriers to switching are not significant;

[761] Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 5.6.
[762] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 2.3.
[763] Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 2.30.
[764] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 2.16 and 2.18.
[765] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 2.21-2.22 and 2.24.
[766] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 1.9.
[767] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 1.10.

(b) advancements in technology such as eSIMs and over-the-air switches have reduced the barriers to switching for light MVNOs and will continue to do so; and

(c) the ability to switch MNO host provides a significant competitive constraint on all MNOs and will continue to exist to constrain the Merged Entity post-Merger.

9.32 The Parties submitted that the bargaining power of MVNOs has increased significantly over the years as evidenced by the increase in their market share and larger customer bases, which continue to grow, and the commercially advantageous terms secured at the wholesale level.[768] This is expected to increase post-Merger in light of their anticipated growth in the retail market and technological advancements (such as eSIMs).[769]

Our assessment

9.33 Below we set out our assessment of:

(a) market shares;

(b) MVNO opportunity data;

(c) competitive dynamics in recent large MVNO opportunities;

(d) level of existing competition for the supply of wholesale mobile services;

(e) MNOs' competitive incentives and strategies; and

(f) other third party submissions.

Market shares

9.34 The (pre-Merger) market is comprised of only four MNOs meaning that at most four MNOs compete for any given wholesale opportunity.

9.35 We have estimated market shares based on MVNO subscriber and revenue data submitted by the Parties and the other two MNOs.

9.36 Tesco Mobile is a 50/50 JV between VMO2 and Tesco. The JV was recently renewed for a further 10 years,[770] and as such Tesco Mobile is not currently a

[768] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 1.3 and 7.1.
[769] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2, paragraph 1.10.
[770] Virgin Media O2 and Tesco agree 10-year renewal of Tesco Mobile joint venture - Virgin Media O2, accessed by the CMA on 11 June 2024.

potential wholesale customer for other MNOs. However, we consider that upon expiration of the JV, Tesco Mobile will be a contestable wholesale customer. There is also an opportunity for VMO2 and Tesco to revisit the agreement in [✂], at which point Tesco has the option of exiting the joint venture [✂] (see further paragraph 9.74).[771] This is [✂] to the contract length of other MVNOs, as set out in paragraph 9.46.

9.37 Tesco told us that before renewing the JV agreement with VMO2 it conducted an internal high-level review of the market to assess appetite from other MNOs, but did not run a formal tender or evaluate wholesale offers.[772] VMO2's internal documents from the period before the recent JV renewal state that Tesco '[✂]'.[773]

9.38 We therefore include Tesco Mobile in our assessment of market shares. However, we note that although Tesco Mobile will in principle become contestable, we consider that the switching costs and therefore incumbency advantage for VMO2 are likely to be greater for Tesco than for other MVNOs given the deep integration that Tesco Mobile has with VMO2's network due to the JV structure, also mentioned at paragraph 9.72. Tesco told us that although there is an opportunity for VMO2 and Tesco to revisit the agreement in [✂], it would be very difficult and complicated to do so in reality.[774]

Table 9.1: Market shares for supply of wholesale mobile services in the UK, subscribers and revenue, 2020-2023

%

MNOs	*Subscribers*				*Revenue*	
	2020	*2021*	*2022*	*2023*	*2022*	*2023*
VUK	[5-10]	[10-20]	[10-20]	[10-20]	[20-30]	[10-20]
3UK	[5-10]	[5-10]	[10-20]	[10-20]	[5-10]	[10-20]
Parties Combined	**[10-20]**	**[20-30]**	**[20-30]**	**[20-30]**	**[30-40]**	**[20-30]**
VMO2	[50-60]	[50-60]	[70-80]	[50-60]	[60-70]	[60-70]
BTEE	[20-30]	[10-20]	[0-5]	[10-20]	[5-10]	[10-20]
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: CMA analysis of data submitted by the Parties and other MNOs.
Note: We combine data received from the Parties and other MNOs to calculate market share by subscribers and market share by revenue for each MNO. Due to data availability, revenue figures are only presented from 2022 onwards.

771 Tesco Mobile call note.
772 Tesco Mobile call note.
773 VMO2 response to the CMA's RFI.
774 Tesco Mobile call note

Table 9.2: Market shares for supply of wholesale mobile services in the UK, number of MVNOs, 2020-2023

MNOs				*% of MVNOs (number of MVNOs)*
	2020	*2021*	*2022*	*2023*
VUK	[5-10] ([✂])	[20-30] ([✂])	[20-30] ([✂])	[10-20] ([✂])
3UK	[5-10] ([✂])	[10-20] ([✂])	[10-20] ([✂])	[10-20] ([✂])
Parties Combined	**[10-20] ([✂])**	**[30-40] ([✂])**	**[20-30] ([✂])**	**[20-30] ([✂])**
VMO2	[20-30] ([✂])	[20-30] ([✂])	[20-30] ([✂])	[10-20] ([✂])
BTEE	[50-60] ([✂])	[40-50] ([✂])	[40-50] ([✂])	[60-70] ([✂])
Total	100 ([✂])	100 ([✂])	100 ([✂])	100 ([✂])

Source: CMA analysis of data submitted by the Parties and other MNOs.
Note: We count the number of MVNOs with subscribers on each MNO's network as at December of each year.

9.39 Although there has been some variation in market shares over the period 2020-2023, we consider that the data shows that all four MNOs have historically been successful in winning MVNO opportunities.

9.40 The Merger would reduce the number of suppliers of wholesale mobile services in the UK from four to three. The Merged Entity would have a market share by subscribers of [20-30]% with an increment of [10-20]% and a market share by revenue of [20-30]% with an increment of [10-20]%.

9.41 BTEE hosted the highest number of MVNOs ([✂]) out of all the MNOs in 2023. However, it had the [✂] market share by subscribers and [✂] market share by revenue in 2023. This is consistent with BTEE being particularly successful in winning smaller MVNO opportunities. VMO2 and VUK both hosted [✂] MVNOs. However, VMO2 had the highest market share by both subscribers and revenue in 2023. This is because VMO2 hosts both Sky Mobile and Tesco Mobile, two of the largest MVNOs. 3UK hosted [✂] MVNOs on its network in 2023, including one large MVNO (iD Mobile), [✂].

9.42 The Parties submitted that:

(a) shares of supply provide limited insight into the extent of competition in the wholesale market.[775]

(b) the Parties' current wholesale shares are almost entirely attributable to one MVNO each: iD Mobile and Lebara. These are not recent opportunities that show the effectiveness of 3UK or VUK as current or future competitors.[776]

[775] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.3.
[776] Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.4.

Our assessment of the market shares

9.43 Measures of concentration such as market shares can be useful evidence when assessing closeness of competition.[777]

9.44 However, the extent and speed at which MNOs can grow their market share depends on a number of factors including:

(a) the nature of wholesale contracts (including duration and the size of the MVNO's customer base);

(b) the number of MVNOs switching (driven by factors including incumbency advantage) and entering the market; and

(c) the growth of MVNOs (ie the extent to which MVNOs grow their customer base over time).

9.45 We consider each of these factors in more detail below.

9.46 The wholesale market is characterised by a limited number of large contracts and a long tail of smaller contracts for existing MVNOs and new entrants. This is recognised in VUK's internal documents which state that the '[✂]'.[778] This means that the award of a single contract by a large MVNO can lead to large changes in market shares. As stated by the Parties,[779] one MVNO accounts for a large proportion of each Party's total wholesale share ([✂]% for VUK[780] and [✂]% for 3UK[781] by customers in Q1 2024). However, reflecting the nature of the market, the situation is similar for the other MNOs – nearly [✂]% of VMO2's wholesale share (by subscribers) is accounted for by two large MVNOs,[782] and even though BTEE hosts a larger number of smaller MVNOs, [✂]% of its wholesale share (by subscribers) is accounted for by one large MVNO[783] and [✂]% is accounted for by two large MVNOs.[784]

(a) Based on the Parties' existing contracts with MVNOs, contract lengths vary between [✂] for VUK[785] and between [✂] for 3UK.[786] As recognised by VUK in its internal documents '[✂]'.[787]

(a) Based on evidence collected from the Parties and MVNOs, in the next two years, contracts for MVNOs serving [20-30]% of the subscribers on

[777] CMA129, paragraph 4.14.
[778] Vodafone internal document.
[779] Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.4.
[780] CMA analysis based on Parties and third party data, Lebara.
[781] CMA analysis based on Parties and third party data, iD Mobile.
[782] CMA analysis based on Parties and third party data, Tesco Mobile and Sky Mobile.
[783] CMA analysis based on Parties and third party data, Lyca Mobile.
[784] CMA analysis based on Parties and third party data, Lyca Mobile and Utility Warehouse.
[785] Vodafone internal document. Noting that [✂].
[786] CK Hutchison internal document. Noting this [✂].
[787] Vodafone internal document.

MVNOs[788] will be subject to re-negotiation. This means that opportunities for MNOs to grow their market share by winning an MVNO from another MNO are infrequent, but there is the possibility of MNOs increasing their market share in the next two years.

9.47 However, this is a market with limited switching. Lyca Mobile was the only large MVNO (out of the five largest MVNOs that engaged in negotiations during 2020-2024) that switched MNO (in 2023). The other large MVNOs (Tesco Mobile, Sky Mobile, [✂]) were retained by their host MNOs. Data provided to us on all MVNO contracts held by the MNOs shows that no smaller MVNOs have switched provider in the last three years.[789] This suggests that MNOs have an incumbency advantage and there are barriers to switching (see paragraphs 9.249 to 9.257).

9.48 In principle, MNOs can grow their market share by attracting new entrants, which then grow in size while on the host's network. However, we consider that this is a difficult way of growing wholesale market share. While150 MVNOs launched in the UK in the ten years before 2021,[790] we understand that there are currently [20-30] MVNOs active in the retail market (including some that have not yet launched their services to retail customers).[791] Sky Mobile and Lebara have experienced some rapid growth, but these are the only two independent MVNOs with a market share greater than [0-5]% by subscribers (Sky Mobile at [0-5]%, and Lebara at [0-5]%).[792] Some MVNOs have struggled, despite being able to cross-sell to existing customers of the parent company:

(a) TalkTalk stopped acquiring new mobile customers from 2017 and now has a retail market share of [0-5]% of subscribers, despite having the ability to cross-sell to its fixed line customer base. [✂].[793]

(b) Asda Mobile has only grown its retail market share to [0-5]% of subscribers since its launch in 2007 despite its ability to leverage its brand. Asda Mobile told us that prior to March 2024, it only operated in the pre-pay market which has been contracting over the years. Its pay monthly service is in its very early stages with a low number of customers.[794]

9.49 For the smallest MVNOs, we have data on their collective performance since March 2019. During that period their combined share has varied between [5-10]% and [5-10]% of all the subscribers on MVNOs, but there is no overall growth trend.

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788 Based on CMA analysis, retail shares of supply by subscribers of the MVNO market only.
789 CMA analysis of data provided by 3UK, VUK, VMO2 and BTEE of all MVNO contracts held 2022-present. We do not have detailed data across all smaller MVNOs in the market for a longer time period to be able to confirm the degree of switching prior to 2022.
790 As highlighted in Annex 2 to the Parties' response to the AIS and working papers, sourced originally from CMA analysis in 2021: Liberty Global and Telefonica Final Report, accessed by the CMA 10 November 2024.
791 CMA analysis of data provided by 3UK, VUK, VMO2 and BTEE of all MVNO contracts held 2022-present. There are an additional [10-20] MVNOs which are Internet of Things providers, which are excluded.
792 Based on CMA analysis of retail market shares data provided by the Parties and third parties.
793 [✂] call note.
794 Asda Mobile call note.

From 2022 to the present, we have information on the subscriber numbers of all MVNOs, and no new entrant or small MVNO has managed to grow beyond [✂] subscribers – well below Asda's subscriber base, which as noted above equates only to a [0-5]% market share.

9.50 We consider that where a market is characterised by incumbency advantage and barriers to entry, a small number of large, long-term contracts, and scarcity of successful MVNO entry, market shares may not fully reflect the degree of competitive constraint which rivals impose on one another. We consider that the Parties' material market shares suggest that they both exert some competitive constraint. However, we have considered this evidence in the round with other evidence, and consider that the assessment of competition between the MNOs during recent opportunities, as detailed below from paragraph 9.63, is more informative in this market as to the competitive strength and the closeness of the MNOs.

MVNO opportunity data

9.51 Data on past competitive interactions can be informative of conditions of competition.[795] Evidence of VUK and 3UK participating in the same opportunities, for example, may indicate that VUK and 3UK compete closely.

9.52 We have used opportunity data covering the period Q1 2020 to Q1 2024 (inclusive) in our analysis, to reflect recent competitive conditions. Although we have focused only on opportunities within this period, given the data is necessarily backward-looking it may still not be reflective of the MNOs' future position in the supply of wholesale mobile services. We are therefore considering this evidence in the round with the other evidence we have collected (for example, third party views) to inform our assessment of the Parties' and the other MNOs' future competitive position.

9.53 We consider that the data submitted by the Parties and the other MNOs has the following limitations:

(a) It may not include all opportunities that took place during the relevant period.

(b) It may incorrectly identify some opportunities as competitive.

(c) 'Participation' may be defined inconsistently (for example, some MNOs may have counted initial discussions as participation while other MNOs may have only counted submitting an offer as participation).

9.54 As set out in paragraph 9.61 below, we have placed more weight on the experience of large MVNOs given their relative competitive importance as

[795] CMA129, paragraph 4.13.

customers of wholesale mobile services. However, we consider the market-level opportunity data provides a useful starting point for assessing competition between MNOs (notwithstanding the limitations).

9.55 Using the data submitted by the Parties and the other MNOs, we considered:

(a) the percentage of MVNO opportunities that each was invited to and participated in, out of the opportunities it was aware of;

(b) the percentage of MVNO opportunities that both Parties were invited to and participated in (ie they overlapped with each other); and

(c) the percentage of MVNO opportunities each MNO won out of all the opportunities each MNO was aware of, for which there was an outcome.

Table 9.3: MVNO opportunity data analysis, Q1 2020- Q1 2024

	VUK	*3UK*	*BTEE*	*VMO2*
Opportunities the MNO was aware of	[✂]	[✂]	[✂]	[✂]
MNO was invited to (of total)	[✂]	[✂]	[✂]	[✂]
MNO participated in (of those invited to)	[✂]	[✂]	[✂]	[✂]
MNO participated in (of total)	[✂]	[✂]	[✂]	[✂]
Both Parties were invited to	[✂]	[✂]	N/A	N/A
Both Parties participated in	[✂]	[✂]	N/A	N/A
MNO won (total opportunities with a result)	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of data submitted by the Parties and other MNOs *(CK Hutchison response to the CMA's s109 notice. Vodafone response to the CMA's s109 notice. BTEE response to the CMA's RFI. VMO2 response to the CMA's RFI.*
Note: Opportunities with a result exclude those which were in progress or on hold, not progressing, and those that had an unknown outcome. Excludes known MVNE/MVNA and M2M opportunities. Excludes Tesco Mobile. [✂].

9.56 We also present the MVNO opportunity analysis based on the five largest MVNO opportunities between Q1 2020 and Q1 2024, to reflect the relative competitive importance of these MVNOs as customers of wholesale mobile services.

(a) Collectively these five MVNOs had an overall retail market share of [10-20]% in 2023 (by subscribers),[796] as shown in Table 5.1.

(b) These five MVNOs collectively accounted for [50-60]% of all subscribers served by MVNOs, (and [80-90]% of all subscribers served by independent MVNOs only), as at 2023.[797]

[796] CMA analysis based on Parties' and third parties' data.
[797] CMA analysis based on Parties' and third parties' data.

Table 9.4: MVNO opportunity data analysis – five largest MVNO opportunities, Q1 2020-Q1 2024

% (number of MVNOs)

	VUK	*3UK*	*BTEE*	*VMO2*
Opportunities the MNO was aware of	[✂]	[✂]	[✂]	[✂]
MNO was invited to (of total)	[✂]	[✂]	[✂]	[✂]
MNO participated in (of those invited to)	[✂]	[✂]	[✂]	[✂]
MNO participated in (of total)	[✂]	[✂]	[✂]	[✂]
Both Parties were invited to	[✂]	[✂]	N/A	N/A
Both Parties participated in	[✂]	[✂]	N/A	N/A
MNO won	[✂]	[✂]	[✂]	20% (1/5)

Source: CMA analysis of data submitted by the Parties and other MNOs. (*CK Hutchison response to the CMA's s109 notice. Vodafone response to the CMA's s109 notice. BTEE response to the CMA's RFI. VMO2 response to the CMA's RFI.*
Note: Based on the five largest MVNO opportunities that were up for negotiations between the period of Q1 2020 and Q1 2024 by subscriber base. These were Sky Mobile, [✂], Lyca Mobile, [✂] and [✂]. We focus on each of the most recent opportunities for these MVNOs and therefore include only the 2023 opportunity for Lyca Mobile. [✂].

9.57 Based on the opportunity data, we consider that:

(a) Based on the five largest MVNO opportunities,

(i) 80% (4/5) were retained by their host MNO, suggesting a strong incumbency advantage.

(ii) Not all MNOs participated in each of the five largest opportunities, however, at least [✂] MNOs did so.

(b) The Parties are both actively competing to supply wholesale mobile services, including participating in the larger MVNO opportunities.

(i) VUK participated in [✂] ([✂]% ([✂])) MVNO opportunities it was invited to. 3UK participated in [✂] ([✂]% ([✂])) MVNO opportunities it was invited to.

(ii) 3UK has a [✂] participation rate than VUK when looking at the total MVNO opportunities the Parties were aware of:

(1) VUK was aware of [✂] MVNO opportunities, of which it participated in [✂]% ([✂]).

(2) 3UK was aware of [✂] MVNO opportunities, of which it participated in [✂]% ([✂]).

(iii) Out of the five largest MVNO opportunities:

(1) VUK participated in [✂]% ([✂]/5) of opportunities. This included opportunities to supply Sky Mobile, Lebara, [✂].

(2) 3UK participated in [✂]% ([✂]/5) of opportunities. This included opportunities to supply Sky Mobile, [✂].

(c) The Parties have both been successful in winning MVNO opportunities, including some of the larger MVNO opportunities for which 3UK's win rate is [✂] VUK's:

(i) VUK won [✂]% ([✂]) of the total MVNO opportunities it was aware of, for which there was a result. Although the overall win rate for VUK was [✂], it won [✂]% ([✂]/5) of the five largest MVNO opportunities, ie Lebara, which is the second largest independent MVNO. This is consistent with VUK having a relatively high market share by revenue, as set out in Table 9.1 ([10-20]%).

(ii) 3UK won [✂]% ([✂]) of the total MVNO opportunities it was aware of, for which there was a result. It won [✂]% ([✂]/5) of the five largest MVNO opportunities ie [✂]. It also won [✂].

(iii) Although not included in the MVNO opportunity data, we note that 3UK has started to onboard [✂], onto its Lifecycle MVNE platform.[798] Given that this will be [✂], if it successfully [✂], this investment may strengthen 3UK's ability to win contracts with new MVNOs in the future.

(d) The Parties have [✂] competed against each other:

(i) VUK and 3UK competed against each other in [✂]% ([✂]) of the MVNO opportunities that they were aware of. In particular, the Parties both took part in [✂]% ([✂]/5) of the five largest MVNO opportunities. These were Sky Mobile [✂];

(ii) VUK and 3UK competed against each other in [✂] of MVNO opportunities if we consider only the MVNO opportunities in which at least one of the Parties actually participated. We consider that this measure better reflects the competitive constraint actually exerted by one Party on the other as it excludes opportunities in which neither Party participated:

(1) of the MVNO opportunities VUK participated in, 3UK also participated in [✂]% ([✂]) of the same MVNO opportunities.

(2) of the MVNO opportunities 3UK participated in, VUK also participated in [✂]% ([✂]) of the same MVNO opportunities.

(e) BTEE is an active participant and has been successful in winning MVNO opportunities, in particular the smaller MVNO opportunities:

[798] [✂]. The Parties submitted that the choice of [✂]. Parties response to the CMA's RFI. We attempted to contact [✂], however, we did not receive a response.

(i) BTEE won [✂]% ([✂]) of MVNO opportunities it was aware of, for which there was a result. However, [✂]% ([✂]) of these were new entrants. BTEE also won [✂]% ([✂]/5) of the five largest MVNO opportunities, Lyca Mobile and [✂].

(ii) BTEE was aware of [✂] MVNO opportunities than all other MNOs. However, BTEE submitted that for many MVNO opportunities [✂]. [✂].[799]

(f) VMO2 participates [✂] than the other MNOs, [✂] has been [✂] in winning MVNO opportunities than VUK and 3UK:

(i) VMO2 won [✂]% ([✂]) of MVNO opportunities it was aware of, for which there was a result, [✂] than the Parties' win rate [✂] than BTEE's.

(ii) VMO2 won [✂]% ([✂]) of the largest MVNO opportunities in this period. It won [✂].

(iii) VMO2 was aware of [✂] opportunities than all other MNOs. VMO2 was selective when participating in MVNO opportunities, and only participated in [✂]% ([✂]) of the opportunities it was invited to, [✂].

9.58 In relation to the data on MVNO opportunities, the Parties submitted that the CMA mischaracterises Lebara, [✂], iD Mobile, and [✂] as competitive tenders, which results in a significant overstatement of the Parties' competitive significance and the extent to which they have overlapped in tenders.[800] The Parties submitted that:

(a) Lebara was not a truly competitive process in which multiple MNOs bid for an opportunity. Rather, [✂]. [✂].[801]

(b) iD Mobile's renegotiation with 3UK in 2020 cannot be characterised as a win for 3UK as:[802]

(i) [✂].

(ii) [✂].

(iii) [✂].

[799] BTEE response to the CMA's RFI.
[800] Parties' response to the AIS and working papers; and Annex 2 to the Parties' response to the AIS and working papers. [✂].
[801] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 5.13.
[802] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 4.20-4.21 and 4.24.

(c) [✂] should be completely disregarded as it cannot be characterised as an MVNO tender at all. 3UK had no involvement in [✂] so this cannot be described as a 'win' by 3UK. There is no evidence that [✂] considered alternative MNO hosts such that there was any competitor to 3UK. [✂].[803]

(d) The renewal of Tesco Mobile's agreement with VMO2 is not classified as an opportunity and iD Mobile should be treated similarly.[804]

9.59 We consider that:

(a) in relation to Lebara, iD Mobile, and [✂]:

(i) Lebara was a competitive process even if [✂]. Due to the limited transparency in the wholesale market (described in paragraphs 9.20 and 9.21 above), MNOs are usually unaware of which other MNOs are participating in an opportunity, which can nonetheless exert a competitive constraint. We consider that [✂] (based on evidence from [✂], as set out in paragraphs 9.114 and 9.115);

(ii) We rely on iD Mobile's submissions and its internal documents when considering iD Mobile as an MVNO opportunity won by 3UK. We also note that:

(1) [✂].[805]

(2) A [✂] internal document [✂].[806]

(b) although we place less weight on 3UK's [✂] win given the unique circumstances, it is an indicator of 3UK's credibility as a wholesale supplier on the basis that [✂] had a choice between [✂] contracting with another MNO. We also rely on the view of third parties in reaching this view. [✂] told us that it could have been supplied by other MNOs but that [✂] 3UK [✂] was particularly attractive for a number of reasons. These included the [✂].[807] [✂].[808] [✂].[809]

(c) the renewal of the JV between Tesco Mobile and VMO2 was not an opportunity as Tesco conducted an internal high-level review of the market only and did not run a formal tender process or evaluate wholesale offers, as

[803] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 4.27-4.30.
[804] Annex 2 to the Parties' response to the AIS and working papers.
[805] FMN.
[806] [✂] internal document.
[807] [✂] call note. [✂].
[808] [✂] call note. [✂] call note.
[809] [✂] call note.

set out in paragraphs 9.66 to 9.67. This is [✂] from the circumstances of the iD Mobile tender, and it is therefore appropriate to treat it differently.

9.60 The Parties also submitted that:

(a) Using the total number of opportunities the Parties were aware of as the denominator instead of the total number of opportunities all MNOs were aware of overstates the proportion of opportunities the Parties were invited to, participated in, and won.[810]

(b) Considering only the largest opportunities (by subscriber base) inflates 3UK's win rate, does not acknowledge the plethora of MVNOs that have entered the retail market in the last ten years, nor does it factor in the real growth and expansion potential of existing MVNOs.[811] This approach excludes an analysis of which MNOs are winning emerging MVNOs and are, therefore, competing most aggressively. The CMA specifically understates the competitive strength of BTEE by not acknowledging its wins of many new entrants while at the same time finding that 3UK exercises a competitive constraint by its 'wins' of new entrant MVNOs.[812]

(c) 3UK [✂] and [✂] of the tenders that 3UK is aware of.[813] The tender data analysis shows that small or new entrant MVNOs, which may be reasonably expected to be attracted to lower prices, do not award their tenders to 3UK but predominantly to BTEE. Similarly, the tender data shows that none of the larger MVNOs choose 3UK.[814]

(d) There has been no competitive interaction between the Parties in more than 84% of the tenders that have taken place over the last four years. This is irrefutable evidence that the Parties cannot be described as close competitors.[815]

9.61 We consider that:

(a) Whilst BTEE [✂]. [✂]. VMO2 [✂]. We therefore consider that using the opportunities the Parties were aware of as the denominator of analysis for the Parties' data provides a robust basis for our analysis.

[810] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 3.3.
[811] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.9.
[812] Parties' response to the AIS and working papers; and Annex 2 to the Parties' response to the AIS and working papers.
[813] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 1.6.
[814] Annex 2 to the Parties' response to the AIS and working papers.
[815] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 4.1.

(b) It is appropriate to place greater weight on the five largest MVNO opportunities that took place between Q1 2020 and Q1 2024 as these MVNOs collectively account for [80-90]% of all subscribers served by independent MVNOs only, as at 2023.[816] These large MVNOs are also likely to be particularly well informed buyers of wholesale services.

(c) Our assessment of what the data shows regarding 3UK's credibility as a wholesale supplier and closeness of competition between the Parties is set out below.

Our assessment of the MVNO opportunity data

9.62 We consider that the MVNO opportunity data shows that:

(a) Competition is already limited, as not all MNOs bid for all opportunities (either because they are not invited or, particularly in the case of VMO2, because they sometimes choose not to bid even when invited). This means that while theoretically there are a maximum of four MNOs for any given opportunity, in practice fewer than four may compete for it.

(b) 3UK is seen as a credible competitor, by at least some MVNOs:

(i) Whilst 3UK was not invited to participate in [✂] the MVNO opportunities it was aware of, 3UK was still invited to participate in [✂]% of them ([✂]) and [✂]% ([✂]) of the five largest MVNO opportunities. It was also invited to participate in [✂] opportunities than VUK.

(ii) Whilst 3UK has won [✂] MVNO opportunities in the period Q1 2020 to Q1 2024 (inclusive), it has won one of the largest MVNOs (iD Mobile), has a [✂] win rate to VUK and has started to onboard [✂], onto its Lifecycle MVNE platform in 2024.

(iii) As set out below in our discussion of the internal documents, even where 3UK does not win, it can exert a competitive constraint. Given MNOs' perceptions of 3UK as being competitive on wholesale price, as mentioned in paragraphs 9.89, 9.170 and 9.174, MNOs may be more incentivised to offer attractive pricing and terms when they believe they may be competing with 3UK.

(c) The Parties are close competitors:

(i) Whilst the Parties did not compete in 84% of opportunities they were aware of, 3UK competed in [✂]% ([✂]) of all opportunities VUK

[816] CMA analysis based on Parties' and third parties' data.

competed in and VUK competed in [✂]% ([✂]) of all opportunities 3UK competed in.

(ii) They competed against each other more often for the five largest MVNO opportunities ([✂]%).

(d) BTEE and VMO2 exert a constraint on the Parties:

(i) BTEE has a higher win rate than the other MNOs, with the majority of these wins being new entrants. This is consistent with BTEE having the [✂] market share by subscriber, as shown in Table 9.1 ([10-20]%). It also won [✂] of the 5 largest MVNO opportunities (Lyca Mobile and [✂]).

(ii) VMO2 is more selective in the opportunities it participates in compared to the other three MNOs [✂]. VMO2 also won one of the large MVNO opportunities (Sky Mobile).

Competitive dynamics in MVNO opportunities

9.63 In addition to the market-wide opportunity data set out above, we have considered the competitive dynamics in specific MVNO opportunities, drawing on a range of evidence including submissions from the Parties, the other MNOs and MVNOs, and contemporaneous internal documents. We consider this analysis complementary to the opportunity data set out above and informative of the conditions of competition experienced by MVNOs, including:

(a) the extent to which the Parties competed against each other;

(b) the role (if any) played by 3UK, including the extent to which the participation of 3UK in MVNO opportunities enabled MVNOs to extract better prices and other terms from MNOs (given the Parties' submissions that 3UK is not a credible competitor); and

(c) the strength of competition from the other two MNOs.

9.64 We have looked at the five largest MVNO opportunities between Q1 2020 – Q1 2024 (Sky Mobile, [✂], Lyca Mobile, [✂] and [✂]). We have also described the steps taken by Tesco before renewing the Tesco Mobile JV given that the Parties submitted that this should be included in the opportunity data.[817]

[817] Annex 2 to the Parties' response to the AIS and working papers.

Tesco Mobile

9.65 Tesco Mobile has a share of [30-40]% out of the total subscribers served by MVNOs in 2023.[818] As set out above, Tesco Mobile is a 50/50 JV between VMO2 and Tesco. The JV was renewed in 2023 for a further 10 years.[819]

9.66 Tesco told us that before renewing the JV with VMO2 in December 2023, it conducted an internal high-level review of the MNO market to assess appetite from other MNOs. However, it did not run a formal tender process or evaluate wholesale offers.[820]

9.67 Tesco's shareholder representative was aware from previous discussions that [✂] Mobile before renewing the JV, and Tesco therefore considered competition in the market to be strong.[821]

[✂]

9.68 Tesco's shareholder representative had some high-level discussions [✂] but these did not go beyond assessing whether [✂] had an appetite to work with Tesco Mobile.[822]

9.69 During that same process, [✂] also expressed an interest in working with Tesco Mobile.[823] A VUK internal document [✂]. The document, [✂]. The document [✂].[824]

9.70 The Parties submitted that [✂] is not indicative of closeness of competition between the Parties. Previous discussions with [✂] does not indicate that [✂] requirements. [✂] in [✂] and [✂] was not invited to participate in the [✂] opportunity [✂].[825]

[✂]

9.71 During the internal review conducted by Tesco's shareholder representative, it did not engage personally with [✂] but it was aware of [✂] having expressed an interest in working with Tesco Mobile.[826]

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818 This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
819 Virgin Media O2 and Tesco agree 10-year renewal of Tesco Mobile joint venture - Virgin Media O2, accessed by the CMA on 11 June 2024.
820 Tesco call note.
821 Tesco call note.
822 Tesco call note.
823 Tesco call note.
824 VUK internal document.
825 Parties' response to the Provisional Findings, 4 October 2024, Annex 2, paragraphs 5.4-5.5.
826 Tesco call note.

9.72 Tesco told us that it would be very challenging for Tesco Mobile to switch MNO given the significant investment it has made in building its customer base and the deep integration with VMO2's network. It added that Tesco was in [✂].[827]

9.73 Tesco told us that it was pleased with the deal it agreed with VMO2. During negotiations with VMO2 an overarching principle was agreed under which Tesco Mobile customers should have [✂].[828]

9.74 [✂]. Tesco told us that at that point, [✂].[829]

Our assessment

9.75 Based on the evidence set out above, we consider that there is a possibility of Tesco Mobile switching to another MNO in the future, however, this would be a complicated process. Based on the evidence from the Parties and from Tesco, we consider that if Tesco was to engage in a competitive process, it is likely that all MNOs would take part [✂]. As set out in paragraph 9.116, the Parties have confirmed that 3UK [✂], and as detailed below at paragraph 9.83, 3UK competed to win Sky Mobile and provided evidence of its capacity to absorb a large customer base. Therefore, we consider that 3UK would have the capability to compete for Tesco Mobile.

Sky Mobile

9.76 Sky Mobile has a share of [20-30]% out of the total subscribers served by MVNOs in 2023.[830] It is currently hosted on VMO2's network. Sky Mobile also provides fixed broadband and entertainment services.

9.77 When Sky Mobile began supplying retail mobile services in 2017, it had a wholesale contract with Telefonica UK. [✂].[831] For simplicity, we refer to Telefónica UK as VMO2 when discussing the Sky Mobile opportunity. From 2020 to 2021, Sky Mobile engaged in a formal industry-wide tender process, which drew participation from VMO2, VUK, 3UK and BTEE.[832]

Parties' submissions

9.78 The Parties submitted that:

[827] Tesco call note.
[828] Tesco call note.
[829] Tesco call note.
[830] This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
[831] Sky Mobile submission.
[832] Sky Mobile submission.

(a) The [✂] was the primary reason that 3UK was not successful in the Sky Mobile tender:

 (i) [✂].[833]

 (ii) [✂].[834]

 (iii) [✂]. [✂] which is at odds with our finding that BTEE [✂].[835]

(b) During the tender, Sky Mobile [✂].[836]

(c) The fact that the Parties lost the bid [✂] demonstrates a lack of closeness:[837]

 (i) VUK's internal documents indicate it lost the Sky Mobile opportunity due to [✂]:

  (1) An internal briefing dated [✂] discusses feedback received from Sky Mobile that [✂].[838]

  (2) Sky Mobile told VUK that it had been eliminated from the process due to [✂].[839]

 (ii) 3UK received clear feedback that Sky Mobile [✂].[840]

(d) Throughout the tender process, VUK [✂]consider 3UK to be [✂] for the Sky Mobile tender. In VUK's view, 3UK [✂] in the Sky Mobile tender because of [✂].[841]

Closeness of competition

9.79 3UK's [✂] response to the Sky Mobile tender emphasised [✂],[842,843] and provided Sky Mobile [✂].[844] 3UK's internal documents from this period show that it suspected it would be competing with [✂], and that it was considering offering a [✂], noting '[✂]'.[845] It also offered Sky Mobile a [✂].[846]

[833] Parties' response to the Provisional Findings, 4 October 2024, Annex 2, paragraph 3.14.
[834] Parties' response to the Provisional Findings, 4 October 2024, Annex 2, paragraph 3.15.
[835] Parties' response to the Provisional Findings, 4 October 2024, Annex 2, paragraph 3.16.
[836] Annex 2 to the Parties' response to the AIS and working papers.
[837] Annex 2 to the Parties' response to the AIS and working papers.
[838] Annex 2 to the Parties' response to the AIS and working papers.
[839] Annex 2 to the Parties' response to the AIS and working papers.
[840] Annex 2 to the Parties' response to the AIS and working papers.
[841] Annex 2 to the Parties' response to the AIS and working papers.
[842] These plans are discussed in paragraph 9.82 below.
[843] CK Hutchison internal document.
[844] CK Hutchison internal document.
[845] CK Hutchison internal document.
[846] CK Hutchison internal document.

9.80 VUK's initial response to the Sky Mobile tender proposed [✂].[847] VUK's internal documents from this period describe 3UK as '[✂]'.[848]

9.81 In [✂], Sky Mobile provided feedback to 3UK and VUK on their [✂] offers and [✂]:

(a) A 3UK internal document shows that Sky Mobile wanted to [✂]. The 'key piece of feedback' was that [✂]. Sky Mobile asked 3UK to '[✂]'. In response, [✂] Sky Mobile's feedback.[849]

(b) A VUK internal document notes that its commercial offer '[✂]'. However, the feedback from Sky Mobile asked VUK to [✂]. In response to the feedback, VUK presented [✂].[850]

9.82 Although [✂] for 3UK raised concerns in an internal email exchange in February 2021 that the tender process could be a '[✂]' following a newspaper article suggesting that Sky Mobile was close to an agreement with VMO2,[851] he said that [✂].[852]

9.83 Between February and March 2021, Sky Mobile requested further information around 3UK's plans for its network [✂].

(a) In response to questions from Sky Mobile on whether 3UK [✂], 3UK closely engaged with Sky Mobile's technical team to explain its network improvement plans.[853] 3UK's internal documents show that [✂].[854]

(b) 3UK's internal documents from this time show that 3UK expected its [✂] and that it considered it had '[✂]'.[855] 3UK's internal documents suggest that [✂] by Sky Mobile.[856]

9.84 In [✂], Sky Mobile provided feedback to VUK on its pricing offer.[857] In particular [✂].[858] In response:

(a) A VUK internal document shows [✂] and that VUK's [✂].[859] The same document demonstrates that VUK's intention with this bid was to '[✂]'.[860]

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847 Vodafone internal document.
848 Vodafone internal document. See also Vodafone internal document.
849 CK Hutchison internal document.
850 VUK internal documents.
851 O2 signals no competition danger with new Sky deal (telegraph.co.uk), accessed by the CMA on 27 August 2024.
852 CK Hutchison internal document.
853 For example, CK Hutchison internal documents.
854 CK Hutchison internal documents.
855 CK Hutchison internal document.
856 CK Hutchison internal documents.
857 Vodafone internal document.
858 Sky Mobile internal document.
859 Vodafone internal document.
860 Vodafone internal document.

(b) Another VUK document notes that '[✂]'.[861] VUK's internal documents from this time suggest that it presumed that it was competing against [✂] to be the MNO that Sky Mobile [✂].[862]

9.85 Both Parties' internal documents from February 2021 indicate that [✂].[863]

9.86 [✂], in response to being told by Sky Mobile that VUK was out of the process due to its [✂], an internal VUK email exchange considers [✂].[864] It also considers [✂] to have made it to [✂].

9.87 A Sky Mobile internal document shows that 3UK and VUK competed 'hard' to win and '[✂]'. The document notes that 'Vodafone and Three offered [✂] but their 'offers weren't compelling enough to [✂]'.[865]

9.88 BTEE's internal documents relating to the opportunity suggest that:[866]

(a) In terms of the potential of other MNOs winning the contract for Sky Mobile, it scored VUK and 3UK [✂], with total scores of [✂] compared to a BTEE score of [✂] and VMO2 score of [✂].

(b) VUK's strengths in competing for Sky Mobile included its wholesale credibility and wholesale pricing, whereas its weaknesses included its lack of existing relationship with Sky Mobile and lack of incumbent commercial advantage.

(c) 3UK's strengths in competing for Sky Mobile included its 5G network and wholesale pricing. Its weaknesses included its 4G network and lack of incumbent commercial advantage.

Impact of 3UK in the process

9.89 Sky Mobile's internal documents show that in [✂], offers from [✂] were used to leverage better offers from [✂]:

(a) One document from [✂] shows Sky Mobile using [✂] offer to ask [✂] for [✂].[867]

(b) In [✂], Sky Mobile reminded VMO2 that [✂].[868]

[861] Vodafone internal document.
[862] Vodafone internal document. '[✂]'.
[863] Vodafone internal document; and CK Hutchison internal document.
[864] VUK internal document.
[865] Sky Mobile internal document.
[866] BTEE internal document.
[867] Sky Mobile internal document.
[868] Sky Mobile internal document.

(c) In [✄], Sky Mobile noted that VMO2 had [✄]. This appears to also have been driven [✄].[869]

(d) Another document from [✄] shows [✄] was asked to reduce rates by [✄]% to stay in the process.[870]

(e) A Sky internal document from May 2021 summarised the tender process noting that 'the MNOs reduced rates by [✄]% from initial to final offer'.[871]

9.90 A Sky Mobile internal document from [✄] shows that 3UK was [✄] competitor [✄] VMO2, [✄] VUK [✄].[872] VUK [✄].[873]

9.91 A Sky Mobile internal document from [✄] suggests a number of reasons why 3UK was ultimately not selected, including [✄].[874]

9.92 As noted above, in an internal document from May 2021 Sky Mobile noted that BTEE, VUK and 3UK had competed 'hard' for the business and '[✄]'.[875]

Alternative constraints

9.93 [✄] Sky Mobile engaged with VMO2 [✄]. It [✄].[876]

9.94 VMO2 responded that it [✄]. VMO2 also responded that it would not [✄].[877]

9.95 Sky Mobile engaged in further negotiations on the [✄] by VMO2 throughout its tender process.[878] VMO2's offer was [✄].[879] [✄] the Sky Mobile team [✄] VMO2 [✄].[880] We understand, based on the fact that discussions with the MNOs continued after this point, that [✄].

9.96 In [✄] Sky Mobile noted that VMO2 [✄] despite VUK, 3UK and BTEE [✄].[881] At this point Sky Mobile rated VMO2 [✄] across [✄] of the [✄] criteria it was using to assess offers.[882]

9.97 As set out above, a Sky Mobile document from [✄] shows that in response to [✄], VUK submitted [✄] than VMO2. [✄].[883]

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[869] Sky Mobile internal document.
[870] Sky Mobile internal document.
[871] Sky Mobile internal document.
[872] Sky Mobile internal document.
[873] Sky Mobile internal document.
[874] Sky Mobile internal document.
[875] Sky Mobile response to the CMA's s109.
[876] Sky Mobile internal document and Sky Mobile submission.
[877] Sky Mobile internal document.
[878] Sky Mobile internal document.
[879] Sky Mobile internal document.
[880] Sky Mobile internal document.
[881] Sky Mobile internal document.
[882] Sky Mobile internal document.
[883] Sky Mobile internal document.

9.98 In [✂] Sky Mobile was able to [✂] VUK's [✂] VMO2 [✂].[884]

9.99 Sky Mobile's internal documents note that BTEE [✂].[885] In [✂], BTEE's [✂] offer was rated [✂] by Sky Mobile across [✂] of the [✂] criteria (compared to [✂] out of [✂] for each of VUK and 3UK) with Sky Mobile noting that the BTEE response [✂]. The only criteria Sky Mobile rated as [✂] for BTEE was [✂].[886]

9.100 VUK's internal documents from this initial period considered [✂] likely to be [✂].[887]

9.101 In [✂], Sky Mobile considered [✂] for BTEE to [✂]. Sky Mobile noted that BTEE's [✂].[888]

9.102 In [✂] a Sky Mobile internal document noted that BTEE [✂], and that to match VMO2 [✂].[889] Sky Mobile considered the reasons why BTEE's [✂] than the other offers. Sky Mobile considered that BTEE's [✂]. It also considered that [✂] for BTEE, [✂], and that BTEE [✂].[890] In an internal document from [✂] Sky Mobile noted that [✂].[891]

9.103 As set out below at paragraph 9.278(c), [✂].[892] It submitted that [✂], BTEE [✂].[893] Sky Mobile told us that BTEE [✂], and Sky Mobile believes this is due to its customer base and BTEE's customer base being very similar and that BTEE is 'simply not incentivised to strengthen us'.[894]

9.104 BTEE's internal documents suggest that [✂]:

(a) BTEE recognised that [✂] but scored itself [✂] than the other MNOs because of other factors including [✂]. It also considered its [✂].[895]

(b) BTEE noted in relation to [✂] offer to Sky Mobile [✂].[896]

(c) A BTEE internal document notes that BTEE submitted [✂].[897] [✂]. Based on five historical bids (Virgin Mobile, Sky Mobile, iD Mobile, Lyca and Utility

[884] Sky Mobile internal document.
[885] Sky Mobile internal document.
[886] Sky Mobile response to the CMA's s109.
[887] Vodafone internal document.
[888] Sky Mobile response to the CMA's s109.
[889] Sky Mobile response to the CMA's s109.
[890] Sky Mobile response to the CMA's s109.
[891] Sky Mobile response to the CMA's s109.
[892] Sky Mobile meeting note.
[893] Sky Mobile meeting note.
[894] Sky Mobile meeting note.
[895] BTEE internal document.
[896] BTEE internal document.
[897] BTEE internal document.

Warehouse), BTEE concluded that [✂].[898] BTEE also considered that its [✂].[899]

9.105 One BTEE internal document suggests that it considered VMO2 the weakest competitor for the Sky Mobile opportunity. It gave VMO2 an overall score of [✂] compared to [✂] for VUK and 3UK, and [✂] for BTEE. It gave [✂] the highest score available per criterion ([✂]) on [✂], and the lowest score available per criterion ([✂]) on [✂].[900]

9.106 In a May 2021 Sky Mobile internal document setting out the outcome of the RFP process, Sky Mobile noted that:[901]

(a) BTEE competed 'hard' for the business (alongside 3UK and VUK as mentioned above) and [✂].

(b) [✂] noting that VMO2 offered [✂]. [✂].

(c) ultimately BTEE was [✂].

9.107 Although Sky Mobile's agreement with VMO2 [✂].[902] There is some evidence that BTEE and VMO2 are beginning to consider this:

(a) A BTEE internal document from [✂] notes that it is understood (by BTEE) that Sky Mobile can [✂].[903] BTEE also expects Sky Mobile to [✂].[904]

(b) A VMO2 slide deck outlines 'Priority Red Risks' with one of the risks being [✂]. VMO2 plans to mitigate the risk by [✂]. However, it notes that 'the risk is [✂].[905]

Our assessment

9.108 On the basis of the evidence set out above, we consider that:

(a) the Parties competed closely for the Sky Mobile opportunity. [✂].[906] [✂] is not evidence that the Parties are not close competitors. Evidence from the Sky Mobile documents suggests that the Parties [✂].

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898 BTEE internal document.
899 BTEE internal document.
900 BTEE internal document,
901 Sky Mobile response to the CMA's s109.
902 Sky Mobile meeting note and meeting slides.
903 BTEE internal document.
904 BTEE internal document.
905 VMO2 internal document.
906 [✂] response to the CMA's s109.

(b) [✂]. Whilst there were [✂] Sky Mobile to move to 3UK's [✂] (besides VMO2) [✂].[907]

(c) BTEE [✂].

(d) VMO2 [✂], with VMO2 ultimately retaining Sky Mobile's wholesale business.

[✂]

9.109 [✂] has a share of [10-20]% out of the total subscribers served by MVNOs in 2023.[908] It is currently hosted on [✂] network.

9.110 [✂] told us that it made informal approaches to all MNOs in [✂], when its contract with [✂] was up for renewal. It [✂] with [✂], [✂] (following [✂] from VMO2 and [✂] from 3UK and BTEE).[909]

9.111 An important underlying factor in these discussions was [✂].[910]

9.112 More recently [✂] has [✂], rather than run a competitive tender process.[911] [✂] submitted that as a light MVNO, its ability to switch is very limited given the significant damage that could be caused by a move to a new MNO, [✂].[912]

9.113 [✂] also submitted that MVNOs do not have substantial countervailing bargaining power, noting that 'MNOs could do without [✂] – and likely do not welcome competition from [✂] – but [✂] cannot do without the MNOs'. [✂] submitted that its lack of ability to exercise countervailing buyer power against the large MNOs is aptly illustrated by [✂] (discussed in more detail in paragraph 9.113).[913] We focus below on [✂] as [✂] is not currently negotiating with MNOs other than [✂].

[✂]

9.114 [✂] told us that 3UK showed an interest in bidding for its [✂] opportunity but indicated that [✂]. 3UK informed [✂] it would be capable and be ready to bid in a future opportunity, [✂].[914] [✂] submitted that while 3UK was not a competitive bidder in the [✂] process, [✂] remains of the view that 3UK is a strong competitor for wholesale supply to the MVNOs.[915]

[907] Sky Mobile response to the CMA's s109.
[908] This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
[909] [✂] call note.
[910] [✂] submission.
[911] [✂] submission.
[912] [✂] submission.
[913] [✂] submission.
[914] [✂] call note.
[915] [✂] email.

9.115 A [✂] internal document notes that 3UK is interested but [✂]. The same document states that [✂] will continue to [✂].[916]

9.116 The Parties have confirmed that there are currently [✂]. [✂].[917]

9.117 A 3UK internal document from August 2022 includes a slide which sets out a list of [✂] 3UK's 'competitor targets', [✂]. [✂] ([✂]).[918]

9.118 [✂].[919]

9.119 A [✂] internal document from [✂] prepared for the review of [✂] notes 'following [✂]'.[920]

9.120 A [✂] internal document notes that [✂] contract [✂] includes improved commercial terms compared with [✂].[921]

9.121 As set out above, [✂]. [✂] submitted that while it has managed to [✂] its terms with [✂][922] its negotiations have also involved [✂].[923]

[✂]

9.122 [✂] told the CMA that BTEE [✂],[924] [✂].[925] [✂] view is that BTEE was not interested in hosting MVNOs at that time.[926]

9.123 [✂] internal documents also suggest that [✂]:

(a) A [✂] slide deck from [✂] notes that [✂].

(b) The same document notes that [✂] will continue to engage with [✂].[927]

(c) An [✂] between [✂] and [✂] dated [✂] shows that [✂] engaged in discussions related to [✂].[928]

(d) A further email from September 2020 states that [✂] would [✂]. The document also states that [✂] could not [✂].[929]

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[916] [✂] response to the CMA's RFI.
[917] Parties' response to the CMA's RFI.
[918] CK Hutchison internal document.
[919] [✂].
[920] VUK internal document.
[921] [✂] response to the CMA's RFI.
[922] [✂] call note.
[923] [✂] submission.
[924] [✂] response to the CMA's questionnaire.
[925] [✂] submission.
[926] [✂] call note.
[927] [✂] response to the CMA's RFI.
[928] [✂] response to the CMA's RFI.
[929] [✂] response to the CMA's RFI.

9.124 BTEE submitted that:[930]

(a) [✂].

(b) [✂].

(c) [✂].

(d) BTEE communicated that it would submit a commercial offer. However, [✂] suggested halting discussions before any offer was submitted stating that BTEE [✂].

9.125 In a slide deck from [✂] states that it will '[✂] with Three and BTEE … [✂]'.[931]

9.126 [✂] told us that VMO2 [✂]:[932]

(a) In a [✂] internal document [✂] notes that it had [✂] Telefónica (O2), [✂].[933]

(b) Another [✂] internal document also states that VMO2's [✂]. It [✂].[934]

(c) Despite attempts by [✂] to negotiate [✂]. This left it with no choice but to [✂] with [✂].[935]

Our assessment

9.127 We consider that all four MNOs engaged with the [✂] opportunity [✂] to some extent, however, [✂] experienced limited interest from MNOs other than its host MNO, [✂].

Lyca Mobile

9.128 Lyca Mobile has a share of [5-10]% out of the total subscribers served by independent MVNOs in 2023.[936] Until 2023, Lyca Mobile was hosted on VMO2's network, at which point it switched to BTEE.

9.129 Lyca Mobile told us that from 2012 until 2022, it continually [✂].[937]

[930] BTEE response to the CMA's RFI.
[931] [✂] response to the CMA's RFI.
[932] [✂] call note.
[933] [✂] response to the parties initial submission, 19 July 2024, paragraph 3.10.
[934] [✂] response to the CMA's RFI.
[935] [✂] call note.
[936] This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
[937] Lyca Mobile call note.

9.130 Lyca Mobile submitted that MNOs hold a position of strength in negotiations and are typically only willing to offer self-preferential terms.[938]

9.131 While price is important, it was not the main factor for Lyca Mobile when it switched BTEE, instead greater weight was placed on network quality and access to a new range of customers.[939]

[✂]

9.132 Lyca Mobile confirmed that [✂] was not contacted as part of its latest tender process.[940] As part of the process, Lyca Mobile undertook a network quality analysis of each MNO, which determined that BTEE would be the best network for quality.[941]

9.133 A 3UK internal document from July 2021 shows that Lyca Mobile [✂].[942] 3UK submitted that [✂].[943]

9.134 [✂] was not invited to participate in the Lyca Mobile opportunity.[944]

9.135 VUK's internal documents suggest that [✂]:

(a) VUK internal documents show that VUK [✂].[945]

(b) A VUK internal document from [✂] shows that VUK had some interaction with [✂] but [✂].[946]

9.136 However, VUK's internal documents also suggest that its incentives to compete for [✂] might be affected [✂]:

(a) A VUK slide deck from November 2022 notes that [✂]. The same document [✂].[947]

(b) A strategy document from August 2023 shows that VUK [✂].[948]

[✂]

9.137 Lyca Mobile told us that during its most recent negotiations, it principally held discussions with VMO2, its host MNO at the time, to attempt to renegotiate its

938 Lyca Mobile call note.
939 Lyca Mobile call note.
940 Lyca Mobile call note.
941 Lyca Mobile call note.
942 CK Hutchison internal document.
943 CK Hutchison email.
944 [✂] call note.
945 Vodafone internal documents.
946 Vodafone internal document.
947 Vodafone internal document.
948 Vodafone internal document.

arrangement, but that VMO2 was unwilling to agree to terms Lyca Mobile said it needed in order to grow its business and [✂].[949]

9.138 Following its engagement with VMO2, Lyca Mobile said that it approached BTEE, which led to a wholesale access agreement which Lyca Mobile considers to be highly competitive and offers greater freedom. As part of the process, Lyca Mobile also undertook a network quality analysis of each MNO, which determined that [✂]. Out of all four MNOs, Lyca Mobile considered [✂] to have higher network quality than [✂], with [✂] being far superior. Network quality perceptions affect brand perceptions, which is an element that Lyca Mobile is striving to improve.[950]

9.139 Lyca Mobile was satisfied with the terms offered by BTEE and believes that it will also benefit from the increase in network quality and reliability offered by BTEE. As set out above, while price is important, it was not the main factor for Lyca Mobile, instead greater weight was placed on network quality and access to a new range of customers. Lyca Mobile noted that its success with BTEE was aided by strategic partnerships and connections it had built with BTEE over the years.[951]

9.140 A BTEE internal document from June 2023 refers to the successful bid for Lyca Mobile as being [✂].[952] BTEE also told us that [✂],[953] and that Lyca Mobile [✂].[954] We understand that after the Lyca Mobile deal, BTEE [✂].[955]

9.141 A VMO2 internal document from July 2023 notes that all previous negotiations with Lyca Mobile [✂]. The document notes VMO2 was informed [✂] that Lyca Mobile would not be renewing with VMO2, citing [✂].[956]

Our assessment

9.142 We consider that:

(a) [✂] was not invited to participate in the Lyca Mobile opportunity, [✂].

(b) [✂] was also not formally invited to participate in the Lyca Mobile opportunity. However, [✂]. This suggests that existing relationships between MVNOs and MNOs might affect MNOs' incentives to compete.

(c) BTEE exerted a significant competitive constraint in this process, [✂].

949 Lyca Mobile call note.
950 Lyca Mobile call note.
951 Lyca Mobile call note.
952 BTEE internal document.
953 BTEE call note.
954 BTEE meeting note.
955 BTEE internal document.
956 VMO2iInternal document.

(d) Lyca Mobile struggled to reach an agreement with VMO2 on the terms it wanted and VMO2's offer [✂].

[✂]

9.143 [✂] has a share of [5-10]% out of the total subscribers served by independent MVNOs in 2023.[957] It is currently hosted on [✂].

9.144 [✂],[958] ran a process to move away from its existing arrangement, [✂].[959] During this process [✂] negotiated with 3UK, BTEE and VUK, but ultimately decided to [✂].[960]

9.145 [✂].[961] [✂].[962]

Closeness of competition

9.146 [✂] received offers from VUK and 3UK. [✂].[963] [✂] told us it was able to negotiate a better deal with [✂] following the offers from the other MNOs [✂].[964]

9.147 The same internal document compares the offers received from VUK and 3UK, [✂].[965] An [✂] internal document notes that the offers received from both VUK and 3UK at this stage would [✂].[966]

9.148 [✂] engaged in several rounds of calls with [✂] to negotiate [✂].[967]

9.149 At the same time, [✂] engaged in several calls with [✂].[968] 3UK also told us that [✂].[969]

9.150 A [✂] document shows ongoing [✂]. This is consistent with the Parties' submission as mentioned in paragraph 9.58(b). [✂]stated that it would compare VUK's [✂] offer with the offers received from 3UK and BTEE ([✂]).[970]

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[957] This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
[958] [✂].
[959] [✂] internal document.
[960] [✂] call note.
[961] [✂] call note.
[962] [✂] call note.
[963] [✂] internal document.
[964] [✂] call note.
[965] [✂] internal document.
[966] [✂] internal document.
[967] [✂] internal document.
[968] [✂] internal document.
[969] CK Hutchison main party hearing transcript.
[970] [✂] internal document.

9.151 An [✂] internal document from [✂]. It compares offers from VUK and 3UK [✂].[971] Another iD Mobile internal document from June 2020 states that the '[✂] profitably opens up the higher ARPU propositions and takes out any usage risk'.[972]

9.152 The Parties' internal documents suggest [✂]:

(a) A 3UK internal document from December 2020 discussing [✂] contract [✂] to be [✂] which has the [✂].[973]

(b) A VUK slide deck from March 2021 [✂]. [✂].[974] A VUK slide deck from [✂] recommended [✂].[975]

Impact of 3UK in the process

9.153 [✂] told us 3UK's [✂]:

(a) [3UK] was [✂].[976]

(b) [✂] noted that both VUK and BTEE [✂]. Unlike 3UK, the [✂].[977]

(c) From a network quality perspective, [✂] considers 3UK to be [✂]. [✂] also noted that VUK [✂] and VMO2 [✂].[978]

Alternative constraints

9.154 [✂] internal documents suggest that BTEE was involved in the process but that [✂] compared to 3UK's (set out above):

(a) [✂] shows that BTEE is [✂]. We understand based on [✂] internal documents [✂] a response from BTEE [✂].[979]

(b) [✂] gave BTEE feedback, including:[980]

(i) [✂].

(ii) [✂].

(iii) [✂].

971 [✂] internal document.
972 [✂] internal document.
973 CK Hutchison internal document.
974 Vodafone internal document.
975 Vodafone internal document.
976 [✂] response to the CMA's questionnaire.
977 [✂] call note.
978 [✂] call note.
979 [✂] internal document.
980 [✂] internal document.

(c) A progress update slide from [✂] shows BTEE as [✂]. It also states that [✂].[981]

(d) A progress update slide dated [✂] states [✂] from BTEE [✂].[982] The document also notes that partnering with BTEE [✂].

(e) However, a document dated [✂] shows that [✂]. [✂]. [✂] recommends [✂] with BTEE. At the same time, [✂] were being negotiated with [✂].[983]

9.155 In relation to VMO2, [✂] internal document shows that [✂]. VMO2 [✂] from [✂] suggesting that [✂].[984]

Our assessment

9.156 We consider that:

(a) the [✂] opportunity was a competitive process as [✂]. It received offers from 3UK, VUK, and BTEE and the Parties competed closely.

(b) [✂] internal documents suggest that BTEE was [✂] and that BTEE's offer was [✂] compared to the offers from 3UK and VUK.

(c) VMO2 [✂].

[✂]

9.157 [✂] has a share of [0-5]% out of the total subscribers served by independent MVNOs in 2023.[985] In 2020, it ran a formal process engaging with [✂].

9.158 We note that VUK was not invited to participate and therefore the Parties did not compete [✂] for the [✂] opportunity. We have therefore focused on the evidence regarding the role of 3UK in the process.

9.159 In the period Q1 2020 to Q1 2024, [✂] Board was informed that it was in the last year of its wholesale mobile contract with [✂]. [✂] then began renewal negotiations with [✂].[986]

981 [✂] internal document.
982 [✂] internal document.
983 [✂] internal document.
984 [✂] internal document and [✂] call note.
985 This includes all customers served by independent MVNOs as well as Tesco Mobile, which is a 50:50 joint venture between Tesco and VMO2.
986 [✂] response to the CMA's RFI.

9.160 At the time it was noted that a key factor in choosing a supplier would be based on the ability to secure ongoing access to the latest mobile technologies as they were introduced.[987]

9.161 Eight months later, [✂] renewed its contract with [✂].[988]

Impact of 3UK in the process

9.162 Towards the end of its contract with [✂], [✂] noted that the retail [✂] could therefore be a potentially suitable wholesale supplier to achieve its goals.[989]

9.163 [✂] told us that [✂] offer had a number of advantages compared to [✂] (initial) offer:

(a) [✂].[990]

(b) it included [✂].[991]

(c) it included technical equivalence. [✂].[992]

9.164 [✂] told us that switching to [✂] would involve risks, and that it initially considered that [✂] coverage did not match [✂]. [993] These concerns were later alleviated following an assessment which demonstrated [✂]network covered [✂]% of [✂] customers.[994] [✂]told us that it considered it probable, in [✂], that it would migrate to [✂] following the expiration of its contract with [✂].[995]

9.165 In [✂], [✂] had further discussions both internally and with [✂] regarding the possibility of migrating to [✂]:

(a) By [✂], [✂] had agreed terms with [✂] regarding migrating its customer base and an agreement in principle including [✂] reached. The agreement was also based on [✂], which [✂] noted would [✂].[996]

(b) A question was raised at a Board meeting as to whether the [✂] network [✂]. It was confirmed that [✂] had [✂], but there was a possibility of [✂].[997]

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[987] [✂] response to the CMA's RFI.
[988] [✂] response to the CMA's RFI.
[989] [✂] call note.
[990] [✂] response to the CMA's RFI.
[991] [✂] call note.
[992] [✂] response to the CMA's RFI.
[993] [✂] response to the CMA's RFI.
[994] [✂] response to the CMA's RFI.
[995] [✂] response to the CMA's RFI.
[996] [✂] response to the CMA's RFI.
[997] [✂] response to the CMA's RFI.

(c) Further Board discussions took place regarding MVNO models which would prevent [✂]having to complete further SIM swaps should it migrate to [✂].[998]

(d) [✂] engaged [✂] to undertake a review of the draft agreement it had negotiated with [✂].[999]

(e) It was determined at the Board that [✂] offer was strong enough to outweigh the considerable short-term cost and disruption that would be inevitable when migrating to a new network.[1000]

9.166 At this point, [✂] received a revised offer from [✂] that it considered attractive (see paragraphs 9.173 to 9.176 below) and decided to renew its contract with [✂] rather than switch to [✂].

9.167 3UK considers that [✂].[1001]

9.168 A 3UK internal document suggests that [✂].[1002]

9.169 [✂] submitted that [✂] has [✂] in the last few years, [✂].[1003]

9.170 Although it ultimately decided not to switch, [✂] submitted that [✂] played an important role in negotiating [✂]:[1004]

(a) [✂] received an improved offer from [✂] after engaging with [✂].

(b) [✂] submitted that had it not received an improved offer from [✂], it was prepared to switch to [✂] due to better terms [✂].

(c) [✂] considered that having an actual offer from another MNO with the terms it wanted was highly important when negotiating with [✂] as it demonstrated that [✂] was serious about the terms and features it required to renew with [✂].

9.171 [✂] ([✂] was not mentioned on either the call or in any of [✂] internal documents).

Alternative constraints

9.172 [✂] told us that it had maintained its relationship with [✂] for many years [✂].[1005]

998 [✂] response to the CMA's RFI.
999 [✂] response to the CMA's RFI.
1000 [✂] response to the CMA's RFI.
1001 Annex 2 to the Parties' response to the AIS and working papers.
1002 CK Hutchison internal document.
1003 [✂] call note.
1004 [✂] call note.
1005 [✂] call note.

9.173 [✂] told us that following initial engagement with [✂], early indications suggested that [✂] would only improve terms by between [✂]% and [✂]%. Moreover, [✂]. This was in contrast to [✂] offer, set out above.[1006]

9.174 [✂] submitted that by [✂], [✂] realised it was about to lose the account and started to engage in further contract extension discussions.[1007] A [✂] document from [✂] shows [✂].[1008]

9.175 Following these negotiations, [✂] provided an improved offer, including revised commercials (which would allow [✂] to [✂]) and [✂]. It also included a non-discrimination clause to ensure [✂] customers were treated no less favourably than [✂] retail customers, [✂].[1009]

9.176 [✂] considered that the new offer from [✂] provided an all-round better deal compared to [✂], including a number of specific advantages:[1010]

(a) [✂] would be able to take advantage of the terms earlier, in [✂].

(b) [✂] could [✂] from a large-scale migration of the existing customer base to a different network.

(c) It would allow [✂].

9.177 A 3UK internal document suggests that [✂].[1011]

9.178 [✂] also told us that it did not engage with [✂]. Having engaged with it previously, it was already aware of its wholesale offerings.[1012]

Our assessment

9.179 We consider that [✂] represented a significant competitive force in the [✂] opportunity, having enabled [✂] to extract better pricing/terms from its [✂]. For example, [✂] was initially reluctant to offer [✂], however, it eventually agreed once it became aware that [✂] was a serious contender for [✂].

Our assessment of competitive dynamics in MVNO opportunities

9.180 Based on the evidence above we consider that:

[1006] [✂] response to the CMA's RFI.
[1007] [✂] response to the CMA's RFI.
[1008] [✂] response to the CMA's RFI.
[1009] [✂] response to the CMA's RFI.
[1010] [✂] response to the CMA's RFI.
[1011] CK Hutchison internal document.
[1012] [✂] call note.

(a) the Parties have competed closely for some large MVNO opportunities, in particular Sky Mobile [✂].

(b) 3UK has played an important role in a number of opportunities, even where it has not won, creating competitive pressure that has led other MNOs to improve their offers.

(c) MVNO internal documents make clear that a couple of MVNOs [✂] were seriously considering a switch to 3UK prior to revised offers from their incumbent MNOs, despite associated costs.[1013]

(d) While the Parties have stated that 3UK has [✂] contracts due to its [✂], the evidence on this is mixed from MVNOs. While some expressed concerns about 3UK's network quality, we have seen that many MVNOs have recognised the improvements in 3UK's network quality, and that its legacy poor network perception does not reflect its current performance.[1014] Some rated 3UK's quality above other MNOs, while some rated it on a par with other MNOs.[1015]

(e) BTEE [✂].

(f) VMO2 [✂].

Level of existing competition for the supply of wholesale mobile services

9.181 We have considered evidence on the level of existing competition for the supply of wholesale mobile services (including, for example, the level of interest expressed by MNOs to host MVNOs, and the ability of new entrants to secure wholesale agreements with MNOs).

9.182 The Parties submitted that:

(a) the third party views gathered during the CMA's merger investigation confirm that competition in the market is strong, and that MVNOs are able to leverage offers from one MNO against another, where necessary, to secure better commercial terms.[1016]

(b) the third party views gathered during the CMA's merger investigation confirm that MVNOs typically secure both parity of access and tracking clauses.[1017]

[1013] [✂] internal document and [✂] response to the CMA's RFI.
[1014] [✂] submission. [✂] call note. [✂] call note and [✂] call note.
[1015] [✂] response to the CMA's questionnaire and [✂] response to the CMA's questionnaire.
[1016] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 7.2.
[1017] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraph 7.4.

(c) the bargaining power of MVNOs has increased significantly over the years as evidenced by the increase in their market share and larger customer bases, which continue to grow, and the commercially advantageous terms secured at the wholesale level.[1018]

(d) Lebara and VUK recently agreed an extension to Lebara's current contract with VUK (to 2026). As part of this, Lebara has secured [✂], including [✂].[1019]

(e) VUK's [✂] agreements with [✂] have resulted [✂].[1020]

Views of MVNOs

9.183 Consistent with the evidence set out in the 'Competitive dynamics in MVNO opportunities' section, feedback from large MVNOs on the competitiveness of recent wholesale opportunities is mixed:

(a) A [✂] MVNO said that there was a 'lack of serious interest expressed' from all MNOs, apart from its host MNO, and hence it had 'no realistic opportunity to switch'.[1021]

(b) Another large MVNO told us that although it was eventually able to negotiate a competitive agreement with an MNO, its host MNO was unwilling to agree to the terms it needed to be competitive.[1022]

(c) Another [✂] MVNO told us that aside from 3UK, the MNOs were quite uncompetitive in their wholesale pricing.[1023]

(d) Another large MVNO told us that strong MNO competition was critical in obtaining its current MVNO deal.[1024]

(e) Another large MVNO told us that in the past all four MNOs expressed an interest in working with it. It considered competition in the market to be strong.[1025]

9.184 A number of potential entrants told us they had experienced limited interest when seeking an MNO host:

[1018] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 7.16.
[1019] Parties' response to the CMA's RFI.
[1020] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 7.7.
[1021] [✂] response to the CMA's questionnaire.
[1022] [✂] call note.
[1023] [✂] call note.
[1024] [✂] submission.
[1025] [✂] call note.

(a) One potential entrant noted that [✂].[1026] [✂].[1027]

(b) Another potential entrant noted that it had 'been unable to secure a viable wholesale MVNO supply agreement' to support its competitive ambition and was concerned that the supply of wholesale mobile services was 'not functioning effectively'. It noted that its negotiations with all four MNOs failed, either for operational reasons, 'when the potential merger was mooted' or due to 'uneconomic offers'.[1028]

9.185 Our engagement with MVNOs suggests that some established MVNOs can achieve better offers from their host MNOs by negotiating with other MNOs, or that their host MNO may assume that there were other credible offers from other MNOs:

(a) one large MVNO told us it was able to use the comparative bids to indicate to rivals how far off the bidders were from others, resulting in continually improved terms. This MVNO said that in its tender process, it observed complex competitive dynamics among the MNOs and that its incumbent MNO was unwilling to engage in productive conversations until the MVNO engaged with competitor MNOs.[1029]

(b) another large MVNO told us it was able to negotiate better terms when it renewed its agreement with its existing host MNO after engaging with other MNOs. It told us it had secured a better offer from another MNO ([✂]) which prompted its existing host MNO to offer similar and improved terms. The MVNO also told us that it was willing to switch to this other MNO ([✂]) had its host MNO not offered similar terms. It also added that having a serious offer from another MNO played an important role when negotiating the terms it required from its host MNO.[1030]

(c) another [✂] MVNO told us it was able to negotiate a better deal with its host MNO ([✂]) following offers from other MNOs and indicated that its success in the market led to better wholesale economics, with less onerous ([✂]) commitments. The MVNO told us it experienced restricted pricing on its wholesale offer [✂]. It also told us [✂].[1031]

(d) one [✂] MVNO told us that it considered its host MNO would likely have believed another MNO to have also been an active and credible bidder.[1032]

1026 [✂] response to the CMA's questionnaire.
1027 [✂] response to the CMA's questionnaire.
1028 [✂] response to the CMA's questionnaire and [✂] email.
1029 [✂] submission.
1030 [✂] call note.
1031 [✂] call note.
1032 [✂] call note.

We understand that the MVNO considered this enabled it to extract better terms from its host MNO.

9.186 Some MVNOs told us that in order to maintain pricing competitiveness over time, they have negotiated tracking clauses with their host MNOs:

(a) One large MVNO told us that it negotiated a tracking mechanism with its host MNO which enables it to benefit from lower costs over time as consumption grows on the host's network.[1033]

9.187 One [✄] MVNO told us that its agreement [✄] which enables the price it is charged to reduce [✄],[1034] although the agreement also enables the MVNO's costs to increase [✄]. A number of MVNOs told us that they find it particularly challenging to offer competitive unlimited tariffs:

(a) Several MVNOs told us that, in their experience, some MNOs are unwilling to offer prices that enable them to offer competitive high usage tariffs ([✄], [✄], [✄], [✄]).[1035] This is [✄] with the 3UK internal document described in paragraph 9.204(a) below which states that [✄].[1036]

(b) One large MVNO told us that it was only able to offer competitive unlimited plans through cross-subsidisation or targeting customers who tend to use less than the average amount of data.[1037] This MVNO told us that it considers the offers it received from MNOs make it more difficult for it to offer unlimited deals compared to other types of offers, and that it thinks this is at least partly due to the cannibalisation concerns of MNOs. It told us that in its view some MVNOs might be able to extract more favourable pricing than others if the MVNOs do not compete directly with the MNOs because of their brand positioning.[1038]

9.188 The majority of large MVNOs told us that they manage to obtain parity of access to the same network capabilities (including, for example, access to 5G) offered to the host MNO's subscribers:

(a) A number of large MVNOs told the CMA that they achieved parity in their negotiations:

(i) One of these large MVNOs told us that not all MNOs were willing to offer it parity of access.[1039]

1033 [✄] meeting note.
1034 [✄] call note.
1035 Call notes from: [✄]; [✄]; [✄]; and [✄]
1036 CK Hutchison internal document.
1037 [✄] meeting note.
1038 [✄] meeting note.
1039 [✄] call note and [✄] call note.

(ii) Another large MVNO told us that in its recent negotiations an overarching principle was agreed that its customers should have access to the same network capabilities and quality of service, including any capabilities/services rolled out in the future, provided to the host MNO's own customers. In this case, the large MVNO's customers would receive these new capabilities within a short timeframe – around 3 months.[1040]

(iii) Another told us that parity of service and network capabilities was a pre-requisite of its agreement with its current host MNO. It told us its customers receive the same service as its host MNO's customers. It added that, at a cost, it is able to take advantage of new network capabilities offered by its host.[1041]

(b) A number of large MVNOs told the CMA that they did not achieve parity:

(i) One MVNO told the CMA there is a general restriction on [✂] received by its customers [✂] and it receives [✂] compared to when its host [✂] offer them to its customers.[1042]

(ii) Another MVNO told the CMA that its contract included a non-discrimination clause to ensure its customers were treated no less favourably than its host's retail customers, however, this excluded the fastest 5G speeds as these were reserved for the host's customers.[1043]

Existing MVNO contract terms

9.189 In addition to seeking views from MVNOs, we have reviewed summaries from all four MNOs of their MVNO contracts across the market.[1044] In line with what the MVNOs described above, we concluded from our analysis (within the time constraints of the Phase 2 merger review process) that there are some areas where there is a degree of consistency across most MVNO contracts, and some where there is wide variation between the terms of the contracts that MVNOs hold.

9.190 We note that currently [✂] MVNO wholesale contracts [✂] include the following standard terms:

(a) MVNOs receive service equivalence, ie the same level of service and network coverage, as their host MNO's own customers, although some

[1040] [✂] call note.
[1041] [✂] call note.
[1042] [✂] call note
[1043] [✂] response to the CMA's RFI.
[1044] We have reviewed summaries of the contracts for each MVNO currently in the market. These summaries were prepared by each MNO, specifying details of the contract across a range of criteria we laid out. Parties' response to CMA's RFI; [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].

MVNOs or customers on particular contracts within an MVNO can receive reduced speeds.[1045]

(b) Non-discrimination between the service and coverage experienced by the host MNO's retail customers and the MVNO's customers.[1046]

(c) Implementation costs, such as initial onboarding costs, are paid by the MVNO.[1047] Any new technical upgrades or changes to service requirements required by the MVNO during the contract term will also usually be paid for by the MVNO, including any upgrades the MVNO must make to its own network to support new technology or services.[1048] Any implementation costs for these services may be provided at cost by some MNOs.[1049]

(d) Most MVNO contracts are between [✂] years. Some larger MVNOs have negotiated longer contract durations.[1050]

(e) MVNOs are usually required to pay the charges due to their host MNO within [✂] of receiving an invoice.[1051]

9.191 Other terms seen frequently in wholesale contracts between MNOs and MVNOs include:

(a) Currently, [✂] MNOs [✂] have [✂] MVNO contract with a form of future pricing mechanism (**FPM**) which adjusts the MVNO's payments based on a specified set of costs or usage changes.[1052] Some MVNOs may have adjustments based [✂].[1053] Some MVNOs may have an FPM that tracks [✂] while others may track the [✂].[1054]

(i) For example, one VUK internal document relating to the [✂] opportunity also notes that '[✂]'.[1055]

(b) MNOs will [✂] aim to make new technology available to their MVNOs.[1056] Most contracts state that the MVNO must pay any implementation costs for

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1045 For example, [✂]. [✂] response to CMA's RFI; [✂], [✂], [✂]. [✂] response to the CMA's RFI; [✂]
1046 For example, Parties response to CMA's RFI; [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
1047 For example, Parties response to CMA's RFI; [✂], [✂], [✂], [✂], [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
1048 For example, [✂] response to CMA's RFI; [✂], [✂], [✂], [✂]. [✂] response to the CMA's RFI; [✂].
1049For example, [✂] response to CMA's RFI; [✂], [✂].
1050 For example, [✂] and [✂]. [✂] response to CMA's RFI.
1051 For example, Parties response to CMA's RFI; [✂], [✂]. VMO2 response to CMA's; [✂]. BTEE response to the CMA's RFI; [✂].
1052 For example, Parties response to CMA's RFI; [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
1053 In [✂] contracts, [✂] pricing adjust based on [✂], while for [✂]. [✂]. Data on contracts supplied by [✂] response to the CMA's RFI.
1054 For example, [✂] response to CMA's RFI.
1055 Vodafone internal document.
1056 For example, Parties response to CMA's RFI; [✂], [✂], [✂]. VMO2 response to CMA's RFI, [✂]. BTEE response to the CMA's RFI, [✂].

new technology, as mentioned above in paragraph 9.190(c).[1057] We note that some MNOs aim to provide access to new technology and services to their MVNOs at the same time as their retail customers or at the same time as their other wholesale customers, subject to technical requirements, although historically there have been delays.[1058] However, one third party MNO submitted that access to new technologies is subject to agreement between the MNO and its MVNOs.[1059]

(c) Some MVNOs must meet minimum revenue commitments, as set out by their host MNO.[1060] [✂].[1061] [✂].

9.192 In relation to pricing, we have seen a wide variation of approaches agreed with MVNOs for their voice calls, texts, and data usage. Pricing models vary across MNOs and between the MVNOs on each MNO's network. We found that:

(a) some MVNOs have [✂]. These include [✂] large MVNOs;[1062]

(b) some MVNOs may pay [✂],[1063] while other MVNOs have [✂];[1064]

(c) some MVNOs may be charged through a usage-based charging model where the MVNO is billed for the data consumed by the MVNO's customer.[1065] [✂];

(d) some MVNOs may be charged [✂];[1066] and

(e) [✂] MVNOs have specific clauses related to offering unlimited tariffs, [✂].[1067]

9.193 Overall, we have found that while there are standard features across MVNO contracts there is also substantial variation across the market, particularly in relation to pricing. These differences impact the types and prices of tariffs that different MVNOs can offer competitively and profitably, in particular higher usage and unlimited tariffs.

[1057] For example, [✂] response to CMA's RFI; [✂], [✂], [✂], [✂]. [✂] response to the CMA's RFI 7, [✂].
[1058] For example, Parties response to CMA's RFI; [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
[1059] [✂] response to CMA's RFI; [✂].
[1060] For example, Parties response to CMA's RFI; [✂], [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
[1061] For example, [✂] response to CMA's RFI; [✂]. [✂] response to the CMA's RFI; [✂].
[1062] For example, [✂] response to CMA's RFI; [✂], [✂]. [✂] response to CMA's RFI; Tesco Mobile.
[1063] For example. Parties response to CMA's RFI; [✂], [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂].
[1064] For example, [✂] response to CMA's RFI; [✂]. [✂] response to the CMA's RFI; [✂].
[1065] For example, Parties response to CMA's RFI; [✂], [✂], [✂]. VMO2 response to CMA's RFI; [✂]. BTEE response to the CMA's RFI; [✂]; [✂].
[1066] For example, [✂] response to CMA's RFI; [✂], [✂], [✂].
[1067] For example, [✂] response to CMA's RFI; [✂], [✂], [✂].

Internal documents and views of the other MNOs

9.194 The internal documents and submissions from the other MNOs suggest that they consider the wholesale market to be competitive:

(a) One BTEE internal document suggests that 'there is a competitive MVNO market in the UK'.[1068]

(b) One BTEE internal document notes that MVNO ARPU 'is already likely at the bottom'.[1069]

(c) One BTEE internal document notes that 'MVNO bids are highly competitive'.[1070]

(d) VMO2 told us that regardless of cost, VMO2 considers [✂].[1071]

9.195 BTEE told us that the amount of information given to it is controlled by the MVNO, in order to increase negotiation leverage and ensure confidentiality is not breached.[1072]

MVNO pricing

9.196 We have considered the extent to which MVNOs' ability to negotiate competitive wholesale terms is reflected in their retail pricing (although we note that differences in retail price may also be driven by other factors, for example some MVNOs may choose to have a lower-priced, value proposition, and others may choose to have higher-priced, premium offerings).

9.197 We have found that some MVNOs compete primarily in the value segment. Some target lower data allowances – with the lowest data allowances served primarily by MVNOs. Some target particular demographics, such as packages that focus on cheap international calling. As set out in Chapter 8, based on Pure Pricing data, the cheapest tariffs across PAYM SIMO 12-month tariffs with capped data allowances were offered by MVNOs including Tesco Mobile, Sky Mobile and iD Mobile.

9.198 In unlimited data, we have found that there are a number of MVNOs that offer Unlimited contracts across different price points from very price competitive offers to offers that are at the top of the market. However, we have found that currently MVNOs have not succeeded in gaining significant customer numbers in this

[1068] BTEE internal documents.
[1069] BTEE internal document.
[1070] BTEE internal document.
[1071] VMO2 response to the CMA's RFI.
[1072] BTEE call note.

segment (see Chapter 8, MNOs' and MVNOs' evidence on the competitive constraint from MVNOs).

(a) As set out in Chapter 8, based on Pure Pricing data, the cheapest provider of unlimited data pre-paid tariffs and PAYM tariffs[1073] was iD Mobile. The other MVNOs included in the data (Sky Mobile and Tesco Mobile) offered PAYM unlimited tariffs, but they were not price competitive, and did not offer any unlimited pre-paid tariffs at that time.[1074]

(b) Given that the Pure Pricing data does not include all MVNOs, we conducted a high-level review of tariffs available on the websites of MVNOs, and noted that there are additional MVNO unlimited tariffs – with a range of pricing, from very competitive tariffs, to tariffs at the high end of the unlimited market.[1075] The most competitive tariff continued to be iD Mobile, with a number of mid-range unlimited tariffs from Lebara, Lyca, Utility Warehouse, Asda, Honest Mobile.[1076] Tesco Mobile and Talk Mobile offered higher priced tariffs,[1077] while Sky offered an unlimited tariff that was priced towards the top of the market at that time.

(c) A 2022 VUK internal document comparing the prices of MVNOs and [✂] shows that [✂] of the [✂] listed in the document [✂], with the exception of [✂]. The document also shows [✂] has the [✂] in the overall market, followed by [✂], and [✂].[1078]

(d) Sky Mobile's internal documents also suggest that Lyca Mobile and iD Mobile are the cheapest providers of unlimited tariffs.[1079] Sky Mobile recently launched an unlimited data plan in Q3 2024,[1080] [✂].[1081]

Our assessment

9.199 We consider that:

(a) the views of MVNOs suggest the intensity of wholesale competition can vary over time, between MNOs, and/or by MVNO.

(b) MVNOs contracts can differ substantially on how their fees are [✂].

[1073] Tariffs that did not have speed caps
[1074] CMA analysis of Pure Pricing data.
[1075] CMA review of unlimited tariffs available on MVNO websites as of November 2024.
[1076] These were primarily on 30 day contracts, with two that also offered 12 month contracts (Lyca and Honest Mobile).
[1077] Talk mobile only offered a 12 month contract, while Tesco offered a 12 month contract and a 24 month contract that was more price competitive.
[1078] Vodafone internal document.
[1079] Sky Mobile internal document.
[1080] Pay Monthly Contract & Sim Only Plans, accessed by the CMA on 18 November 2024.
[1081] Sky Mobile meeting note.

(c) MVNOs are stronger in the value segment of the market and in lower data usage and appear able to offer competitive retail pricing based on their wholesale contracts.

(d) A number of MVNOs have expressed concerns that some MNOs are unwilling to offer contracts that enable them to offer competitive high usage tariffs, but there are a number of MVNOs that have been able to offer customer tariffs for larger data allowances and unlimited contracts, some of which are price competitive.

(e) most large MVNOs manage to obtain parity in terms of services and network coverage with their host MNO:

(i) the majority of large MVNOs manage to obtain parity of access to the same network capabilities (including, for example, access to 5G) offered to the host MNO's own customers.

(ii) However, [✂]. [✂].

(f) Sky Mobile is in a unique position amongst the independent MVNOs:

(i) This is due to its strong brand, ability to cross-sell to a large, fixed customer base and strong growth. Sky Mobile's status also provides it with significantly more resources and leverage in negotiations with MNOs, as described in paragraphs 9.76 to 9.108 above, which note that all four MNOs engaged with Sky Mobile during its last tender and [✂].

(ii) We therefore do not consider Sky Mobile's experience of strong competition between all four MNOs as representative of the experience that other MVNOs would have.

(iii) Notwithstanding Sky Mobile's experience of strong competition in wholesale negotiations, we note that Sky Mobile has expressed concern [✂]. [✂].

(g) post-Merger, the MVNOs' buyer power will be reduced. This is because the MVNOs' buyer power will depend on the availability of good alternatives they can switch to, which will have been reduced as a result of the Merger. We also note that there are barriers to switching in this market, as set out in paragraphs 9.249 to 9.257 below.

MNOs' competitive incentives and strategies

9.200 In this section we set out our assessment of:

(a) MNOs' competitive incentives; and

(b) MNOs' competitive strategies.

MNOs' competitive incentives

9.201 We have considered the extent to which MNOs' retail activities and other factors affect their incentives to compete to supply wholesale mobile services. This draws on a range of evidence including the internal documents of the Parties and third parties, and third party views.

9.202 As set out further below, the Parties' and other MNOs' internal documents, produced in the context of negotiations with MVNOs or which otherwise relate to the wholesale market, refer to:

(a) the overlap between the MNO and the MVNO's retail businesses;

(b) the impact on the MNOs' retail business (including the network quality experienced by customers) of winning an MVNO opportunity;

(c) the ability of an MVNO to compete in the retail market given wholesale pricing/terms;

(d) their existing relationships with MVNOs;

(e) the risk that an MVNO will be won by another MNO and/or the net benefit of winning an MVNO; and

(f) the costs of providing an MVNO's wholesale service.

The Parties

9.203 In relation to cannibalisation, the Parties submitted that:

(a) The prospect of cannibalisation will not reduce the Merged Entity's incentives to compete strongly in the wholesale market. MNOs have an incentive to host an MNO as the cannibalisation effect is unavoidable. This is supported by VUK's internal documents.[1082]

(b) The view that larger MNOs have weaker incentives to compete aggressively due to greater cannibalisation concerns, is inconsistent with commercial reality and contradicted by the fact that BTEE wins the most tenders and

[1082] Annex 2 to Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 6.3

VMO2 hosts the largest MVNOs.[1083] The Parties' internal documents support the fact that large MNOs compete aggressively.[1084]

(c) Rather than being concerned about the growing size of the customer bases of its MVNOs leading to greater cannibalisation, [✂].[1085]

(d) The capacity constraints currently faced by the Parties ultimately limit the extent to which they are able to compete for MVNOs. This is because acquiring additional wholesale customers/traffic on a capacity-constrained network is costly to the Parties, as it triggers the need for additional network investments to avoid increased congestion and/or leads to a deterioration in quality for existing customers. This is demonstrated in the Parties' internal documents.[1086]

(e) The argument that the Merged Entity will have less incentive to compete than VUK and 3UK in the counterfactual amounts to a prediction that the Merged Entity will engage in input foreclosure, but the CMA has not engaged with the Parties' submissions on this point other than to express disagreement, nor set out any economic analysis that would be required to substantiate a concern on this basis.[1087]

9.204 We have considered a range of the Parties' internal documents in relation to these factors. We have found that:

(a) A number of the Parties' internal documents refer to the overlap between the MNO and MVNOs' retail businesses, the impact on MNOs' retail business (including the network quality experienced by customers) of winning an MVNO opportunity and/or the ability of an MVNO to compete in the retail market given wholesale pricing/terms:

(i) During negotiations with Sky Mobile, VUK conducted an [✂] which suggested that [✂].[1088]

(ii) In the context of a Lebara negotiation, VUK's internal documents stated:

(1) '[✂]'.[1089]

[1083] Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 1.9.
[1084] Annex 2 to Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraphs 6.5-6.6.
[1085] Annex 2 to Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 6.5.
[1086] Annex 2 to Parties' response to the AIS and working papers.
[1087] Annex 2 to Parties' response to the AIS and working papers.
[1088] Vodafone internal document.
[1089] Vodafone internal document.

(2) A VUK internal document in relation to the 2021 Lebara opportunity notes that '[✂]'.[1090]

(3) A VUK internal document in relation to the 2021 Lebara opportunity notes '[✂]'.[1091]

(iii) In the context of negotiations with [✂].[1092]

(iv) A 2022 VUK internal document in relation to its MVNO commercial strategy notes that [✂].[1093]

(v) A 2022 VUK internal document in relation to Lebara and VUK's MVNO business notes that '[✂]'.[1094]

(vi) A 3UK internal document in relation to the iD Mobile opportunity states that [✂].[1095]

(vii) A 3UK internal document states that [✂].[1096]

(viii) A 3UK internal document in relation to the Sky Mobile opportunity states that 'it is expected that Sky Mobile's [✂]'.[1097]

(b) A number of the Parties' internal documents refer to the risk that an MVNO will be won by another MNO and/or the net benefit of winning an MVNO:

(i) VUK considered that '[✂]'.[1098]

(ii) A 2022 VUK document noted that '[✂]'.[1099]

(iii) A VUK internal document in the context of [✂] states that the recommendation is to '[✂]'.[1100]

(iv) A 3UK internal document states that one of its principles is to '[✂]'.[1101]

(v) A VUK internal document refers to the [✂].[1102]

[1090] Vodafone internal document.
[1091] Vodafone internal document.
[1092] Vodafone internal document.
[1093] Vodafone internal document.
[1094] Vodafone internal document.
[1095] CK Hutchison internal document.
[1096] CK Hutchison internal document.
[1097] CK Hutchison internal document.
[1098] Vodafone internal document.
[1099] Vodafone internal document.
[1100] Vodafone internal document.
[1101] CK Hutchison internal document.
[1102] Vodafone internal documents.

(vi) A VUK internal document [✂].[1103]

9.205 A number of the Parties' internal documents refer to the costs of providing an MVNO's wholesale service:

(a) a VUK internal document evaluated the impact of [✂] deal in terms of [✂].[1104]

(b) a VUK internal document evaluated the Lebara two year extension and as part of that considered [✂].[1105]

(c) VUK internal documents from [✂] estimated the incremental cost of [✂] that would be required to [✂].[1106]

(d) a 3UK internal document in relation to the Sky Mobile opportunity notes that [✂]. [✂].[1107]

(e) A VUK internal document suggests that it considers adding MVNOs to its network provides a '[✂]'.[1108]

(f) We look at the incremental costs of capacity of wholesale contracts in more detail in Chapter 14, Effect of incremental cost of capacity on prices.

9.206 There is one case where Parties' internal documents refer to an existing relationship with an MVNO when considering whether/how to compete for another MVNO:

(a) A VUK document from November 2022 notes that a [✂]. The same document lists [✂].[1109]

(b) A VUK document from August 2023 shows that VUK [✂].[1110]

(c) We have also seen an example where one MNO speculated that another MNO would not bid for an MVNO contract due to its existing relationship with another MNVO that is a close competitor.[1111] This suggests that the situation we have seen above may not be unique.

[1103] Vodafone internal document.
[1104] Annex VF REE WP 2 to Annex 3 to the Parties' response to the AIS and working papers.
[1105] Vodafone internal document.
[1106] Vodafone response to the CMA's s109 notice.
[1107] CK Hutchison internal document.
[1108] Vodafone internal document.
[1109] Vodafone internal document.
[1110] Vodafone internal document.
[1111] BTEE internal document. Discussing Aldi bids, statement that VMO2 was unlikely to bid due to relationship with Tesco.

9.207 We have also considered the views and internal documents of the other two MNOs and MVNOs in relation to these factors. We set out our findings below.

BTEE

9.208 BTEE told us that cannibalisation can be viewed as a potentially negative aspect of doing wholesale deals, and that it considers the risk of cannibalisation as part of its wholesale strategy. [✂]. However, it can also make sense for BTEE to work with MVNOs who directly compete against its own brands. It would be more economic for BTEE to benefit from supporting an MVNO on its own network rather than allow another MNO to benefit. [1112]

9.209 A number of BTEE's documents refer to the overlap between the MNO and MVNO's retail business, and/or the impact on the MNOs' retail business of winning an MVNO opportunity:

(a) BTEE noted in respect of [✂] that [✂]. BTEE noted in respect of [✂] that [✂].[1113]

(b) BTEE's internal document [✂].[1114]

(c) A document from [✂].[1115]

(d) [✂].[1116]

(e) A BTEE internal document discussing previous deals shows: '[✂]'.[1117] This suggests that MNOs with particular customer demographics may be able to extract better terms.

9.210 BTEE's internal documents also refer to other factors, including the risk that an MVNO will be won by another MNO and the costs of providing wholesale services to an MVNO:

(a) In one internal document BTEE noted that [✂] but recognised that this '[✂]'. It also recognises that '[✂]'.[1118]

(b) In one internal document in relation to Sky Mobile, BTEE considered [✂].[1119]

[1112] BTEE call note.
[1113] BTEE internal document.
[1114] BTEE internal document.
[1115] BTEE internal document.
[1116] BTEE internal document.
[1117] BTEE internal document.
[1118] BTEE internal document.
[1119] BTEE internal document.

(c) In one internal document BTEE noted that winning Nitrogen [Sky] would [✂].[1120]

(d) One BTEE internal document states [✂].[1121]

(e) The section below on BTEE's competitive strategy (paragraphs 9.235 to 9.239) discusses how BTEE's wholesale strategy [✂].

VMO2

9.211 VMO2 told the CMA that cannibalisation is inevitable [✂].[1122]

9.212 One VMO2 internal document notes that 'cannibalisation is inevitable, [✂]'.[1123]

MVNOs

9.213 A number of MVNOs also told us that they believe that MNOs consider the risk of cannibalisation when deciding on the price and non-price terms to offer them:

(a) One large MVNO estimated, based on revenue data, that MNO subscribers were more valuable to MNOs than wholesale MVNO subscribers.[1124]

(b) In relation to BTEE specifically, the same large MVNO told us that it believes BTEE's incentives are such that it is unlikely to offer it competitive terms in the future.[1125]

(c) One MVNO told us that in its view MNOs partner with MVNOs for several strategic and financial reasons but ultimately, in doing so, it allows MNOs to reach customer segments they themselves may not wish to or be able to effectively target on their own.[1126]

9.214 In contrast, one [✂] MVNO told us that it considers 3UK's approach has been to maximise capacity through offering favourable terms to MVNOs.[1127]

9.215 We have also considered internal document evidence from MVNOs:

(a) A number of Sky's internal documents refer to cannibalisation as a potential factor considered by MNOs:

[1120] BTEE internal document.
[1121] BTEE internal document.
[1122] VMO2 response to the CMA's RFI.
[1123] VMO2 internal document.
[1124] [✂] meeting note.
[1125] [✂] meeting note.
[1126] [✂] call note and [✂] email.
[1127] [✂] email.

(i) In one internal document kicking off its RFP process, Sky considered that both VUK and BTEE [✂].[1128]

(ii) In another internal document Sky considered why the offer BTEE submitted in response to its RFP was [✂]. The first potential reason Sky cited was [✂].[1129]

Our assessment

9.216 MNOs are vertically integrated in the supply of wholesale and retail mobile services which may affect their incentives to supply MVNOs. Supplying wholesale mobile services allows MNOs to generate additional revenue and therefore spread network costs across a larger customer base. However, MNOs may consider a number of factors when deciding whether to compete for an MVNO's business and what terms to offer. Given that some MNOs choose not to bid for contracts they have been invited to, or do not revise bids when told their offer is not competitive, factors which reduce the interest of an MNO in competing can materially impact the degree of competition in the process. Factors that MNOs consider can include:

(a) the costs of onboarding and servicing the MVNO as compared to the potential revenues the MVNO might generate;

(b) the level of overlap between the MNO's and the MVNO's customers (including whether the MNO and MVNO supply fixed as well as mobile services) and therefore the extent to which the MVNO may 'cannibalise' the MNO's retail customers;

(c) the impact of onboarding an MVNO's customers on the user experience of the MNO's own customers;

(d) the likelihood of winning and likely costs involved in competing for an opportunity;

(e) the likelihood that the MVNO will obtain wholesale services from another MNO if the MNO does not offer competitive pricing and terms (meaning that the MNO still risks losing retail customers, but without any revenue upside); and

(f) the potential impact on retail market pricing, resulting from offering cheaper wholesale pricing to MVNOs.

9.217 We consider:

[1128] Sky Mobile internal document.
[1129] Sky Mobile internal document.

(a) a number of the Parties' and third parties' internal documents show that the factors outlined above can affect an MNO's willingness to bid for a particular MVNO opportunity (and how aggressively it competes for that MVNO) if invited.

(b) cannibalisation is often not the determinative factor in whether the Parties decide to bid for a given MVNO. However:

(i) MVNOs targeting different consumer segments is frequently cited by MNOs in their rationale for competing for an MVNO opportunity.

(ii) MNOs may be incentivised to offer less competitive pricing or terms where the MVNO competes more closely with the MNOs' own retail business. This is likely to be affected by the segment of the market the MVNO competes in and/or the scale of the MVNO. For example, Three's statement that [✂] chose 3UK because other MNOs compete with [✂] (see paragraph 9.57(c)(iii) above), or Sky's concern that BTEE would be disincentivised from providing access to their network, due to them competing in other markets.[1130] MNOs frequently cite that an MVNO is credible and likely to get an MNO deal elsewhere, however, this does not necessarily mean that the MNO will bid for the contract – such as [✂].[1131] Therefore, we consider that it is possible that MNO may be incentivised to behave in this way even if the MVNO ultimately obtains wholesale services from another MNO – this would have the impact of the MVNO receiving less competitive pricing or terms in its final contract.

(iii) the [✂] references to [✂] in 3UK's internal documents could be consistent [✂], or it could be specific to 3UK's competitive strategy.

(c) MNO's incentive to compete for another MVNO. If this occurred in other cases, for example where two MVNOs were particularly close competitors, it could reduce the incentive of an MNO to compete aggressively, if there were a conflict with an existing MVNO relationship.[1132]

(d) that the Parties consider the costs of providing wholesale services to an MVNO when competing for an opportunity (including the investment costs required to be able to serve a new MVNO and maintain quality for current customers). However, we have not seen evidence from the Parties' internal documents that they are currently facing capacity constraints which limit their

[1130] Sky Mobile meeting note.
[1131] [✂] internal document.
[1132] As discussed in paragraph 9.134.

incentive to compete for MVNOs. We also note that BTEE, which is not currently capacity constrained, [✂].

9.218 We also do not agree with the Parties' argument that our consideration of cannibalisation amounts to a prediction that the Merged Entity will engage in input foreclosure. We have considered cannibalisation in the context of the impact it has on MNOs' incentives to participate and offer competitive pricing/terms when competing against other MNOs.

MNOs' competitive strategies

9.219 We have obtained evidence from the Parties, BTEE and VMO2 on their competitive strategies in wholesale, including their strengths and weaknesses. This draws on a range of evidence including internal documents, evidence obtained on calls and other submissions made by the Parties and the other MNOs during our investigation.

The Parties

9.220 The Parties submitted that:

(a) the view that 3UK has ambitions to grow its market share in wholesale mobile services disregards [✂]. It [✂].[1133] We consider this point in paragraphs 9.46, 9.225 and 9.246(a).

(b) VUK's internal documents indicate that [✂].[1134]

(c) the Parties' internal documents do not suggest that they are close competitors.[1135]

9.221 We have considered the internal documents from both VUK and 3UK which discuss their wholesale strategy. A number of VUK's internal documents discuss [✂]:

(a) 'In 2018, VUK reviewed and changed its commercial approach to MVNOs, with a new ambition to grow to a [✂]'.[1136]

(b) A 2021 internal document notes that one of its strategic priorities [✂]. In particular by [✂].[1137]

[1133] Annex 2 to Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings, 4 October 2024, Annex 2 paragraphs 3.26-3.27.
[1134] Parties' response to the AIS and working papers; and Annex 2 to the Parties' response to the AIS and working papers.
[1135] Annex 2 to the Parties' response to the AIS and working papers.
[1136] Vodafone internal document.
[1137] Vodafone internal document.

(c) A VUK internal document from 2022 states that an element of its plan is '[✂]' as well as creating [✂].[1138]

(d) A VUK internal document from 2022 states that '[✂]'. The same document notes that VUK's 'MVNO Commercial Strategy' targets (or considers 'viable to progress') [✂].[1139]

(e) A VUK internal document from 2023 states that its FY24 Priorities (Wholesale Mobile) include '[✂]'.[1140]

9.222 A VUK internal document from 2022 comments on its strategic approach by type of MVNO:[1141]

(a) [✂].

(b) [✂].

(c) [✂].

(d) [✂].

9.223 Recognising that large MVNOs are typically in longer term contracts and winning MVNOs from another MNO can be challenging, VUK also focuses on [✂]. One VUK internal document refers to these as the '[✂]'.[1142]

9.224 A January 2021 VUK internal document in relation to the [✂].[1143]

9.225 A number of 3UK documents also discuss ambitions to grow:

(a) One strategy document from 2021 states that the 'aim is to [✂]'.[1144]

(b) One document from 2022 states that winning new MVNO business is '[✂]'.[1145]

(c) One internal document from 2021 produced during the Sky Mobile opportunity states that hosting Sky Mobile would '[✂]'.[1146]

(d) One internal document from 2021 states that attracting MVNOs to its network is [✂]. The same internal document states that 3UK has a '[✂]'.[1147]

1138 Vodafone internal document.
1139 Vodafone internal document.
1140 Vodafone internal document.
1141 Vodafone internal document.
1142 Vodafone internal document.
1143 Vodafone internal document.
1144 CK Hutchison internal document.
1145 CK Hutchison internal document.
1146 CK Hutchison internal document.
1147 CK Hutchison internal document.

(e) In 2022, 3UK's internal documents suggest there was a '[✂]' and '[✂]', requiring a [✂]. 3UK considers that '[✂]'.[1148]

(f) 3UK's 2024 budget pack notes that 3UK has [✂] through '[✂]'.[1149]

9.226 One 3UK internal document from 2021 states that 3UK's strategy includes [✂],[1150] and another document from 2021 states that 3UK is interested [✂].[1151]

9.227 A 3UK internal document from 2022 also states that it has plans to [✂].[1152]

9.228 BTEE considers that 'every MNO is active in the consumer MVNO space'.[1153] BTEE stated to us in October 2023 that 3UK is typically proactive in the supply of wholesale mobile services, visible as a competitor on bids and engages with the industry including sponsorship of MVNO conferences. It stated that VUK does not appear as proactive as 3UK on smaller MVNOs and has not typically been visible at MVNO conferences and believes VUK is now focused on the bigger deals. [1154]

9.229 BTEE's internal documents from 2021 suggest that: [1155]

(a) it considers that VUK was historically not supportive of MVNOs, driven by Group position, whereas more recently (as at 2021) it has been aggressive in targeting MVNOs.

(b) it considers that 3UK was historically aggressive on pricing, but that its management team has been more recently (as at 2021) less focused on MVNOs.

(c) it ranks VUK [✂] on a range of criteria, giving it an overall score of [✂], compared to a score of [✂] for 3UK, [✂] for itself and [✂] for VMO2.[1156]

(d) it considers VUK's strengths to [✂]. [✂].[1157]

(e) it considers 3UK's main strength to be [✂]. [✂].[1158]

9.230 VMO2 noted that VUK has a pedigree in the wholesale business, is a credible partner to MVNOs and has made significant improvements in terms of network performance. With respect to 3UK, VMO2 also stated that 3UK's level of 5G spectrum holdings has allowed it to materially improve its network performance in

1148 CK Hutchison internal document.
1149 CK Hutchison internal document.
1150 CK Hutchison internal document.
1151 CK Hutchison internal documents.
1152 CK Hutchison internal document.
1153 BTEE internal document.
1154 BTEE call note.
1155 BTEE internal document.
1156 BTEE internal document.
1157 BTEE internal document.
1158 BTEE internal document.

recent years and, in turn, to become a more credible supplier of wholesale mobile services, including to larger MVNOs.[1159]

9.231 A VMO2 internal document notes that 3UK performs [✂]. It also notes that VUK is [✂].[1160]

BTEE and VMO2

9.232 The Parties submitted that:[1161]

(a) BTEE's strategy is well known to be focused on wholesale: it has very recently won the tender for Lyca Mobile and hosts more than 50 MVNOs on its network.[1162]

(b) VMO2 is the largest provider in the wholesale market by some way, hosting the largest MVNO customers – Sky Mobile and Tesco Mobile.

(c) their internal documents [✂].[1163]

9.233 The Parties' internal documents suggest that [✂].

(a) VUK's internal documents suggest that BTEE and VMO2 have historically '[✂]' the supply of wholesale mobile services with [✂].[1164]

(b) Both Parties recognise that [✂]; for instance 3UK notes that [✂],[1165] and VUK notes that [✂].[1166]

(c) VUK has speculated that [✂].[1167]

(d) Similarly, 3UK has speculated that [✂].[1168]

9.234 The Parties' internal documents also suggest that BTEE and VMO2 have a number of competitive weaknesses:

(a) Both Parties have speculated that [✂].[1169]

[1159] VMO2 call note.
[1160] VMO2 internal document.
[1161] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 5.23
[1162] As detailed above, see paragraph 8.48, we have evidence that there are fewer active MVNOs in the market.
[1163] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 6.11.
[1164] For example, Vodafone internal documents.
[1165] CK Hutchison internal document.
[1166] Vodafone internal document.
[1167] For example, Vodafone internal documents, [✂].
[1168] CK Hutchison internal document, [✂].
[1169] CK Hutchison internal documents; [✂]

(b) A 3UK internal document also suggests that: [1170]

(i) [✂].

(ii) [✂].

(iii) [✂].

(c) [✂].[1171]

BTEE

9.235 BTEE submitted that:

(a) it plays an active role in wholesale to ensure MVNO value is maximised. BTEE works with all of its MVNO customers with the aim of maintaining the MVNO's competitive position, as well as attracting new MVNO customers.[1172]

(b) BTEE has a general principle of [✂]. [✂].[1173]

9.236 BTEE also told us that:[1174]

(a) [✂] it carried out a review of [✂].

(b) As a result, BT now has [✂]. [✂].

(c) [✂].

(d) Working with MVNOs can benefit BT with [✂]. For example, the Lyca Mobile business (which recently migrated from VMO2 to BT) [✂]. [✂].

9.237 This is consistent with BTEE's internal documents. We consider that over time, BTEE has [✂]. BTEE's internal documents suggest that [✂]. For example:

(a) A June 2023 document noted that [✂].[1175]

(b) A March 2024 document [✂].[1176]

9.238 In one of BTEE's internal documents it compares itself to other MNOs on a range of criteria. It ranks itself [✂], compared to [✂] for VUK, [✂] for 3UK, and [✂] for VMO2. It considers its strengths to include [✂]. [✂].[1177]

[1170] CK Hutchison internal document.
[1171] CK Hutchison internal document.
[1172] BTEE call note.
[1173] BTEE call note.
[1174] BTEE call note.
[1175] BTEE internal document.
[1176] BTEE internal document.
[1177] BTEE internal document.

9.239 BTEE told us that MVNOs are [✂].[1178]

VMO2

9.240 VMO2 submitted that its wholesale strategy is to [✂] in the retail market. In practice, this means its current focus is [✂].[1179] For existing MVNOs, their success is clearly apparent. For new MVNOs, VMO2 considers factors such as:

(a) [✂];

(b) [✂];

(c) [✂];

(d) [✂];

(e) [✂]; and

(f) [✂].[1180]

9.241 VMO2 has favoured bidding for [✂]. However, VMO2 has recently [✂].[1181]

9.242 VMO2 submitted that it has a number of strengths and weaknesses compared to other MNOs:[1182]

(a) VMO2 considers it has an edge compared to other MNOs [✂]. [✂].

(b) VMO2 considers itself weaker in terms of [✂]. [✂].

(c) VMO2 considers that it has to sell capacity [✂] and therefore has to focus on maintaining network performance and meeting KPIs. Therefore Beacon 4.1 and the spectrum transfer would allow a focus on 'winning business' [✂].

(d) VMO2 enjoys no inherent advantage in terms of [✂].

(e) VMO2 has no inherent advantages in how it [✂].

(f) VMO2 does not have an MVNE in place and so does not currently do business with MVNAs.

(g) VMO2 enjoys no advantage over any other MNO [✂]. [✂].

9.243 VMO2's internal documents suggest that [✂]:

1178 BTEE meeting note.
1179 VMO2 response to the CMA's RFI.
1180 VMO2 response to the CMA's RFI.
1181 VMO2 response to the CMA's RFI.
1182 VMO2 response to the CMA's RFI; and VMO2 meeting note.

(a) One VMO2 internal document notes that [✂]. The same document notes that VMO2 has [✂]. It also notes that [✂].[1183]

(b) One internal document notes that there is a risk of [✂].[1184]

(c) Feedback from [✂] noted that it [✂] because of [✂].[1185]

9.244 BTEE considers that VMO2 is focused on large MVNOs that are complementary to its retail business (for example, Sky Mobile and Lyca Mobile).[1186]

9.245 BTEE's internal documents ranked VMO2 [✂] other MNOs on a range of criteria. It did not give VMO2 [✂]. BTEE considered VMO2's weaknesses to include [✂].[1187]

Our assessment

9.246 We consider that:

(a) 3UK and VUK's strategies both suggest that they compete for existing MVNOs as well as new entrants and have ambitions to grow. This is also consistent with our assessment of the MVNO opportunity data set out above.

(b) BTEE [✂] paragraphs 9.140 and 9.235.

(c) VMO2 is the largest MNO in terms of wholesale subscribers but is selective in which MVNOs it bids for.

Third party submissions

9.247 We have considered submissions from third parties on:

(a) barriers to switching wholesale suppliers;

(b) closeness of competition between the Parties;

(c) alternative competitive constraints; and

(d) the impact of the Merger on competition in the supply of wholesale mobile services.

9.248 While we have taken account of all submissions from MVNOs (including potential entrant MVNOs), we have placed particular weight on the submissions from larger MVNOs. This is to reflect the competitive importance of these MVNOs as

[1183] VMO2 internal document.
[1184] VMO2 internal document.
[1185] VMO2 internal document.
[1186] BTEE internal document.
[1187] BTEE internal document.

customers of wholesale mobile services and suppliers of retail mobile services. We contacted and received submissions from nine of the 10 largest MVNOs (including Tesco Mobile), which collectively accounted for [90-100]% of all MVNOs' subscribers in 2023.[1188]

Barriers to switching

9.249 Switching network host is simpler for full MVNOs than for light MVNOs.[1189] As set out in Table 5.1, based on the ten largest MVNOs, full MVNOs supply [60-70]% of all subscribers supplied by MVNOs and light MVNOs supply [20-30]% as at 2023.[1190] Four of the ten largest MVNOs are full MVNOs.[1191]

9.250 However, MVNOs have told us that transitioning from a light to a full MVNO is costly:

(a) Lyca Mobile transitioned to a full MVNO model in 2009 and told us that it required substantial upfront investments.[1192]

(b) [✂] told us that it has 'invested very significantly' into its [✂] platform.[1193]

9.251 MVNOs told us they experience barriers to switching MNO supplier:

(a) One out of four full MVNOs said that switching is either difficult or very difficult.[1194]

(b) Five out of six light MVNOs said that switching is either difficult or very difficult.[1195]

9.252 Light MVNOs (one of which has recently switched MNO providers) explained the difficulties of switching:

(a) One light MVNO said that switching would require it 'to supply each customer with a new SIM (for the new network) and ask each customer manually to replace the SIM in their phone' which would risk significant customer loses.[1196]

(b) Another light MVNO said that 'implementation [of a switch] is difficult, costly, time-consuming and resource heavy'.[1197] However, this MVNO did not feel

1188 CMA analysis based on Parties' and third parties' data. Superdrug was not contacted as it is a CK Hutchison subsidiary and is excluded from our market share calculations.
1189 FMN.
1190 Based on CMA analysis.
1191 These are Tesco Mobile, Sky Mobile, Lyca Mobile, and TalkTalk.
1192 Lyca Mobile call note.
1193 [✂] submission.
1194 [✂] response to the CMA's questionnaire.
1195 Responses to the CMA's questionnaire from: [✂], [✂], [✂], [✂] and [✂].
1196 [✂] response to the CMA's questionnaire.
1197 [✂] response to the CMA's questionnaire.

completely tied to its host MNO. It said that it would consider whether switching would enable it to benefit from competitive pricing, as well as other factors including network quality.[1198]

(c) Another light MVNO said that 'it would be a difficult and complex process to switch providers as the impact would be to both customers and operationally.'[1199]The MVNO noted that whilst switching providers comes with the risk of disruption to its customers, this was not the most important factor in its decision to remain with its host, within the overall business case, it was not something the MVNO wanted to undertake in light of the time, costs associated with integrating the MVNO's wider business, customer disruption, and risk of increased customer churn.[1200]

(d) Another light MVNO made similar comments. The MVNO noted that it received similar offers from two MNOs, including its host, but chose to stay with its host MNO to avoid carrying out a SIM migration. However, it added that it did not consider SIM migration to be a substantial barrier to switching MNO providers, and that it was confident the other MNO it had engaged with would have supported the transition well had it decided to switch.[1201]

9.253 Full MVNOs also said that switching is difficult:

(a) One full MVNO that switched MNO providers commented that switching is easier and quicker with less disruption to customers as a full MVNO, but that there are nevertheless significant costs to switching and rated the difficulty of switching as 'very difficult'.[1202]

(b) Another full MVNO rated the difficultly of switching as three out of five and commented that switching involves significant costs and disruption which must be weighed carefully against the benefits of doing so.[1203]

(c) Another full MVNO told us that it would be a hugely costly, complex and risky exercise for it to switch networks. Such an exercise could involve 'a cost of about £[✂]' and take [✂] to implement the migration.[1204]

(d) Another full MVNO told us that switching a base from one MNO to another MNO would require hefty customer migration and swapping SIMs.[1205]

[1198] [✂] call note.
[1199] [✂] response to the CMA's questionnaire.
[1200] [✂] call note and [✂] response to the CMA's questionnaire.
[1201] [✂] response to the CMA's questionnaire, and [✂] call note.
[1202] [✂] response to the CMA's questionnaire.
[1203] [✂] response to the CMA's questionnaire.
[1204] [✂] call note.
[1205] [✂] call note.

However, it also told us that this would not stop it from considering moving to a different MNO.[1206]

9.254 This is also supported by evidence from third parties' internal documents and the submissions from third party competitors:

(a) A number of Sky Mobile's internal documents refer to the 'effort and risks of migration':

(i) One document states that the objective of its tender was to secure significantly better terms that would 'justify the effort and risks of migration'.[1207]

(ii) One document states that the 'new deal needs to be materially better deal than O2 in order to warrant effort, disruption and risks of the switch'.[1208]

(iii) One document refers to the fact that continuing the [✂] partnership with VMO2 would avoid a 'high-risk migration process'.[1209]

(b) Sky's internal documents suggest that these risks include:

(i) [✂].[1210]

(ii) [✂].[1211]

(iii) [✂].[1212]

(iv) [✂].[1213]

(c) Sky's internal documents suggest that even if there are barriers to switching, the threat of switching can be used to extract better terms from incumbent MNOs. In one internal document Sky Mobile noted that [✂].[1214]

(d) As set out in paragraph 9.164 to 9.165 above, [✂] noted that switching to [✂] would involve risks including considerable short-term cost and disruption that would be inevitable when migrating to a new network.

1206 [✂] email.
1207 Sky Mobile internal document.
1208 Sky Mobile internal document.
1209 Sky Mobile internal document.
1210 For example, Sky Mobile internal document.
1211 For example, Sky Mobile internal document.
1212 For example, Sky Mobile internal document.
1213 For example, Sky internal document.
1214 Sky Mobile internal document.

(e) A BTEE internal document notes ‘other opportunities are limited due to incumbent power and unlikely to win on price alone without another reason to change’.[1215]

(f) A BTEE internal document notes that [✂].[1216]

(g) BTEE told us that ‘MVNO migrations from other MNOs are hard to win due to the incumbent MNO’s leverage’.[1217]

9.255 The Parties have noted that advancements in technology such as eSIMs and over-the-air switches have reduced the barriers to switching for light MVNOs.[1218] However, not all MVNOs offer this technology, and we have not seen evidence from MVNOs that these have made an impact on the decision to switch MNOs, or that they consider they will have an impact in the future.

9.256 We note that some MVNOs have recently switched MNO providers, suggesting that, although switching is difficult, these difficulties are not insurmountable. However, based on the five largest MVNO opportunities between Q1 2020 and Q1 2024, [✂] out of five opportunities ([✂]%) were retained by the MVNOs’ incumbent MNO. Where MVNOs had considered switching, they required a substantial price reduction from an alternative MNO compared to their host to justify the additional costs and risks of the switch.

Our assessment

9.257 We consider that:

(a) there are barriers to switching for both full and light MVNOs;

(b) switching is easier for full MVNOs than light MVNOs; and

(c) light MVNOs can transition to a full MVNO model but there are costs involved.

3UK as a significant competitive force

9.258 We have considered MVNOs’ views on whether 3UK is a significant competitive force. We consider that a firm may be a close competitor if it represents a significant competitive force or exerts a strong constraint on other firms.[1219]

[1215] BTEE internal document.
[1216] BTEE internal document.
[1217] BTEE call note.
[1218] Parties’ initial submission, 1 May 2024, paragraph 4.1(iii)(c).
[1219] CMA129, paragraph 4.9.

9.259 In this regard and consistent with the approach explained in paragraph 9.248, we have placed more weight on the feedback from large MVNOs given that a small number of key MVNOs account for a high proportion of overall supply.

9.260 The Parties submitted that:

(a) The MVNOs' actions speak more tellingly and convincingly of their real views and motivations than any remarks they may have made to the CMA during its merger investigation. It is not plausible that MVNOs consider 3UK [✄][1220] and [✄].[1221]

(b) Third party views do not support a finding that MVNOs perceive 3UK's network quality to be reliable.

(i) The approach of placing more weight on the feedback of large MVNOs artificially limits the evidence base and is flawed. As well-informed industry players, smaller MVNOs are equally well positioned to form valid views on an MNO's network quality. For example, [✄].[1222]

(ii) Individual retail customers are also able to provide valuable views on network quality. For instance, comparison websites have cited 3UK's network quality as a reason against choosing iD Mobile at the retail level, and Superdrug subscribers regularly identify network quality as an issue. [✄].[1223]

(iii) The reality is that [✄].[1224]

9.261 We set out the views of some large MVNOs in paragraphs 9.65 to 9.179 above, which suggest that some large MVNOs have historically had negative perceptions of 3UK's network quality, but others have had positive perceptions.

9.262 3UK is also recognised by multiple MVNOs as having improved its network quality over time, especially through its 5G offering:

(a) One large MVNO commented that although it had historic concerns about 3UK's network quality, it considers that its network quality has significantly improved and considers 3UK to be a 'very credible network host'. [1225] The

[1220] Parties' response to the AIS and working papers; Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 1.6.
[1221] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 3.4.
[1222] Annex 2 to the Parties' response to the AIS and working papers.
[1223] Annex 2 to the Parties' response to the AIS and working papers.
[1224] Annex 2 to the Parties' response to the AIS and working papers.
[1225] [✄] submission.

same MVNO commented that it considered 3UK's network quality to be [✄].[1226]

(b) Another large MVNO commented that it considered 3UK's network quality to be 4 out of 5 and had the 'fastest and most widespread 5G coverage'.[1227]

(c) By contrast, one [✄] MVNO commented that it considered 3UK's network quality to be 2 out of 5. The same MVNO noted that once 3UK had achieved its planned technical capability, it would put forward a 'very competitive offering in a tender process'.[1228]

(d) One third party told us 3UK is well-positioned from a network quality perspective given its 5G spectrum holdings and its recent improvements in 5G speeds.[1229]

(e) One third party noted that 3UK has improved its network quality significantly in the last few years, with a focus on 5G.[1230]

(f) One third party said it considers 3UK's data network to be the best, depending on location and that in contrast, other networks seem less reliable.[1231]

(g) One third party told us that the 3UK network is very good, with independent surveys, eg Opensignal, reporting that it has the highest availability of any of the UK networks. This third party also told us that it provides services based on both 3UK and BTEE's network because no network has ubiquitous coverage.[1232]

(h) One third party noted that customer satisfaction scores can be tied to a historic perception of poor reputation, and as a result MVNOs can receive higher satisfaction scores than their host MNO, despite identical coverage and quality.[1233]

(i) In relation to roaming specifically, one third party told us it has wholesale agreements with all licensed mobile operators in the UK for roaming purposes. It mentioned that [✄]. This suggests that 3UK's network may offer acceptable network quality for roaming customers compared to other MNOs in some areas. However, the same third party noted that [✄].[1234]

1226 [✄] response to the CMA's questionnaire.
1227 [✄] response to the CMA's questionnaire.
1228 [✄] response to the CMA's questionnaire.
1229 [✄] call note.
1230 [✄] call note.
1231 Vitrifi Digital call note.
1232 Gamma email.
1233 [✄] email.
1234 [✄] call note.

9.263 3UK is also recognised by a number of MVNOs as offering competitive pricing/terms compared to the other MNOs:

(a) One large MVNO commented that 3UK was the closest to its incumbent MNO on price and played a pivotal role in bringing down prices for other MNOs.[1235]

(b) One [✂] MVNO and one potential MVNO entrant commented that 3UK was the most competitive MNO on price.[1236] Although in its recent negotiations, the potential MVNO had not carried out a full market test.[1237]

(c) One [✂] MVNO commented that as part of its negotiations with MNOs that included both 3UK and VUK, 3UK presented the [✂].[1238] The MVNO told us that in comparison to 3UK, the other MNOs (VUK and BTEE) were [✂]. [✂].[1239]

(d) One large MVNO told us that [✂] was [✂] than its host MNO to offer [✂] as well as a more favourable pricing structure and played an important role in enabling it to secure a better offer in terms of [✂] and pricing from other MNOs.[1240]

9.264 Our evidence from MVNOs also suggests that in some cases 3UK was the only MNO (other than the host provider) the MVNO engaged with:

(a) One large MVNO told us that when it considered switching, the only MNO it held high-level discussions with was 3UK, despite other MNOs previously expressing interest in hosting it. However, the discussions did not go beyond assessing whether 3UK had an appetite to work with the MVNO. The MVNO added that moving wholesale supplier is disruptive, and whilst it carried out a limited review of the market, it did not consider it necessary to approach other MNOs at the time.[1241]

(b) One large MVNO told us that negotiations with [✂] prompted its host MNO to offer similar terms. The same MVNO told us it would have been willing to switch to [✂] for better terms despite the need to carry out a SIM migration.[1242]

[1235] [✂] submission.
[1236] [✂] response to the CMA's questionnaire and [✂] response to the CMA's questionnaire.
[1237] [✂] email.
[1238] [✂] response to the CMA's questionnaire.
[1239] [✂] call note.
[1240] [✂] call note.
[1241] [✂] call note.
[1242] [✂] call note.

9.265 Further, one large MVNO commented that 3UK is an important competitor as the only non-fixed MNO, meaning it has different incentives to VUK and other MNOs.[1243]

Our assessment

9.266 We consider that:

(a) the views of MVNOs suggest 3UK is a significant competitive force in the supply of wholesale mobile services.

(b) whilst we have placed more weight on the views of larger MVNOs in relation to network quality (as we consider the larger MVNOs are well positioned to make an informed assessment of 3UK's network quality and network reputation given their significant technical expertise relative to individual retail customers), the views of smaller MVNOs also suggest 3UK's network quality is credible. We also note that larger MVNOs appear to engage in a more detailed assessment of an MNO's network quality than smaller MVNOs. For example, Sky Mobile's [✂] engaged [✂] with 3UK's team to understand [✂].[1244]

(c) Whilst retail customers of MVNOs do have views on network quality, it is unclear the extent to which they are aware of which underlying MNO is providing the wholesale service when choosing an MVNO. We also note that 3UK's network quality has been improving as set out in Chapter 8, Network Quality, and iD Mobile (on 3UK's network) is one of the largest and most price competitive MVNOs in the market.

(d) If it were the case that 3UK did not gain contracts in the future, this could weaken its credibility, and therefore the degree of leverage that an MVNO could gain through negotiation with its host MNO. However, we consider that the likelihood of this is limited given that: there is very limited switching, with only one MNO having recently won a significant MVNO from another; and 3UK has come close to achieving significant contracts, and this may mitigate any loss of credibility, to the extent that other MNOs were aware of this. In addition, 3UK's ongoing participation in the MVNO market would aid its credibility (most notably through the continued growth of iD Mobile - one of the largest independent MVNOs - and 3UK's recent success in winning the contract to host a new MVNO).

1243 [✂] response to the CMA's questionnaire.
1244 For example, CK Hutchison internal documents.

Closeness of competition and alternative constraints

9.267 We have considered MVNOs' views on:

(a) closeness of competition; and

(b) whether BTEE and VMO2 exert a competitive constraint on the Parties.

9.268 As above, we have placed more weight on the feedback from large MVNOs given that a small number of key MVNOs account for a high proportion of overall supply.

Closeness between the Parties

9.269 We have considered the extent to which submissions made by MVNOs (including potential entrant MVNOs) indicate that the Parties are close competitors:

(a) In relation to the extent to which 3UK competes with VUK:

(i) five out of 11 MVNOs (including four large MVNOs) indicated that 3UK competes strongly or very strongly with VUK;[1245]

(ii) three out of 11 MVNOs (including one large MVNO) indicated that 3UK competes weakly or very weakly with VUK;[1246] and

(iii) three out of 11 MVNOs (including one large MVNO) gave a neutral response.[1247]

(b) In relation to the extent to which VUK competes with 3UK:

(i) six out of 11 MVNOs (including four large MVNOs) indicated that VUK competes strongly or very strongly with 3UK;[1248]

(ii) four out of 11 MVNOs (including one large MVNO) indicated that VUK competes weakly or very weakly with 3UK;[1249] and

(iii) out of 11 MVNOs, one large MVNO gave a neutral response.[1250]

(c) A large MVNO noted that both 3UK and VUK are 'strong competitors with similar focus as both are large MNOs providing similar services'.[1251]

1245 Responses to the CMA's questionnaire, question 26, from: [✂], [✂], [✂], [✂] and [✂].
1246 Responses to the CMA's questionnaire, question 26, from: [✂], [✂] and [✂].
1247 Responses to the CMA's questionnaire, question 26, from: [✂], [✂] and [✂].
1248 Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂], [✂] and [✂].
1249 Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂] and [✂].
1250 [✂] response to the CMA's questionnaire.
1251 Lyca Mobile response to the CMA's questionnaire.

(d) Consistent with the MVNO opportunity data set out above, a number of MVNOs told us that the Parties have directly competed against each other, including in key opportunities:

(i) As set out in paragraphs 9.89 to 9.92 above, the evidence from the Sky Mobile opportunity is that the Parties directly competed against each other.

(ii) As set out in paragraphs 9.146 to 9.151, one MVNO [✂] told us that it negotiated with 3UK, BTEE and VUK and that it was able to negotiate better terms following these offers.[1252]

(iii) Asda Mobile told us that it received proposals from 3UK, VUK and BTEE.[1253]

9.270 Although MVNOs have limited transparency over MNOs' wholesale strategies, when MVNOs were asked for their views on VUK's and 3UK's strategies, strengths and weaknesses, the responses are consistent with our interpretation of the Parties' internal documents. For example:

(a) One [✂] MVNO stated that both VUK's and 3UK's strategy is to drive growth through independent MVNOs and to gain share in order to use excess capacity to generate incremental revenue.[1254]

(b) Similarly, another large MVNO indicated that 3UK's wholesale strategy is to 'collaborate with various MVNOs to expand its market presence'. The same MVNO commented that, as the MNO with the smallest market share, the chances of an MVNO cannibalising 3UK's customer base is less than for the other MNOs.[1255]

(c) Another large MVNO submitted that VUK's interest has historically been low but has been very strong recently, while 3UK is actively looking to build its wholesale business.[1256]

Our assessment

9.271 We consider, based on the evidence above, that notwithstanding that 3UK has not won a significant number of recent wholesale opportunities, it competes closely with VUK. In particular, we place particular weight on feedback from the large

[1252] [✂] call note.
[1253] Asda Mobile call note.
[1254] [✂] response to the CMA's questionnaire.
[1255] Lyca Mobile response to the CMA's questionnaire.
[1256] [✂] response to the CMA's questionnaire.

MVNOs. The majority of these large MVNOs consider 3UK and VUK to compete strongly or very strongly against each other.

Alternative constraints

9.272 We have considered submissions made by MVNOs on the extent of the constraint from BTEE and VMO2 on the Parties.

9.273 With respect to BTEE:

(a) We gathered views on the extent to which BTEE competes with VUK:

(i) Five out of 12 MVNOs (including three large MVNOs) indicated that BTEE competes strongly or very strongly with VUK.[1257]

(ii) Seven out of 12 MVNOs (including three large MVNOs) indicated that BTEE competes weakly or very weakly with VUK.[1258]

(b) We gathered views on the extent to which BTEE competes with 3UK:

(i) Four out of 11 MVNOs (including three large MVNOs) indicated that BTEE competes strongly or very strongly with 3UK.[1259]

(ii) Six out of 11 MVNOs (including two large MVNOs) indicated that BTEE competes weakly or very weakly with 3UK.[1260]

(iii) Out of 11 MVNOs, one gave a neutral response.[1261]

(c) One [✂] MVNO indicated that in its negotiations 'BTEE [✂]. The same MVNO indicated that [✂].[1262]

(d) Another large MVNO submitted that based on its interactions, BTEE shows limited interest in large non-niche MVNO deals and tends to offer less competitive rates that are significantly worse than the other MNOs and tends not to offer technological parity.[1263]

(e) One large MVNO told us that BTEE is seen as having the strongest and fastest network because it has heavily invested in spectrum.[1264]

(f) Another MVNO noted that while it believed BTEE was ambitious to grow in the supply of wholesale mobile services and had been encouraging MVNOs

[1257] Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂] and [✂].
[1258] Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂], [✂], [✂] and [✂].
[1259] Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], and [✂].
[1260] Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂] and [✂].
[1261] [✂] response to the CMA's questionnaire.
[1262] [✂] response to the CMA's questionnaire.
[1263] [✂] response to the CMA's questionnaire.
[1264] Tesco Mobile call note.

to also sell, for example, BT fixed line to drive overall growth, BTEE wants to do so 'very much on its own terms' and by seeking to charge a premium for its network.[1265]

(g) One new entrant told us that when considering its wholesale supply strategy, which included helping to launch MVNEs, it had some concerns about the fact that there were very few MVNEs on the BTEE network.[1266]

(h) As noted above, we have also heard from potential new entrants:

(i) In one potential entrant's experience it was unable to enter the supply of wholesale mobile services owing to failed negotiations with all four MNOs. In particular, BTEE did not engage due to 'other priorities'.[1267]

(ii) In another's experience, while it considered BTEE to be active in the supply of wholesale mobile services, it noted that BTEE did not offer 'low prices' (based on pricing received from BT Wholesale using the BTEE network).[1268]

9.274 With respect to VMO2:

(a) We gathered views on the extent to which VMO2 competes with VUK:

(i) Five out of 12 MVNOs (including three large MVNOs) indicated that VMO2 competes strongly or very strongly with VUK.[1269]

(ii) Four out of 12 MVNOs (including one large MVNO) indicated that VMO2 competes weakly or very weakly with VUK.[1270]

(iii) Three out of 12 MVNOs (including one large MVNO) gave a neutral response on whether VMO2 is a competitor to VUK.[1271]

(b) We gathered views on the extent to which VMO2 competes with 3UK:

(i) Six out of 10 MVNOs (including four large MVNOs) indicated that VMO2 competes strongly or very strongly with 3UK.[1272]

(ii) Two out of 10 MVNOs indicated that VMO2 competes weakly or very weakly with 3UK.[1273]

1265 [✂] response to the CMA's questionnaire.
1266 [✂] call note.
1267 [✂] response to the CMA's questionnaire.
1268 [✂] response to the CMA's questionnaire and [✂] email.
1269 Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂] and [✂].
1270 Responses to the CMA's questionnaire, question 26 from: [✂], [✂] and [✂].
1271 Responses to the CMA's questionnaire, question 26 from: [✂], [✂] and [✂].
1272 Responses to the CMA's questionnaire, question 26 from: [✂], [✂], [✂], [✂], [✂] and [✂].
1273 Responses to the CMA's questionnaire, question 26 from: [✂] and [✂].

(iii) Two out of 10 MVNOs gave a neutral response.[1274]

(c) One large MVNO told us that VMO2 is strong in the wholesale market and has more MVNO partners than other MNOs. However, considering the amount of spectrum that VMO2 holds, and as the customer bases of VMO2 and its existing MVNO customers use more data, it would have concerns about the potential network quality it could offer MVNO customers.[1275]

(d) In another [✂] MVNO's experience, VMO2 submitted a bid which [✂]. [✂].[1276]

(e) One large MVNO commented that VMO2 has proven capability hosting MVNOs, but its network quality has degraded over time. The same large MVNO submitted that VMO2's strategy was historically favourable towards wholesale, but its interest has reduced over time, possibly due to the VM/O2 merger. [1277]

(f) In another large MVNO's experience during its most recent wholesale tender, VMO2 was 'unwilling to agree to the terms' the MVNO deemed it needed in order to grow its business.[1278]

(g) Another large MVNO told us VMO2 has an understanding of what MVNOs are interested in due to its previous experience with Virgin Mobile.[1279]

(h) One MVNO told us that VMO2 would risk falling further behind the Merged Entity and BTEE due to not being part of the MBNL partnership (based on its current position in independent network benchmarking tests as the worst performing operator).[1280]

(i) Another MVNO submitted that whilst VMO2 has a history of supporting MVNOs, it tends to do so in segments where its 'retail brand is comparatively weak' and that there are certain segments where VMO2 'would rather not support the competition'.[1281]

(j) As noted above, we have also heard from potential new entrants:

(i) In one potential entrant's experience it was unable to enter the supply of wholesale mobile services owing to failed negotiations with all four

1274 Responses to the CMA's questionnaire, question 26 from: [✂] and [✂].
1275 [✂] call note.
1276 [✂] response to the CMA's questionnaire.
1277 [✂] response to the CMA's questionnaire.
1278 [✂] response to the CMA's questionnaire.
1279 [✂] call note.
1280 [✂] email.
1281 [✂] response to the CMA's questionnaire.

MNOs. In particular, VMO2 presented an 'uneconomic' commercial offer.[1282]

(ii) Another noted that VMO2 has not recently supported the market entry of new, lower cost MVNO providers. In its experience VMO2 was not interested in wholesaling to new entrants who would seek low wholesale prices that would allow competition with its established and co-owned Tesco Mobile and Giffgaff.[1283]

(iii) Another noted that VMO2 requires 'bespoke development for any new MVNOs' and as such requires MVNOs to be 'of significant size and investment' for it to host the MVNO on its network.[1284]

(iv) One told us that when considering its wholesale supply strategy, which included helping to launch MVNEs (Mobile Virtual Network Enablers), it had some concerns about networks including VMO2's becoming quite congested.[1285]

9.275 One large MVNO ([✂]) also noted that MVNO pricing is typically higher where the MVNO uses the networks of BTEE and VMO2 compared to MVNOs using the VUK network.[1286]

Our assessment

9.276 We consider that feedback from MVNOs (including large MVNOs which we place more weight on), suggests that although MVNOs may consider BTEE and VMO2 as potentially strong competitors to the Parties, these MNOs may not always bid or bid competitively.

Impact of the Merger on competition in the supply of wholesale mobile services

9.277 The Parties submitted that:

(a) It is not correct, in considering the impact of the Merger on competition, to place additional weight on third party evidence from larger MVNOs. By doing so, it disproportionately discounts the views of MVNOs hosted by BTEE.[1287]

(b) MVNOs were unaware of the Beacon 4.1 Agreement until it was announced publicly part way through our inquiry on 3 July 2024. When asked for their

[1282] [✂] response to the CMA's questionnaire.
[1283] [✂] response to the CMA's questionnaire and [✂] email.
[1284] [✂] response to the CMA's questionnaire.
[1285] [✂] call note.
[1286] [✂] response to the Parties' initial submission, 21 August 2024, paragraph 3.2.4.
[1287] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 4.1.

views (before this date), MVNOs therefore did not understand that the effects of the Merger go far beyond the Merged Entity. Absent the Merger and Beacon 4.1, VMO2 will likely be a weaker competitor given its capacity constraints.[1288]

9.278 We have considered the views of MVNOs on how the Merger may impact competition in the supply of wholesale mobile services. We gathered the following views prior to the announcement of the Beacon 4.1 Agreements:

(a) Nine out of 15 MVNOs consider that the Merger would worsen competition.[1289]

(b) 4 out of 15 MVNOs consider that the Merger would improve competition.[1290]

(i) One MVNO said that whilst competition in the supply of wholesale mobile services would improve, it had concerns around the Parties' ability to have stronger control over wholesale prices due to their increased market position.[1291]

(ii) Another MVNO said that although there would be less choice as a result of the Merger, 'the choice will be more balanced and there will be more network parity to make a decision on.'[1292]

(c) Of the MVNOs who consider the Merger would worsen competition:

(i) One large MVNO commented that the Merger would result in a less competitive market to supply MVNOs, creating jeopardy in its ability to maintain attractive input costs once its current deal expires.[1293]

(ii) One large MVNO commented that although the Parties have stated that the Merger will 'provide more choice in wholesale partners for the UK's already competitive MVNOs', its view is that this is the diametrical opposite of the impact of the proposed Merger. In its view, the loss of any of the MNOs would significantly reduce the level of competition.[1294]

(iii) One large MVNO had concerns that a reduction of wholesale suppliers may lead to difficulty in securing a competitive wholesale deal. It also

[1288] Annex 2 to the Parties' response to the AIS and working papers; and Parties' response to the Provisional Findings 4 October 2024, Annex 2 paragraph 2.15.
[1289] Responses to the CMA's questionnaire from: [✂], [✂], [✂], [✂], [✂], [✂], [✂], [✂] and [✂].
[1290] Responses to the CMA's questionnaire from: [✂] and [✂]. [✂] email. [✂] email.
[1291] [✂] response to the CMA's questionnaire.
[1292] [✂] response to the CMA's questionnaire.
[1293] [✂] meeting slides.
[1294] [✂] response to the Parties' initial submission, 21 August 2024, paragraphs 1.4-1.5.

had concerns that the Merged Entity would prioritise integrating the two businesses and deprioritise MVNO hosting.[1295]

(iv) One large MVNO told us that the Merger would reduce choice for consumers and wholesale partners. It added it was uncertain whether the claimed benefits of the Merger would be felt by wholesale partners and end-consumers. The same MVNO told us that previous mergers between MNOs have led to fewer MVNOs and operators [✂] with business models to constrain prices having subsequently disappeared.[1296]

(v) One MVNO told us that a reduction in MNOs might result in less competitive terms being available for MVNOs.[1297]

(d) One MVNO said that the Merger would have little impact as in its view the costs may remain the same and its customers would have access to better coverage, benefitting the MVNO's offering.[1298]

(e) One large MVNO had mixed views, stating that 'it is difficult to predict with any certainty what the impact of the transaction will be on the retail and wholesale mobile services in the UK. To a large extent, it will depend on the merged entity's strategy. However, it should be noted that the transaction will result in 4 to 3 MNOs in the UK market. A reduction of 4 to 3 will lead to reduced choice for both retail and wholesale customers. We also note that a consolidation of 4 to 3 might lead to an investment in network infrastructure.'[1299]

9.279 A BTEE internal document notes that 'ARPU here is already likely at the bottom and there are not that many other large deals other than [✂] in the market so impact is limited'.[1300] This suggests that BTEE expects the impact of the Merger on wholesale ARPUs to be limited.

9.280 In light of the announcement of the Beacon 4.1 Agreement being reached between VUK and VMO2, discussed in Chapter 5, CTIL/Beacon, we gathered views from MVNOs on how this might affect competition in the supply of wholesale mobile services:

1295 [✂] call note.
1296 [✂] call note.
1297 [✂] call note.
1298 [✂] response to the CMA's questionnaire.
1299 [✂] response to the CMA's questionnaire.
1300 BTEE internal document.

(a) Of the nine MVNOs (including one potential MVNO) who previously had concerns, all seven who responded to us remained concerned despite the existence of the agreement.[1301]

(i) One large MVNO told us that, 'from a wholesale perspective, the risk to MVNOs arises from a reduction in the number of MNOs willing to wholesale'.[1302]

(ii) One large MVNO told us that 'competition in the wholesale market will still reduce from four to three parties'.[1303]

(b) One large MVNO told us that the agreement was a positive development, as it should result in rebalancing of spectrum and improving VMO2's network in terms of capacity and network quality.[1304]

(c) One MVNO who previously told us the Merger would improve competition, told us that the agreement was positive.[1305]

(d) One MVNO who previously told us that the Merger would have no impact told us that its views have not changed as a result of the recent announcement.[1306]

(e) Some MVNOs noted that the agreement could affect VMO2's network quality, but that there is uncertainty around this:

(i) One large MVNO told us that 'for customers of VMO2 there are likely to be some benefits from there being more capacity available'.[1307]

(ii) One MVNO told us that there is not enough information provided to confirm if the agreement would improve the competitive performance of VMO2 as a future network option.[1308]

9.281 VMO2 told us that it considers that the Beacon 4.1 Agreements, including the spectrum transfer, will improve its competitiveness in the wholesale market, noting that its [✂].[1309]

9.282 VMO2 also told us that it has to build additional capacity to accommodate the growth of its large MVNOs, and that it has only been able to do so because of their

1301 Emails from: [✂], [✂], [✂], [✂], [✂], [✂] and [✂].
1302 [✂] email.
1303 [✂] email.
1304 [✂] email.
1305 [✂] email.
1306 [✂] email.
1307 [✂] email.
1308 [✂] email.
1309 VMO2 letter.

relatively [✂]. Beacon 4.1 means that it would have greater capacity available to be able to sell to MVNOs.[1310]

9.283 We have considered more broadly whether the merger could impact the competitive position of BTEE and/or VMO2, due to disrupting the existing network sharing agreements. As set out in Chapter 10 and Chapter 11, we have concluded that the Merged Entity's involvement in the MBNL and Beacon network sharing arrangements would not harm BTEE and VMO2's ability to exert a competitive constraint in the wholesale market.

Our assessment of the third party submissions

9.284 We consider the evidence from third party submissions shows that:

(a) MVNOs can receive better offers from their host MNOs by negotiating with other MNOs;

(b) while the intensity of wholesale competition can vary, all MNOs exert a degree of competitive constraint.

(i) BTEE and VMO2 exert a competitive constraint on the Parties; and

(ii) the Parties are also close competitors;

(c) 3UK is seen by most MVNOs as a credible competitor, with most MVNOs recognising its recent improvements in network quality; and

(d) most MVNOs have concerns about the impact of the Merger, in particular on their ability to negotiate competitive terms with MNOs.

9.285 We consider that the Beacon 4.1 Agreement between VUK and VMO2 will improve VMO2's network quality, enabling it to become a stronger competitive constraint post-Merger (we discuss this, and the Parties' efficiencies submissions, in more detail in Chapter 14).

Conclusion on horizontal unilateral effects in the supply of wholesale mobile services

9.286 Based on our assessment of the evidence set out above, we conclude that:

(a) There is currently limited competition in the supply of wholesale mobile services. There are only four MNOs in the UK, meaning that at most four MNOs compete for any given wholesale opportunity. The evidence set out

[1310] VMO2 meeting note.

above also suggests that the intensity of competitive outcomes has varied over time, by MNO, and by type of MVNO.

(b) The evidence set out above suggests that MNOs have incumbency advantages and there are significant barriers to switching.

(c) VUK and 3UK are close competitors in the supply of wholesale mobile services. The Parties' internal documents [✂]. Moreover, the Parties competed against one another for a number of large MVNO opportunities, including the Sky Mobile opportunity, by far the largest independent MVNO opportunity, which saw particularly close competition between the Parties, [✂].

(d) Based on evidence collected from the Parties and MVNOs, in the next two years, MVNO contracts serving almost [✂]% of MVNO subscribers, including MVNOs currently hosted by the Parties ([✂], which alone make up [✂]% of MVNOs' subscribers)[1311] may be subject to renewal. Based on the opportunity data and previous engagement between the Parties and the MVNOs (as set out in the competitive dynamics section), we consider it likely that the Parties would both compete for large MVNO opportunities that may be up for renegotiation in the near future.

(e) 3UK's improvements in network quality (described in the retail section) have been recognised by MVNOs, although some continue to have concerns. This should enable it to compete more effectively for upcoming MVNO opportunities.

(f) There are only two alternative suppliers of wholesale mobile services to the Parties in the UK: BTEE and VMO2. It appears that both MNOs exert a competitive constraint on the Parties, although we note that they do not necessarily compete in all opportunities, even where invited.

(g) We also note that BTEE's internal documents suggest [✂]. BTEE also appears [✂].

(h) VMO2 has told us it is selective in participating for MVNO opportunities. We consider that the Beacon 4.1 Agreement between VUK and VMO2 would improve VMO2's network quality, enabling it to become a stronger competitive constraint post-Merger (we discuss this in more detail in Chapter 14). However, we consider it may have a reduced incentive to act on this ability as a result of the removal of the constraint which the Parties currently exert.

[1311] Based on CMA analysis, retail shares of supply by subscribers of MVNOs only.

(i) We note that the market will be highly concentrated post-Merger. We expect that the Merged Entity may have a reduced incentive to compete for MVNO opportunities than the Parties individually because the Merger will lead to the removal of the constraint which the Parties currently exert on each other (we discuss this in more detail in Chapter 14).

(j) We consider that there may also be an indirect effect resulting from the fact that the Merged Entity will also have an expanded presence in the supply of retail mobile services, which may mean it may have less of an incentive to bid for wholesale business. However, we note that the weight an MNO places on cannibalisation as a factor in deciding whether to bid (and on what terms) can also depend on its wholesale strategy, and whether it expects that other MNOs will bid for that MVNO. If the Merged Entity were to act on these incentives by bidding less and/or offering less competitive prices/terms, its rivals would experience an increase in demand for their services. This increase in demand may also provide rivals with incentives to compete less aggressively.

9.287 Therefore, before consideration of any potential countervailing factors (which are discussed in Chapters 13 and 14), we conclude that there is scope for an SLC as a result of the Merger due to horizontal unilateral effects in the supply of wholesale mobile services in the UK.

10. IMPACT OF THE MERGER ON THE CONSTRAINT FROM VMO2 THROUGH THE MERGED ENTITY'S PARTICIPATION IN BEACON

10.1 In this section, we consider:

(a) whether, following the Merger, the Merged Entity would have the ability to use its participation in Beacon to limit the constraint from VMO2;

(b) whether the Merged Entity would have the incentive to do so; and

(c) whether any impact on VMO2 would harm its ability to exert a competitive constraint in the retail and wholesale markets.

10.2 In the phase 1 decision, the CMA found that the Merged Entity may have the ability and incentive to use its participation in Beacon to disrupt the effective functioning of the network sharing agreement which could lead to a reduction in VMO2's ability to exert a competitive constraint in the supply of retail and wholesale mobile services post-Merger.

10.3 As set out in Chapter 5, Spectrum and respective spectrum holdings, on 5 June 2024 VUK and VMO2 entered into the Beacon 4.1 Agreements. This includes the Beacon 4.1 Long Form Amendments, setting out a framework governing the future of Beacon, and a Spectrum Transfer Agreement (**STA**), pursuant to which VUK is to sell [✂] of spectrum to VMO2 for an agreed price.[1312]

10.4 The rest of this section is structured as follows:

(a) Background to Beacon;

(b) The Beacon 4.1 Agreements and their impact on our assessment;

(c) The Parties' main submissions;

(d) VMO2's main submissions;

(e) Our assessment, structured as follows:

(i) Ability

(ii) Incentive

(iii) Effect

[1312] Parties' response to the CMA's RFI. This excludes [✂] of '[✂]' spectrum transferred to VMO2 under the STA but which is not suitable for mobile telecommunication services and therefore has been excluded from our analysis (Parties response to the CMA's RFI).

(f) Our conclusion.

Background to Beacon

10.5 As set out in Chapter 5, through the Beacon network sharing arrangement, VUK and VMO2 share active infrastructure (2G, 3G, 4G and 5G MORAN infrastructure). VUK and VMO2 also share passive infrastructure through CTIL.

10.6 The original Beacon agreement envisaged completion of a single grid with VUK as 'host' operator (ie the operator with the responsibility for providing active RAN services and deploying each operator's spectrum on that RAN) in the West of the UK and South London and VMO2 as host in the East of the UK, including Scotland and North London.[1313]

10.7 In 2017, VUK and VMO2 agreed to unwind active sharing in certain areas, meaning they no longer rely on each other for the provision of active network services in these areas (although they continue to passive share via CTIL). This was initially done for all active sharing in London (known as Beacon 2) and then in 2019 they agreed to unwind all active sharing in the major population centres in the UK (known as Beacon 3).[1314]

10.8 The Beacon parties continued acting as 'host' in the rest of the West and East MORAN areas. VMO2 currently uses approximately [✂] sites hosted by VUK in the West,[1315] which is [30-40]% of VMO2's total sites.[1316]

10.9 Acting as host involves:[1317]

(a) [✂].

(i) [✂].[1318]

(ii) The Beacon parties have agreed [✂] as part of the Beacon 4.1 Agreements. However this relates to [✂] spectrum assets only. Most sites will be upgraded beyond [✂].[1319]

(b) [✂].

(i) [✂].

1313 FMN.
1314 FMN.
1315 Parties' response to the CMA's RFI.
1316 FMN.
1317 FMN.
1318 FMN.
1319 [✂] response to CMA's RFI.

(ii) [✂].[1320]

10.10 The Beacon 4.1 Agreements include various provisions related to the delivery of the Merged Entity's joint network and its integration within the Beacon grid:

(a) a joint upgrade plan, known as the Consolidated Works Programme (**CWP**), [✂] with financial incentives [✂].[1321] This is an [✂]-year delivery plan, covering about [✂] of the network, which is aimed at synergising the deployment of new equipment across the shared MORAN areas.[1322] The full suite of configurations that can accommodate each of the Beacon parties' [✂] spectrum has been agreed but the precise configuration deployed at each site will [✂].[1323] As part of this plan, the Merged Entity intends to integrate [✂] existing 3UK sites into the Beacon network in the MORAN areas and VMO2 will have the right to [✂];[1324]

(b) [✂];[1325]

(c) [✂];[1326, 1327]

(d) enhanced governance, with [✂].[1328] If the Beacon parties cannot agree the site design for each consolidated works packages configuration, [✂];[1329] and

(e) provisions relating to the planning, testing and deployment of the MOCN solution. For example, the Beacon parties [✂].[1330]

Parties' main submissions

10.11 The Parties submitted that:

(a) there is no ability for the Merged Entity to use its participation in Beacon to disrupt the effective functioning of Beacon and thereby limit the competitive constraint from VMO2.[1331]

(b) all parties to the Beacon 4.1 Agreements have entered into the arrangement on the basis that their respective commercial interests are protected in the

1320 FMN.
1321 Parties' submission.
1322 [✂].
1323 VMO2 response to the CMA's RFI.
1324 Parties' Beacon 4.1 CMA briefing.
1325 Parties' submission.
1326 Parties' submission.
1327 FMN.
1328 VMO2 meeting slides.
1329 Parties' submission.
1330 Parties' submission.
1331 Parties' response to the AIS and working papers.

revised arrangements and that there will be no realistic means for any party to materially disrupt the other. [1332]

10.12 The Parties submitted that the Phase 1 Decision mischaracterises the Merged Entity's intentions for Beacon post-Merger;[1333] that the Merged Entity will have no ability or incentive to disrupt VMO2's network development because:

(a) The Merged Entity will be reliant on VMO2 in the East. Given the geographical divide of Beacon, the Merged Entity would be reliant on VMO2 for the current [✂] sites VMO2 manages to which will be added the 3UK densification sites in the East.

(b) It will need to work closely with VMO2 to achieve its JBP.[1334]

(c) [✂].[1335]

10.13 The Parties submitted that, far from contributing to any SLC, the Beacon 4.1 Agreement will be significantly pro-competitive.[1336]

VMO2's main submissions

10.14 VMO2 told us that the Beacon 4.1 Agreements address any concerns previously shared with the CMA in relation to the effective functioning of the Beacon network sharing agreement.[1337]

10.15 VMO2 stated that:

(a) in order for the network sharing agreement to function effectively they require broad (not perfect) symmetry in terms of spectrum and aligned incentives in terms of rollout, which is provided by the Beacon 4.1 Agreements.[1338]

(b) one party having significantly greater spectral capacity and/or access to sites outside of a network sharing agreement would create an imbalance and remove mutual co-dependence, potentially reducing their incentive to cooperate.[1339]

(c) over the years, VUK and VMO2's incentives have [✂], and their mutual dependence has evolved over time. For example, [✂]. However, with similar

[1332] Parties' response to the AIS and working papers.
[1333] We note that at the time of the Phase 1 Decision, the Parties had not signed the Beacon 4.1 Agreements.
[1334] The JBP incorporates the JNP.
[1335] Parties' initial submission, 1 May 2024, paragraphs 5.2 and 5.16.
[1336] Parties' response to the AIS and working papers.
[1337] VMO2 call note; VMO2, Incentives submission; and VMO2, letter.
[1338] VMO2 call note.
[1339] VMO2 meeting slides.

allocations of spectrum in Ofcom's most recent auction for the 3.4-3.6 GHz band, [✂].[1340]

(d) by re-aligning the Merged Entity and VMO2's incentives to cooperate, Beacon 4.1 removes the Merged Entity's incentives to harm VMO2.[1341]

(e) Beacon 4.1 will enable VMO2 to compete more effectively post-Merger, reducing the Merged Entity's ability to harm VMO2 by not cooperating in Beacon, [✂].[1342]

10.16 We note that we have received internal documents from VMO2 which are consistent with their submissions that the Beacon 4.1 Agreements solve their network sharing concerns:

(a) A VMO2 November 2023 Board document states that it was concerned that the Merger, including the resulting spectrum asymmetry, would undermine its existing network sharing agreement (Beacon), but that these concerns would be addressed by signing the Beacon 4.1 Agreements. It noted that it had managed to [✂].[1343]

(b) A VMO2 November 2023 Board document states that '[✂]'.[1344]

Our approach to contractual protections

General approach

10.17 As a starting position, the CMA considers that there are typically limitations in the extent to which contracts, including contracts entered into by parties during our investigation, are capable of resolving competition concerns identified by the CMA. Paragraph 7.15 of CMA129 outlines some of these limitations, in particular:[1345]

(a) Scope and implementation of the contract – the contract may not cover all the ways in which the anticompetitive effect may arise. In particular, the contractual terms may not be sufficiently specified or may not be fully implemented.

(b) Duration – the contract may not cover the entire period during which the SLC is expected to persist. Its term may be limited or it may be terminated.

[1340] VMO2 Incentives submission.
[1341] VMO2 meeting slides.
[1342] VMO2 meeting slides.
[1343] VMO2 internal document.
[1344] VMO2 internal document.
[1345] CMA129 refers to these limitations in the context of vertical foreclosure concerns but we consider that the principles stated have wider application and are relevant to the issues we are considering this case, including in relation to the Beacon network sharing arrangement.

(c) Renegotiation – the contract may be renegotiated such that it no longer addresses the competitive concern.

(d) Waiver / non-enforcement – the counterparty may waive its rights under the contract or not seek to enforce it in case of breach.

(e) Consequences of breach – the financial and other (eg, reputational) consequences of breach may not outweigh the benefits for the merging party of non-compliance.

10.18 Accordingly, the CMA's assessment of the ability of the Merged Entity to foreclose its rivals is unlikely to place material weight on contractual protections. However, CMA129 makes it clear that the CMA may consider any financial or reputational costs of terminating contracts in its assessment of foreclosure incentives. We consider it is possible in principle that the financial or reputational impacts of breaching contracts could impact the merged entity's incentive to foreclose. However, we consider that the impact depends on the likely consequences in the event the Merged Entity did adopt a foreclosure strategy and therefore breached the contracts, and the materiality of the consequences. We consider the Merged Entity's market power and the third party's bargaining power post-Merger relevant to this assessment.

10.19 In any case, the impact of a contract with a third party, including a contract entered into by parties during our investigation, will depend on the particular circumstances of the case, including the nature of the contract. In principle, it may impact the competitive assessment directly, for example by affecting the ability or incentive of the merged entity to foreclose. This may be more likely where the bargaining position of the merged entity and the counterparty is more balanced. It may also do so indirectly, by giving rise to efficiencies that countervail the SLC.

The Beacon 4.1 Agreements

10.20 The CMA takes a forward-looking approach when assessing mergers. It takes account of foreseeable developments that would occur post-merger to evaluate post-merger competitive dynamics. Where a contract is entered into between a merger party and a third party during the CMA's assessment of a merger, the CMA must therefore consider the extent to which it impacts the competitive assessment.

10.21 In the present case, we consider that VUK had longer-term commercial incentives to enter into the Beacon 4.1 Agreements, as opposed to purely short-term regulatory incentives to address potential competition concerns arising from the Merger. Indeed, whilst entered into during our review of the Merger, the Beacon 4.1 Agreements are the latest iteration of the long-standing Beacon network sharing arrangements. Moreover, it was necessary for VUK to enter into these Agreements with VMO2, given the Parties intend for the Beacon network to be the base grid for the Merged Entity's network, including by integrating some of the sites currently belonging to 3UK (and the Merged Entity thus needed to ensure its network integration post-Merger was contractually possible under the Beacon arrangements, as set out in paragraph 10.10 above) .

10.22 We have considered the extent to which the typical limitations that may apply to contracts (as outlined in paragraph 10.17 above) apply to the Beacon 4.1 Agreements. We consider that the scope and dynamics of the Beacon 4.1 Agreements mean that many of the typical limitations are not present. In particular:

(a) following the implementation of the Beacon 4.1 Agreements, the Merged Entity will continue to rely on VMO2 for the provision of mobile telecommunication services in the East of the country (given the geographical divide of Beacon). Terminating the network sharing arrangement would therefore likely be costly and undesirable, as it would require the Merged Entity to build or access a new grid in half of the country.

(b) the risk of a failure to fully implement or breach the Beacon agreements, including the Beacon 4.1 Agreements, is also reduced as a result of the mutual dependency of the network sharing partners, in particular as the Merged Entity will need VMO2's cooperation for merger integration and to roll out its joint network.

10.23 As a result, we expect that the Merged Entity will continue to be committed to Beacon 4.1 post-Merger and that VMO2 will maintain sufficient bargaining power when ensuring compliance with the agreements and negotiating any future amendments. In addition, we also consider it relevant that the Beacon 4.1 Agreements include a spectrum divestment from VUK to VMO2, which increases spectral symmetry between VMO2 and the Merged Entity and enhances VMO2's ability to compete. Once the totality of the spectrum is transferred, there will not be any ongoing contractual obligations between VUK and VMO2 in relation to the STA.[1346]

10.24 In light of the above, the CMA has taken into account the Beacon 4.1 Agreements where relevant in its assessment of the ability and incentive of the Merged Entity to disrupt the effective functioning of the Beacon network sharing arrangement.

Our assessment

10.25 The evidence base for our assessment includes submissions from the Parties and VMO2, VMO2's internal documents and our own assessment of the Beacon 4.1 Agreements.

[1346] The spectrum will be released [✂].

10.26 We consider whether the Merged Entity has the ability and incentive to disrupt the effective functioning of the Beacon network sharing arrangement and thereby limit the constraint exerted by VMO2 on the Merged Entity post-Merger. In doing so, we consider the impact of the Beacon 4.1 Agreements.

10.27 At the outset, we note that we attach material weight to VMO2's submissions that the Beacon 4.1 Agreements address any concerns previously shared with the CMA in relation to the effective functioning of the Beacon network sharing agreement. This is because:

(a) VMO2 would be the only third party that could potentially be harmed by any disruption of the Beacon network sharing arrangement.

(b) We expect that the current level of mutual dependency between the Beacon parties will remain post-Merger for the reasons mentioned in paragraph 10.22 above, and that, therefore, the Merged Entity will continue to be committed to Beacon 4.1 post-Merger.

(c) VMO2 will maintain sufficient bargaining power when ensuring compliance with the Beacon 4.1 Agreements and negotiating any future amendments. This is distinguishable from other contexts where a weaker contract party may not feel able to express its concerns to the CMA.

Ability

10.28 For our assessment of the potential ability of the Merged Entity to limit the constraint from VMO2, we have assessed whether the Merged Entity would have the ability materially to harm VMO2 by disrupting the Beacon network sharing arrangement to an extent that would limit the competitive constraint from VMO2. In particular we set out:

(a) our view of the potential mechanisms for harm; and

(b) our view on the protection offered by the contractual arrangements.

Parties' submissions

10.29 The Parties submitted that:

(a) the view that the Merged Entity could frustrate VMO2 through setting a plan for deployment of VMO2 demand with protracted timescales does not reflect the reality of the Beacon arrangements [✂]. VUK and VMO2 have also agreed [✂] the Merged Entity and VMO2 of the consolidated works packages programme which includes [✂]. The CMA also does not take into account the significant financial and operational penalties that would incur if it were to fail to meet agreed timescales;[1347]

(b) at existing Beacon sites, the Merged Entity and VMO2 will [✂];[1348]

(c) [✂];[1349]

(d) there is no ability to [✂]. Under the Beacon arrangements neither the Merged Entity nor VMO2 will be able to [✂];[1350] and

(e) VMO2 and the Merged Entity do not have active sharing in a material part of the country, as VMO2 deploys for itself in London and in the 'unwind' areas (covering [✂]% of the UK population). VMO2 deploys for itself and VUK in the East region.[1351]

Mechanisms for harm

10.30 We have considered a range of potential mechanisms through which the Merged Entity could potentially disrupt the effective functioning of Beacon and thereby limit the constraint from VMO2.

10.31 As set out in paragraph 10.8, VUK is responsible for the West of the UK and VMO2 currently uses approximately [✂] sites hosted by VUK in the West, which is [30-40]% of VMO2's total sites. We consider that this amounts to a material proportion of VMO2's total sites. VMO2 would therefore be dependent on the Merged Entity to roll out upgrades to the shared MORAN in the West, [✂].[1352]

10.32 We note that the Beacon 4.1 Agreements include a joint upgrade plan for the Merged Entity's and VMO2's deployment requirements, as set out in paragraph 10.11 above. As part of this:

(a) the Merged Entity and VMO2 have committed to upgrade approximately [✂] existing Beacon sites in the MORAN areas; [1353]

(b) at the existing Beacon sites, the Merged Entity and VMO2 [✂];[1354] and

(c) the Merged Entity intends to integrate c.[✂] existing 3UK sites into the Beacon network in the MORAN areas and provide VMO2 with [✂].[1355]

[1347] Parties' response to the AIS and working papers.
[1348] Parties' Beacon 4.1 CMA briefing.
[1349] FMN; and Parties' response to the Issues Letter.
[1350] Parties' response to the AIS and working papers.
[1351] Parties' initial submission, 1 May 2024, paragraph 5.14.
[1352] FMN.
[1353] Parties' Beacon 4.1 CMA briefing.
[1354] Parties' submission, Beacon 4.1.
[1355] Parties' Beacon 4.1 CMA briefing.

10.33 However, whilst the intention of the Beacon 4.1 Agreements is to synergise the Beacon parties' demand requirements, there are some circumstances in which their demand may still progress separately (for example, [✂]).[1356]

10.34 We consider that there are several potential mechanisms for harm. For example, the Merged Entity could disrupt VMO2's network roll-out by:

(a) failing to deliver on the consolidated works packages, including by failing to meet agreed timescales or failing to provide VMO2 access to the retained 3UK sites;

(b) providing VMO2 with a plan for deployment of any additional demand (over and above the consolidated works packages) which has protracted delivery timescales; and/or

(c) failing to meet agreed timescales for deployment of any additional demand (over and above the consolidated works packages).

Protection offered by the contractual arrangements

10.35 There are penalties for failing to fulfil the consolidated works packages, [✂]. VMO2 also submitted that Beacon 4.1 protects it against harmful behaviours by creating financial and other incentives to adhere to the Beacon principles.[1357]

10.36 We have considered whether the Beacon 4.1 Agreements provide sufficient contractual protection such that the Merged Entity would not have the ability to disrupt the Beacon network sharing arrangement and thereby limit the constraint from VMO2. We have considered:

(a) the duration of the Agreements; and

(b) the clarity of the provisions in the Agreements and the extent to which they are likely to prevent the Merged Entity from disrupting network sharing with VMO2.

Duration

10.37 Beacon 4.1 has extended the term of Beacon to [✂]. Beacon 4.1 shall continue to be in effect [✂].[1358] While we therefore consider that VMO2 may have sufficient notice to protect its commercial position, we consider that this does not completely remove the ability to disrupt the Beacon network sharing arrangements.

[1356] VMO2, Beacon 4 Term Sheet.
[1357] VMO2 meeting slides.
[1358] Parties' submission, Beacon 4.1.

The clarity of the provisions in the Agreements

10.38 The main relevant contractual provisions in this regard are:

(a) the spectrum divestment to VMO2;

(b) the consolidated works packages, which include financial incentives to promote prompt delivery of the agreed network deployment and upgrade plans and penalties for under-delivery; and

(c) access for VMO2 to 3UK sites which are being retained by the Merged Entity with a penalty regime to incentivise the Merged Entity to secure access.

10.39 While the Beacon 4.1 Agreements set out precise obligations, mechanisms and timelines for both parties, particularly in relation to the integration of the Merged Entity's network into Beacon and VMO2's access to 3UK sites and may thus provide some level of protection to VMO2, we place limited weight on these contractual protections when assessing the Merged Entity's ability to disrupt the Beacon network sharing arrangement given they might not protect all ways in which Beacon 4.1 could be disrupted, and they could be renegotiated or breached.

Our view on ability

10.40 Based on the evidence set out above, we have found that the Merged Entity would have the ability materially to impact, and thereby limit the constraint from, VMO2 by using the Merged Entity's participation in Beacon to disrupt the effective functioning of the network sharing arrangement, despite the contractual protections in the Beacon 4.1 Agreements.

Incentive

10.41 We set out our view of the incentive of the Merged Entity to disrupt the Beacon network sharing arrangement.

10.42 For the reasons mentioned in paragraphs 10.18, 10.22 and 10.23 above, we consider that it is appropriate to take into account the Beacon 4.1 Agreements in our assessment of the incentive of the Merged Entity to disrupt the effective functioning of the Beacon network sharing arrangement.

10.43 The Beacon network sharing arrangement relies on relative symmetry between VMO2 and VUK. That symmetry currently incentivises both VUK and VMO2 to deliver on the requirements of the other because they have similar requirements in terms of capacity upgrades, meaning that they are equally dependent on one another.

10.44 The parties to a network sharing arrangement can be symmetric in relation to:

(a) factors affecting capacity (for example, sites or spectrum);

(b) outside options (including access to other sites); and

(c) wider business strategy (for example, 5G roll-out strategy).

10.45 The Beacon 4.1 Agreements impact:

(a) spectrum symmetry between the Beacon parties (via the STA discussed above, whereby VUK is to sell [✂] of spectrum to VMO2 for an agreed price[1359]); and

(b) site symmetry between the Beacon parties (including the number of sites, and equipment on those sites, via the consolidated works packages (which we understand includes access for VMO2 to 3UK sites which will be retained by the Merged Entity).

10.46 The Parties submitted that the Phase 1 Decision overstates the degree of symmetry between VUK and VMO2 today, and that Beacon has always allowed VUK and VMO2 to promote network independence and asymmetry where their network strategies and/or capex commitments change.[1360]

10.47 VMO2 submitted that the Beacon 4.1 Agreements remove the Merged Entity's incentives to harm VMO2.[1361] In particular it submitted that the Beacon 4.1 Agreements ensure that there will be sufficient balance and mutual co-dependence between VMO2 and the Merged Entity resulting from:

(a) provisions that materially improve VMO2's competitive position post-Merger by limiting the gains that the Merged Entity might make from acting to harm or frustrate VMO2 (including the spectrum divestment, [✂]); and

(b) provisions that increase the costs of the Merged Entity acting non-cooperatively ([✂]).[1362]

10.48 VMO2 also submitted that the Beacon 4.1 Agreements include further provisions which protect its competitive position. Under the Beacon 4.1 Agreements, [✂].[1363] In particular, the Beacon 4.1 provisions establish that [✂]. The Merged Entity has committed to [✂].[1364]

10.49 As set out in paragraph 10.43 above, the Beacon network sharing arrangement relies on relative symmetry between the Beacon parties. Where the Beacon

[1359] As explained in footnote 1312, this excludes [✂] of '[✂]' spectrum.
[1360] Parties' initial submission, 1 May 2024, paragraph 5.17.
[1361] VMO2 Incentives submission.
[1362] VMO2 Incentives submission.
[1363] VMO2 meeting slides.
[1364] VMO2 Incentives submission.

parties have similar requirements for capacity upgrades, they are incentivised to co-operate because they are equally dependent on each other. The Beacon 4.1 Agreements include:

(a) provisions which directly affect the symmetry between the parties (STA and site access provisions); and

(b) provisions which are the result of that change in symmetry (consolidated works packages site upgrade plan).

10.50 As set out below, the STA and site access provisions in the Beacon 4.1 Agreements increase alignment in the Beacon parties' spectrum and site holdings. We have therefore considered the impact of these provisions on their incentives to co-operate. The consolidated works packages site upgrade plan demonstrates that the Beacon parties expect to have an incentive to co-operate post-Merger. This is enabled by the increased symmetry in terms of spectrum and sites.

Impact of STA on spectrum symmetry

10.51 As set out in paragraph 10.3, VUK and VMO2 have now entered into the Beacon 4.1 Agreements. This includes a Spectrum Transfer Agreement, whereby VUK is to sell [✂] of spectrum to VMO2 for an agreed price.

10.52 It also includes an agreement between the Merged Entity and VMO2 to [✂]. This would [✂] VMO2 holds, improving VMO2's spectral efficiency and enabling it to compete more effectively with the spectrum it has available.[1365]

10.53 We have considered the extent to which the STA affects the symmetry between the Beacon parties in relation to spectrum by changing:

(a) number of shared bands;

(b) total amount of spectrum held by each party; and

(c) amount of spectrum held by each party in a given band.

10.54 The Parties submitted that [✂].[1366]

VMO2's submissions

10.55 VMO2 submitted that:

(a) where both Beacon parties have similar spectrum holdings in the same frequency bands it is easier to agree on a site configuration which works for

[1365] VMO2 response to CMA's RFI [✂].
[1366] Parties' initial submission, 1 May 2024, paragraph 5.17.

both (eg the antennas which offer the best performance for operator A are also likely to offer the best performance for operator B) [✂].

(b) the alignment is particularly important where [✂]. This is because [✂]. [✂].[1367]

10.56 VMO2 submitted that the Merger does not result in overall reduced spectrum alignment compared to the pre-Merger situation because of the STA which brings greater alignment in terms of:

(a) the number of shared bands ([✂]).[1368]

(b) the total volume of spectrum between VMO2 and the Merged Entity. The most important alignment [✂].[1369]

10.57 In relation to symmetry in the low-band specifically, VMO2 submitted that:

(a) there are no changes to VMO2's [✂] as a result of the STA. While the Merged Entity will have [✂].[1370]

(b) however the Beacon parties already have the same low-band spectrum assets (ie they both have spectrum in the 700, 800 and 900MHz bands). This enables the use of shared kit to radiate all three bands for both of the Beacon parties and a common baseline configuration to be deployed on every active shared site. [✂].[1371]

(c) the common baseline configuration can support [✂].[1372]

10.58 In relation to symmetry in [✂] specifically, VMO2 submitted that the STA increases the symmetry between the Beacon parties:

(a) [✂];[1373] and

(b) as a result, agreement of [✂] via the consolidated works packages is expected to be [✂].[1374] The symmetry will also enable faster delivery.[1375]

10.59 VMO2 submitted, in relation [✂] spectrum, that [✂]:

(a) improvement in VMO2's [✂];[1376]

1367 VMO2 response to the CMA's RFI.
1368 VMO2 response to CMA's RFI.
1369 VMO2 response to CMA's RFI.
1370 VMO2 response to CMA's RFI.
1371 VMO2 response to CMA's RFI; and VMO2 email.
1372 VMO2 response to CMA's RFI.
1373 VMO2 response to CMA's RFI.
1374 VMO2 response to CMA's RFI.
1375 VMO2 meeting slides.
1376 VMO2 meeting slides.

(b) the most important alignment [✄]. [✄];[1377] and

(c) the benefits and efficiencies, both in terms of the consolidated works packages [✄] (see paragraph 10.52 above), outweigh any issues that may otherwise have arisen.[1378]

Our assessment

10.60 We have considered the impact of the Merger on spectrum symmetry between the Beacon parties.

10.61 For the reasons mentioned in paragraph 10.27(c) above, we attach material weight to VMO2's submissions.

10.62 We have first considered the extent to which the Merger increases spectrum symmetry between the Beacon parties by increasing alignment between the parties in terms of the number of shared bands of mid-band spectrum. Greater alignment in shared bands enables the Beacon parties to more effectively and efficiently agree site designs and share cell site equipment and enables joint deployment across all bands.

10.63 The STA will increase alignment between the Beacon parties in terms of the number of shared bands [✄]. There is no impact on the number of shared bands in low-band or high-band spectrum. VMO2's understanding of the Beacon parties' holdings of spectrum bands post-Merger is set out in Figure 10.1 below.

Figure 10.1: Number of shared bands post-Spectrum Transfer Agreement

[✄]

Source: VMO2 meeting slides.

10.64 We have also considered the extent to which the Merger (including the STA) affects spectrum symmetry more broadly between the Beacon parties. As set out in Figure 10.2 below:

(a) currently the Beacon parties have broadly similar spectrum holdings (with an overall ratio of 1.0).

(b) the Merger will increase the total spectrum asymmetry between the Beacon parties (from 1.0 to [✄]).

(c) the impact varies by spectrum band:

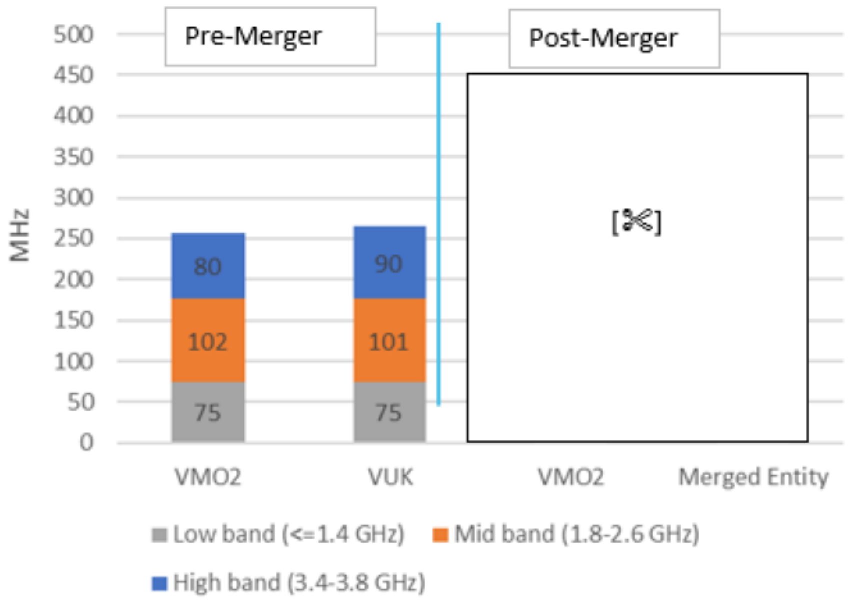
[1377] VMO2 response to CMA's RFI.
[1378] VMO2 response to CMA's RFI.

(i) low-band: the Beacon parties' spectrum asymmetry increases from 1.0 to [✂].

(ii) mid-band: the Beacon parties' spectrum asymmetry [✂].

(iii) high-band: the Beacon parties' spectrum asymmetry increases from 1.1 to [✂].

Figure 10.2: Impact of the Merger on spectrum symmetry



Source: CMA analysis of Ofcom's Frequency allocations: mobile and wireless Broadband below 5 GHz and the Spectrum Trade Agreement, Parties submission, Beacon 4.1
Notes: We have not included 3UK's holdings in the 3800-4200MHz band as it is not usable for mobile services (FMN, [✂] of VUK [✂] spectrum as it is not suitable for telecommunications (Parties response to the CMA's RFI)) and allocations expiring on 15 October 2024 and 31 December 2025.

10.65 We consider that:

(a) spectrum asymmetry between the Beacon parties is increased as a result of the Merger, particularly spectrum asymmetry in the high-band; and

(b) notwithstanding this, sufficient alignment will remain between the Beacon parties. We note that the Beacon parties' spectrum holdings do not need to be symmetric for the Beacon network sharing arrangement to function effectively and that total spectrum asymmetry is only increased from 1.0 to [✂].

10.66 We also note that VMO2 does not have concerns in relation to the spectrum asymmetry, and that as set out in paragraph 10.59 above, the asymmetry in high-band spectrum is less of a concern for VMO2.

Incentive of Merged Entity to divest spectrum

10.67 We might still be concerned if the Merged Entity was not sufficiently incentivised to deliver on the STA. We have therefore considered its incentives to comply with the Agreement.

Parties' submissions

10.68 The Parties submitted that the Merged Entity will have no ability or incentive to disrupt VMO2's network development because:

(a) The Merged Entity will be reliant on VMO2 in the East. Given the geographical divide of Beacon, the Merged Entity would be reliant on VMO2 for the current [✂] sites VMO2 manages to which [✂].[1379]

(b) It will need to work closely with VMO2 in the context of Beacon to achieve its JBP. The proposed Merged Entity site grid [✂]. The need to carry out [✂], is critical to delivering the benefits of the Merger.[1380]

10.69 The Parties also submitted, in relation to the STA specifically, that:

(a) the Merged Entity has a contractual obligation to divest the spectrum, including [✂];[1381] and

(b) [✂].[1382]

VMO2's submissions

10.70 VMO2 submitted that it will need to support the Merged Entity's MOCN rollout. The Beacon 4.1 Agreements include financial incentives for it to achieve certain MOCN delivery milestones.[1383]

10.71 In relation to the STA specifically, VMO2 submitted:

(a) it doesn't see the spectrum transfer as being uncertain, and noted the incentive for VUK to transfer the spectrum to benefit from the £[✂] million payment from VMO2.[1384]

(b) the Merged Entity has committed [✂].[1385] [✂].[1386]

[1379] Parties' initial submission, 1 May 2024, paragraphs 5.2 and 5.16.
[1380] Parties' initial submission, 1 May 2024, paragraphs 5.2 and 5.16.
[1381] Vodafone internal document. Parties' submission, Beacon 4.1. [✂].
[1382] Parties, Beacon 4.1 CMA briefing, [✂]. [✂].
[1383] VMO2 meeting slides; and VMO2 Incentives submission.
[1384] VMO2 call note.
[1385] VMO2 Incentives submission.
[1386] VMO2 meeting slides.

Our assessment

10.72 As set out in paragraph 10.27, we first note that we attach material weight to VMO2's submission that the Beacon 4.1 Agreements alleviate its concerns, considering we expect that the current level of mutual dependency between the Beacon parties will remain post-Merger and, that, therefore, the Merged Entity will continue to be committed to Beacon 4.1 post-Merger and VMO2 will maintain sufficient bargaining power.

10.73 We note that the nature of the spectrum divestment (a one-off transaction) means that VMO2 does not require the Merged Entity to have ongoing incentives to cooperate with VMO2 and respect its contractual obligations under Beacon 4.1 once the totality of the spectrum has been released. We have therefore considered the extent to which the Merged Entity has the incentive to cooperate with VMO2 in the period before the spectrum has been released.

10.74 The spectrum transfer is allocated and phased as set out in Tables 10.1 and 10.2 below. In this context, 'Day 1', as defined in the STA, is the first working day after the date that is [✂] after Merger Completion, or [✂].[1387]

10.75 The Parties submitted that the rationale for [✂].[1388]

Table 10.1: Spectrum allocation

Band	*Amount (MHz and % of total)*	*Allocation (£m and % of total)*
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]

Source: Parties submission, Beacon 4.1.
Note: This includes [✂] of 'power restricted' spectrum in the [✂] band which is not suitable for mobile telecommunication services and is excluded from our analysis of spectrum asymmetry.

Table 10.2: Spectrum release timetable

Spectrum band	*Day 1*	*Yr1*	*Yr2*	*Yr3*	*Yr4*	*Yr5*	*Yr6*
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Vodafone response to the CMA's s109 notice.

10.76 There are a number of reasons why we consider the Merged Entity would be incentivised to divest the spectrum:

[1387] Parties' submission, Beacon 4.1.
[1388] Parties' Beacon 4.1 CMA briefing.

(a) The Parties estimate it will take approximately nine years to fully integrate their networks.[1389] This implies that the Merged Entity will be reliant on VMO2's cooperation for the entire period of the spectrum transfer (as set out in Table 10.2) (the Merged Entity will need VMO2 to rollout the MOCN solution in the East MORAN area on its behalf). We consider this will give the Merged Entity the incentive to divest the spectrum, as VMO2 will have leverage over the Merged Entity if it does not comply with its obligations. For example, as part of Beacon 4.1, VMO2 has committed to [✂].[1390] In other words, we expect that the current level of mutual dependency between the Beacon parties will remain post-Merger and, that, therefore, the Merged Entity will continue to be committed to Beacon 4.1 post-Merger and VMO2 will maintain sufficient bargaining power.

(b) The Parties intend to [✂].[1391] VMO2 is also responsible for maintaining and upgrading the shared network in the East MORAN areas. Currently this represents [✂][1392] ([✂]% of the Merged Entity's total sites based on the JBP), although we note that the number of sites will likely increase over time as VMO2 also becomes responsible for some of the retained 3UK sites in the East MORAN area.[1393]

10.77 We have received internal documents from VMO2 which are consistent with the Merged Entity being reliant on VMO2, in particular during the early years after Merger completion:

(a) A VMO2 November 2023 Board document states that in exchange for securing [✂].[1394]

(b) A VMO2 November 2023 Board document also notes that VMO2 is to support delivery of MOCN for the Merged Entity [✂].[1395]

10.78 We also consider that there are other benefits to the Merged Entity divesting the spectrum as planned:

(a) as set out in Table 10.1, the Merged Entity gains from divesting the spectrum via the payment from VMO2 (£[✂] million).

(b) [✂] set out in the STA, VUK will receive [✂] from VMO2 and VMO2 will receive [✂]. This [✂] will allow VUK to reconfigure its own spectrum

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[1389] FMN.
[1390] VMO2 meeting slides. Parties submission.
[1391] FMN.
[1392] Parties' response to the CMA's RFI.
[1393] As part of the Beacon 4.1 Agreements VMO2 will become the 'host operator' for the Retained 3UK sites in East MORAN areas (ie it will become responsible for maintaining and upgrading the sites as it is currently for sites in the East MORAN area). If the Merged Entity does not manage to get VMO2 the relevant hosting rights, this triggers a liability ([✂] described below).
[1394] VMO2 internal document.
[1395] VMO2 internal document.

holdings and benefit from a more efficient spectrum holding. This in turn will allow it to use less equipment and reduce interference.[1396]

10.79 As set out above, we note that:

(a) the Merged Entity has a contractual obligation to divest the spectrum, [✂].

(b) [✂].

(c) it would be very costly for the Merged Entity to breach the STA given the [✂], the payment of £[✂] million which it would forgo, and the negative impact it would have on VMO2's willingness to cooperate with the Merged Entity (i) in the East MORAN area where it is the host and (ii) for merger integration and to roll out its joint network.

10.80 Based on the evidence above we consider that the Merged Entity will have an incentive to give VMO2 access to the 3UK sites it will retain in MORAN areas.

Impact of Beacon 4.1 Agreements on site symmetry

10.81 The Beacon 4.1 Agreements affect the symmetry between the Beacon parties in relation to sites by changing the total number of sites each has access to.

10.82 The Parties submitted that, [✂].[1397]

VMO2's submissions

10.83 VMO2 submitted that:[1398]

(a) VMO2 will have the opportunity to [✂] under Beacon 4.1 ([✂]). This will improve VMO2's [✂].

(b) The spectrum transfer will, amongst other things, rebalance the need for [✂].

Our assessment

10.84 We have considered the extent to which the Merger affects symmetry between the Beacon parties by affecting the total number of sites each has.

10.85 As set out in paragraph 10.27, we attach material weight to VMO2's submission that the Beacon 4.1 Agreements alleviate its concerns.

[1396] Parties' Beacon 4.1 CMA briefing. Parties' submission, Beacon 4.1.
[1397] Parties' initial submission, 1 May 2024, paragraph 5.17. Parties' submission, Beacon 4.1.
[1398] VMO2 Incentives submission.

10.86 Currently, both VMO2 and VUK have access to about [✂] sites in shared MORAN areas and [✂] sites in total.[1399]

10.87 Under the JBP, the Merged Entity's combined network will have [✂] sites.[1400] As part of this the Merged Entity plans to retain about [✂] 3UK sites in shared MORAN areas and about [✂] 3UK sites in [✂].[1401]

10.88 As part of the Beacon 4.1 Agreements, the Merged Entity has agreed to give VMO2 access to the 3UK sites it will retain in MORAN areas. As set out in paragraph 10.10, the Merged Entity intends to integrate about [✂] existing 3UK sites into the Beacon network. Assuming the Merged Entity does integrate [✂] 3UK sites into the Beacon network (which, as discussed below is not certain), VMO2 would have access to [✂]% more sites in shared, MORAN areas and [✂] sites in total (compared to the Merged Entity's [✂]).[1402] We consider this would broadly re-establish the symmetry that exists absent the Merger.

10.89 We note that there is a degree of uncertainty around:

(a) the number of 3UK sites the Merged Entity will retain (ie the JBP); and

(b) whether BTEE and multiple site providers (MSPs) will grant VMO2 access to the retained 3UK sites.

10.90 In relation to the uncertainty around the number of 3UK sites the Merged Entity will retain, we note that:

(a) the Merged Entity has committed to the principle of giving VMO2 access to all retained 3UK sites in shared MORAN areas,[1403] and therefore the Beacon parties will retain symmetry (in terms of access to sites) in these areas.

(b) the Merged Entity could add more sites in the London and Unwind areas than planned, leading to increased asymmetry between the Beacon parties. The London and Unwind areas currently amount to [✂]% of VUK's total sites,[1404] and cover [✂]% of the UK population.[1405] In that regard we consider:

(i) As set out in paragraph 10.83 above, VMO2 has submitted that the spectrum transfer will rebalance the need for new sites between VMO2 and the Merged Entity and that even without access to 3UK sites (which

[1399] Vodafone response to the CMA's RFI; and VMO2 response to the CMA's RFI.
[1400] FMN.
[1401] Parties' response to the CMA's RFI.
[1402] Vodafone internal document.
[1403] Parties' submission, Beacon 4.1.
[1404] Parties' response to the CMA's RFI.
[1405] FMN.

is achieved under Beacon 4.1), VMO2's demand for new sites is materially reduced due to the additional spectrum available to it.

(ii) VMO2 told us that as part of the negotiation it put together a list of about [✂] it was interested in [✂].[1406] We consider this suggests that the Beacon parties do not require perfect alignment in sites for the network sharing arrangement to work, and that the Merged Entity could therefore increase the number of 3UK sites it retains in London and Unwind areas without disrupting the network sharing arrangement.

(iii) We think, in the absence of remedies, the Merged Entity's incentive is likely to be to cut back on the number of sites planned in the JBP (see Chapter 14, Incentive to deliver the full JBP); therefore, the Merged Entity would be likely to add fewer, not more, sites in the London and Unwind areas than planned.

10.91 As indicated above, BTEE and MSP consent may be required in order for VMO2 to access the retained 3UK sites and this could lead to a concern that VMO2 might be prevented from accessing some of these sites by their refusals. However, we do not consider this a concern:

(a) BTEE: Where a BTEE consent issue arises, the Beacon parties have agreed a process, [✂].[1407] VMO2 also noted that they had agreed a process in the event of [✂], which in any event they noted was time-limited.[1408] We note that as part of the STA, [✂].[1409] This may provide BTEE with incentives to co-operate with the Beacon parties.

(b) MSPs eg Cellnex, WIG: We consider that MSPs are incentivised to grant VMO2 site permissions in order to increase their revenue.

(i) VMO2 told us that MSPs have a natural incentive to have VMO2 on the sites because their business model is to make revenue. They also noted that the initial engagement with [✂] had been positive.[1410] We note that VUK and VMO2 signed a new agreement with Cellnex on [✂].[1411]

(ii) [✂].[1412]

1406 VMO2 call note.
1407 Vodafone internal document; and Parties' submission, Beacon 4.1.
1408 VMO2 call note; and Parties' submission, Beacon 4.1.
1409 Parties' Beacon 4.1 CMA briefing; and Parties' submission, Beacon 4.1.
1410 VMO2 call note.
1411 See Cellnex UK, Vodafone UK and Virgin Media O2 agree new long-term partnership to boost UK mobile connectivity - Cellnex, accessed by the CMA on 10 September 2024 and Vodafone response to the CMA's section 109 notice.
1412 [✂] call note.

10.92 A TowerCo told us that there can be practical challenges to adding another operator to a site, depending on how they are added but that an active RAN share has limited impact on the physical infrastructure, providing no additional antenna are required for the spectrum (if further antenna are needed to accommodate additional spectrum bands, the tower may need strengthening or replacing in the extreme).[1413] However, the same TowerCo also noted that operational practicalities of integrating an MNO [3UK] onto Beacon sites could be categorised as 'business as usual', ie getting landlord consent, installing more equipment onto sites, upgrading the infrastructure etc.[1414]

10.93 We consider that:

(a) site asymmetry between the Beacon parties will be increased as a result of the Merger, in particular given the Merged Entity will have access to additional sites in London and Unwind Areas.

(b) notwithstanding this, sufficient alignment will remain between the Beacon parties. We note that the Beacon parties' site holdings do not need to be symmetric for the Beacon network sharing arrangement to function effectively and that VMO2 has submitted that the spectrum transfer reduces the need for site alignment.

Incentive of Merged Entity to improve VMO2's site access

10.94 Although we recognise that the Beacon parties do not require perfect alignment for the network sharing arrangement to function, and that, as set out at paragraph 10.83 above, the spectrum transfer will rebalance the need for new sites between VMO2 and the Merged Entity, we might still be concerned if the Merged Entity had no incentive to deliver on the Beacon 4.1 Agreements (ie get VMO2 access to the retained 3UK sites). We have therefore considered its incentives to comply with the Agreement.

Parties' submissions

10.95 As set out in paragraph 10.68, the Parties submitted that the Merged Entity will have no ability or incentive to disrupt VMO2's network development because it will be reliant on VMO2 in the East and will need to work closely with VMO2 in the context of Beacon to achieve its JBP.

10.96 The Parties also submitted that VUK and VMO2 will enter into legally binding amendments to the Beacon agreements, including [✂].[1415]

1413 [✂] call note.
1414 [✂] call note.
1415 Parties' initial submission, 1 May 2024, paragraphs 5.2 and 5.16.

VMO2's submissions

10.97 As set out in paragraph 10.70, VMO2 submitted that:

(a) it will need to support the Merged Entity's MOCN rollout.

(b) the Beacon 4.1 Agreements include financial incentives for it to achieve certain MOCN delivery milestones.

10.98 VMO2 also submitted that the Merged Entity is incentivised to provide it with site access because:

(a) the Merged Entity's failure to comply with [✂] would cause it to be subject to [✂] payments [✂].[1416]

(b) sharing sites with VMO2 enables it to share the costs of those sites.[1417]

Our assessment

10.99 As set out in paragraph 10.27, we attach material weight to VMO2's submissions that the Beacon 4.1 Agreements alleviate its concerns.

10.100 As set out in paragraph 10.22, we note that the Merged Entity will continue to rely on VMO2 for the provision of telecoms services in the East of the country and will need VMO2's cooperation for merger integration and to roll out its joint network, which means that the current level of mutual dependency between the Beacon parties will remain post-Merger. As a result, we expect that the Merged Entity will continue to be committed to Beacon 4.1 post-Merger and that VMO2 will maintain sufficient bargaining power when ensuring compliance with the Beacon 4.1 Agreements and negotiating any future amendments.

10.101 We note that there are a number of '[✂]' in the Beacon 4.1 Agreements which [✂]:[1418]

(a) [✂];[1419]

(b) [✂];[1420] and

(c) [✂].[1421]

[1416] VMO2 meeting slides.
[1417] VMO2 call note.
[1418] These [✂] do not count towards and shall not be limited by the aggregate [✂]. Parties' submission, Beacon 4.1.
[1419] Parties' submission, Beacon 4.1.
[1420] Parties' submission, Beacon 4.1.
[1421] Parties' submission, Beacon 4.1.

10.102 We received internal documents from VMO2 which note the role of these '[✂]'. A VMO2 November 2023 Board document notes that:

(a) '[✂]'.[1422]

(b) '[✂]'.[1423]

10.103 We therefore consider that the Merged Entity has the incentive to comply with the Beacon 4.1 provisions in relation to the retained 3UK sites given the [✂] and the Merged Entity's reliance on VMO2's co-operation post-Merger.

Our view on incentive

10.104 Based on the evidence set out above, we have found that the Merged Entity would not have the incentive to use its participation in Beacon materially to impact, and thereby limit the constraint from, VMO2 by disrupting the effective functioning of the network sharing arrangement.

Effect

10.105 As we have not found that the Merged Entity has the incentive to limit the constraint from VMO2 by disrupting the Beacon network sharing arrangement, we have not assessed the effect on competition.

Conclusion on the impact of the Merger on the constraint from VMO2 through the Merged Entity's participation in Beacon

10.106 Based on our assessment of the evidence set out above, we have found that the Merged Entity would not have the incentive to limit the constraint from VMO2 by disrupting the Beacon network sharing arrangement. Therefore, the Merged Entity's involvement in Beacon would not harm VMO2's ability to exert a competitive constraint in the retail and wholesale markets.

[1422] VMO2 internal document.
[1423] VMO2 internal document.

11. IMPACT OF THE MERGER ON THE CONSTRAINT FROM BTEE THROUGH THE MERGED ENTITY'S PARTICIPATION IN MBNL

11.1 In this section, we consider:

(a) whether, following the Merger, the Merged Entity would have the ability to use its participation in MBNL to limit the constraint from BTEE;

(b) whether the Merged Entity would have the incentive to do so; and

(c) whether any impact on BTEE would harm its ability to exert a competitive constraint in the retail and wholesale markets.

11.2 The rest of this section is structured as follows:

(a) Background to MBNL;

(b) BTEE's concerns;

(c) Parties' submissions;

(d) Our assessment, structured as follows:

(i) Ability;

(ii) Incentive;

(iii) Effect; and

(e) Our conclusions.

Background to MBNL

11.3 As set out in Chapter 5 - Industry Background, MBNL was established as a 50/50 joint venture between BTEE (then T-Mobile) and 3UK in December 2007 (the **MBNL JV**). As of 2024 it primarily manages existing passive infrastructure and joint sites on behalf of BTEE and 3UK. [✂]% of BTEE's sites are currently shared with 3UK via MBNL and [80-90]% of 3UK's sites are currently shared with BTEE via MBNL.[1424] Under its JBP, the Merged Entity plans to continue to use approximately [✂] MBNL sites (over [✂] of MBNL sites) which will constitute

[1424] BTEE submission. Parties' response to the CMA's RFI.

approximately [✂]% of the Merged Entity's sites.[1425] The MBNL joint venture is due to be terminated in 2031.[1426]

11.4 MBNL has its own staff who are independent from the two shareholders and who have delegated responsibility for the day-to-day operations.[1427]

11.5 BTEE and 3UK are each obliged under the MBNL Agreements to pay their share of amounts [✂] to MBNL.[1428] The amount [✂].[1429] MBNL's operating costs include rent, rates, operational services, electricity and transmission.[1430]

11.6 [✂] proposed a new business plan (the **New Business Plan**), which was approved by [✂][1431] and [✂],[1432] and ratified by the MBNL Board on [✂].[1433] The New Business Plan specifies MBNL's opex and capex forecasted funding requirements and BTEE's and 3UK's funding contributions [✂].[1434] No major amendments to MBNL's initial proposal affecting shared MBNL activities and funding were made by either BTEE or 3UK.[1435] Any future changes to the New Business Plan would require the approval of both BTEE and 3UK. An annual budget process will still occur, with the New Business Plan acting as the start point for MBNL's funding needs and BTEE's and 3UK's funding commitments.[1436]

11.7 Both shareholders sit on MBNL's board of directors and MBNL's governing committees ([✂]). [✂].[1437] [✂].[1438]

11.8 There are also a number of other, working-level forums/bodies, for example the [✂], which are involved in operationalising the MBNL JV.[1439]

11.9 Strategic decision-making and the overall control and direction of MBNL is exercised by [✂].[1440]

11.10 We understand that MBNL's dispute resolution process includes [✂]. Therefore, [✂].[1441] There are [✂]:

[1425] Parties' response to RFI; and FMN. We note that whilst these are the Merged Entity's plans under the JBP, in the absence of remedies, this may not be the course of action the Merged Entity would necessarily adopt in practice.
[1426] The JBP incorporates the JNP.
[1427] FMN.
[1428] CK Hutchison internal document.
[1429] [✂].
[1430] MBNL call note.
[1431] Parties' response to the phase 1 Issues Letter.
[1432] BTEE response to the CMA's RFI.
[1433] BTEE email of.
[1434] Parties' response to the CMA's RFI.
[1435] BTEE requested firstly that MBNL's costs for works it provides on BTEE's unilateral sites (which are not shared with 3UK) be removed and secondly that the forecasting assumptions used be made explicit. 3UK and MBNL accepted these changes. 3UK proposed no changes. MBNL response to the CMA's RFI.
[1436] BTEE response to RFI.
[1437] CK Hutchison response to CMA question by email.
[1438] FMN.
[1439] CK Hutchison, MBNL call transcript, 31 July 2024 page 4; and MBNL call note.
[1440] CK Hutchison internal document.
[1441] CK Hutchison internal document.

(a) The day-to-day operations [✂]. [✂].[1442] 3UK and BTEE are also involved in many working-level decisions through participation in various forums.[1443]

(b) The managing director of MBNL – [✂] and has a fiduciary duty to MBNL – [✂].[1444,1445] We understand that [✂].[1446]

11.11 Various contractual arrangements set out and provide for the operation of MBNL and these arrangements have evolved and been amended over time. In April 2023 an agreement known as the 'Stanley Agreement' came into effect, which provides for:[1447]

(a) transition to a simplified operating model for MBNL as a provider of cost-efficient services to the shareholders, focussed primarily on estates management; and

(b) for BTEE and 3UK to facilitate, and continue to facilitate, the shareholders' ability to pursue their separate technical and operational objectives for their networks, independently of each other.[1448]

11.12 Under the Stanley Agreement, BTEE and 3UK have ceased jointly upgrading sites through MBNL and now perform all upgrades independently of each other and predominantly at their own, rather than shared, expense.[1449]

11.13 Notwithstanding the changes in the nature of the MBNL JV, as reflected in the Stanley Agreement, there are a number of processes by which shareholders manage upgrades to sites via MBNL, which we discuss in more detail below, including:

(a) Shareholders need to declare their high-level technology upgrade plans to MBNL's [✂]. This relates to 'once in a generation' technologies (eg 6G)[1450], and new equipment designs.[1451]

(b) A change control process is used when a shareholder wishes to make changes to the configuration of a site which could have an impact on the operation of the other shareholder's service. Both shareholders play a role in reviewing and approving (or rejecting) proposed changes.[1452]

[1442] CK Hutchison internal document.
[1443] BTEE, letter.
[1444] [✂].
[1445] CK Hutchison internal document.
[1446] BTEE response to the issues statement, 16 May 2024, Box 3.1; and MBNL call note.
[1447] CK Hutchison internal document.
[1448] The Stanley Agreement includes a core principle that each shareholder is to carry out its activities independently of each other. [✂]. Furthermore, [✂].
[1449] FMN.
[1450] MBNL call note.
[1451] MBNL call note.
[1452] MBNL call note.

(c) MBNL's change management process (**CMP**) is a separate process used by shareholders to raise permits to undertake work at a site. The CMP is wholly administered by MBNL.[1453]

(d) The [✂] are working-level MBNL bodies responsible for managing situations where both shareholders wish to do works at the same location at similar times, and coordinating between the shareholders to avoid clashes.[1454]

11.14 On 10 November 2022, Cellnex completed the acquisition of the passive infrastructure assets of CK Hutchison and its subsidiaries in the UK (including 3UK) (the **Cellnex Transaction**).[1455] Upon termination of MBNL under the MBNL Agreements (in 2031), the sites that are allocated to 3UK will be transferred to Cellnex in accordance with the provisions of the agreements between 3UK and Cellnex.[1456]

11.15 [✂].[1457] [✂].

BTEE's concerns

11.16 BTEE submitted that MBNL is a successful network sharing arrangement and that it is highly dependent on MBNL to invest in and innovate its network.[1458] While the scope of MBNL's activities have been scaled back over time, BTEE submitted that its activities remain significant, cover more than just estate management, and that the MBNL JV requires constant engagement and cooperation by both BTEE and 3UK, including updating its operational and governance processes.[1459] In particular, BTEE submitted that:

(a) MBNL is key to the success of BTEE's mobile business;[1460]

(b) BTEE relies on MBNL to build sites and roll out technologies;[1461] and

(c) MBNL manages both BTEE's shared and unilateral sites.[1462]

11.17 BTEE submitted that the Merged Entity will have drastically reduced incentives compared with 3UK to invest in MBNL or, more generally, to engage co-operatively with BTEE on matters essential to MBNL's proper functioning.[1463] BTEE also submitted that the Merged Entity has a greater prospect of capturing

[1453] MBNL call note.
[1454] MBNL call note.
[1455] FMN.
[1456] FMN.
[1457] CK Hutchison internal document.
[1458] BTEE response to the issues statement, 16 May 2024, paragraph 3.2.
[1459] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.4.
[1460] BTEE call note.
[1461] BTEE response to the CMA's invitation to comment.
[1462] BTEE call note.
[1463] BTEE response to the issues statement, 16 May 2024, paragraph 3.43.

customers from BTEE and has access to CTIL infrastructure which means that it has [✂].[1464] BTEE have told us these incentives are strengthened by the Beacon 4.1 agreement.[1465]

11.18 BTEE submitted that the contractual relationship between BTEE and 3UK in relation to MBNL is, in part, [✂]. BTEE submitted that [✂].[1466]

11.19 BTEE submitted that without aligned incentives, MBNL cannot function effectively, [✂].[1467]

11.20 BTEE identified a range of potential mechanisms of harm which it considers that the Merged Entity could use to disrupt the effective functioning of MBNL.[1468] These include:

(a) The Merged Entity could limit the funding of MBNL. For example, the Merged Entity could limit or block the funding of [✂];[1469]

(b) The Merged Entity could block and/or delay upgrades to MBNL sites by, for example:

(i) slowing down, or blocking BTEE's proposed unilateral deployments on shared sites;

(ii) disengaging with (approvals [✂]) [✂] on shared sites; and

(iii) disengaging with or delaying carrying out unilateral deployments on shared sites ([✂]).[1470]

(c) The Merged Entity could increase BTEE's costs after 2031, by reducing the extent of site sharing with BTEE. In particular, BTEE told us that [✂] MBNL, as it is currently structured, would come to an end in 2031 (owing to 3UK's sale of infrastructure to Cellnex). BTEE submitted that in the absence of the Merger, [✂] and would enable BTEE to benefit from the synergies of network sharing. However, BTEE told us that it was concerned that post-Merger [✂] because, unlike 3UK absent the Merger, the Merged Entity would not want to have a network sharing arrangement with BTEE.[1471]

(d) The Merged Entity could overload MBNL sites with VUK traffic.[1472]

[1464] BTEE response to the CMA's RFI.
[1465] BTEE response to the Provisional Findings, 4 October 2024, paragraphs 4.39-4.41.
[1466] BTEE response to the issues statement, 16 May 2024, paragraph 3.31.
[1467] BTEE meeting slides.
[1468] BTEE response to the issues statement, 16 May 2024, paragraph 3.45.
[1469] BTEE response to the issues statement, 16 May 2024, paragraph 3.48.
[1470] BTEE response to the issues statement, 16 May 2024, paragraph 3.45.
[1471] BTEE, call note; and BTEE response to the CMA's RFI.
[1472] BTEE response to the issues statement, paragraph 3.45.

11.21 BTEE told us that the governance processes for upgrading MBNL sites set out in paragraph 11.13, mean that any disputes are ultimately escalated to [✂] and, [✂]. BTEE also told us that because [✂][1473] in the event of conflict between BTEE and 3UK.[1474]

11.22 BTEE also said that its concerns about the Merged Entity's incentives to disrupt MBNL are consistent with the European Commission's findings in its 2016 decision to prohibit the proposed Hutchison 3G UK/Telefonica UK transaction. It said that in that decision, the European Commission acknowledged network sharing concerns resulting from misaligned incentives, concluding that the merger would lead to "a significant increase in misalignment between the interests of the two MBNL network sharing partners".[1475]

Parties' submissions

11.23 The Parties submitted that the Merged Entity does not have the ability or incentive to frustrate BTEE via MBNL.[1476]

11.24 In particular, the Parties submitted that:

(a) For many years the clear direction of travel for MBNL has been a reduction, rather than expansion, of its scope.[1477] Over time, the network strategies and assets of BTEE and 3UK have diverged materially.[1478] Due to this divergence, MBNL has evolved from active sharing (where BTEE and 3UK shared sites, passive infrastructure and active equipment, and also carried out site upgrades jointly) to a largely passive sharing agreement.[1479]

(b) In this context, BTEE and 3UK agreed to reform and further scale back MBNL. Project Stanley was agreed for the purpose of ensuring that, for the remaining lifespan of MBNL, each shareholder could continue to develop their own respective networks independently of, and with reduced dependence on, the other.[1480]

(c) Therefore, MBNL is now a largely passive sharing arrangement which has been significantly scaled back over time to an 'EstatesCo', with limited

[1473] BTEE response to the issues statement, 16 May 2024, Box 3.1.
[1474] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.10.
[1475] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.5
[1476] Parties' response to the AIS and working papers.
[1477] Parties initial submission, 1 May 2024, paragraph 5.8. For example, the Parties note that in 2016 the MBNL shareholders were still planning to jointly roll out a shared 4G network (prior to the significant scaling back of MBNL under Project Stanley) but since that time the scope of MBNL's joint activities has drastically reduced. Parties' initial submission, 1 May 2024, footnote 212. See also FMN, paragraph 15.557 which states that although 3UK and BTEE had initially planned to coordinate their network ambitions via MBNL for 4G (in 2013) and [✂] the divergence of interests and network strategies between the parties meant that these plans were not pursued.
[1478] Parties' initial submission, 1 May 2024,
[1479]FMN.
[1480] Parties' initial submission, 1 May 2024, paragraph 5.6

activities which largely involve managing the shared estate of sites and passive infrastructure.[1481]

(d) MBNL has been designed to facilitate operational independence as between the shareholders, and BTEE currently has, and will continue to have, full freedom to develop its network entirely independently of 3UK. This has enabled BTEE to roll out its 4G and 5G networks in advance and independently of 3UK, and to become recognised as the best quality mobile network in the UK with very different network characteristics to 3UK.[1482]

(e) A failure to meet its obligations in respect of MBNL could have significant consequences for the Merged Entity including financial consequences.[1483]

(f) The Merged Entity would not have the incentive to disrupt BTEE through the MBNL network sharing arrangements. This is because [✂].[1484]

11.25 We address the Parties' submissions in relation to the specific mechanisms for harm raised by BTEE below.

Analytical framework

11.26 We have considered a range of ways by which the Merged Entity could disrupt the effective functioning of MBNL and thereby limit the constraint from BTEE (**potential mechanisms for harm**):

(a) The Merged Entity could block and/or limit funding.

(b) The Merged Entity could block and/or delay BTEE's network upgrades via MBNL.

(c) The Merged Entity could increase BTEE's costs after 2031, by reducing the extent of site sharing with BTEE.

(d) The Merged Entity could increase BTEE's costs, by overloading MBNL sites.

11.27 We have assessed each of these potential mechanisms for harm by considering whether following the Merger:

(a) the Merged Entity would have the ability to use its participation in MBNL to limit the constraint from BTEE;

(b) the Merged Entity would have the incentive to do so; and

[1481] Parties' initial submission, 1 May 2024, paragraph 5.2(i).
[1482] Parties' initial submission, 1 May 2024, paragraphs 5.2(i) and 5.4.
[1483] Parties' response to the AIS and working papers.
[1484] Parties' initial submission, 1 May 2024, paragraph 5.12.

(c) whether any impact on BTEE would harm its ability to exert a competitive constraint in the retail and wholesale markets.

11.28 For our assessment of the potential ability of the Merged Entity to limit the constraint from BTEE, we have assessed whether the Merged Entity would have the ability materially to harm BTEE to an extent that would limit the competitive constraint from BTEE.

11.29 As noted at paragraph 11.19, BTEE submitted that without aligned incentives, MBNL cannot function effectively. BTEE further submitted that the assessment of the Beacon network sharing arrangement in the Provisional Findings relied on increased alignment between VMO2 and the Merged Entity to conclude there was no concern, whereas for MBNL we did not account for what BTEE considers to be increased misalignment from the Merger.[1485] In order to assess the claims made by BTEE, we have sought to identify potential mechanisms for harm. For those mechanisms where we find ability, we consider the extent to which the Merged Entity would experience competitive and financial benefits compared to any competitive and financial costs it would also incur, from utilising each mechanism. Assessing these competitive costs includes an assessment of the Merged Entity's reliance on MBNL. We note that there are various significant differences in governance structure and operational form between MBNL and Beacon, which affect the Merged Entity's incentives under each arrangement.

11.30 BTEE submitted that for the purposes of determining the Merged Entity's ability to harm the effective functioning of MBNL and thereby limit the competitive constraint from BTEE, no material weight should be placed on protections available to BTEE under the relevant MBNL contracts. This is because:

(a) The contracts may not in any case protect against all mechanisms through which MBNL's effective functioning could be harmed.

(b) The contracts are complex, subject to technological change and may need to be renegotiated to accommodate for changes in the purpose and scope of the network sharing arrangement.[1486]

(c) Enforcement of the Merged Entity's commitments under the MBNL Agreements should not be relied on as litigation would involve a complex and lengthy process and would be unlikely to lead to an effective remedy.[1487]

11.31 For the reasons mentioned in Chapter 10, Network Sharing – Beacon, we consider that the existence of contractual protections (including the existence of an agreed

[1485] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.7.
[1486] BTEE response to the issues statement, 16 May 2024, paragraph 1.17.
[1487] BTEE response to the Provisional Findings, 4 October 2024, paragraphs 4.6 and 4.15.

business plan) does not of itself eliminate the ability of the Merged Entity to harm the effective functioning of MBNL.

11.32 However, as indicated in Chapter 10, Network Sharing – Beacon, we consider it is possible in principle that the financial or reputational impacts of breaching the MBNL Agreements could impact the Merged Entity's incentive to disrupt the MBNL network sharing arrangement in a manner that breaches the MBNL Agreements. We consider this depends on the likely consequences of disrupting the network sharing arrangement and breaching the MBNL Agreements, and the materiality of those consequences in all the circumstances, including the Merged Entity's market power in the supply of retail and wholesale mobile services and BTEE's bargaining power post-Merger.

Ability

11.33 We consider each of the potential mechanisms for harm we have identified in turn.[1488]

Whether the Merged Entity could block and/or limit funding

11.34 In this section we consider whether the Merged Entity would have the ability materially to impact, and thereby potentially limit the constraint from, BTEE by blocking and/or limiting funding for MBNL.

11.35 As set out in paragraph 11.5, BTEE and 3UK are each obliged under the MBNL Agreements to pay their share of amounts [✂] to MBNL. The MBNL Co-operation Agreement sets out the [✂][1489] and the obligation for each shareholder to fund or pay its share of funding under various provisions of the MBNL Co-operation Agreement:

(a) Some of these funding obligations concern the operation of the MBNL JV, [✂]. For example, [✂].

(b) [✂].

11.36 [✂].

11.37 The MBNL Agreements provide a process [✂].[1490] We discuss the details of this process in more detail in paragraph 11.146.

[1488] We note that BTEE did not identify any further specific mechanisms for harm in its response to our Provisional Findings.
[1489] CK Hutchison internal document.
[1490] CK Hutchison internal document; and BTEE response to RFI.

BTEE's submissions

11.38 BTEE submitted that:

(a) MBNL funding is agreed through a combination of a [✂].[1491]

(b) [✂].[1492]

11.39 BTEE submitted that the Merged Entity could block and/or limit funding by:

(a) obstructing the process by which funding [✂].[1493]

(b) refusing approval of [✂]. [✂].[1494]

(c) limiting funding of [✂] specifically.[1495]

11.40 As set out in paragraph 11.6, the New Business Plan for [✂] has been agreed. BTEE submitted that MBNL is highly likely to require significant funding beyond that set out in the New Business Plan.[1496] Specifically, BTEE submitted that the New Business Plan [✂].[1497] In particular:

(a) BTEE submitted that the funding provided for in the New Business Plan for 2025 would already [✂] and therefore the 2025 budget would need updating, requiring the approval of both 3UK and BTEE.[1498]

(b) As evidence of the difficulties forecasting MBNL's expected costs, BTEE submitted the examples of firstly [✂] which required £[✂] million in unforeseen funding,[1499] and secondly the recent unforeseen expenditure to [✂].[1500]

(c) BTEE submitted that the probability of [✂], which are not provided for under the New Business Plan, are not low because the MBNL estate [✂].[1501] However, BTEE was unable to provide estimates of the opex and capex funding which MBNL might need but would not be covered by the New Business Plan.[1502]

(d) BTEE identified the non-funding of [✂] as a particular concern because:

[1491] BTEE response to the CMA's RFI.
[1492] BTEE call note.
[1493] BTEE response to the CMA's RFI.
[1494] BTEE response to the CMA's RFI.
[1495] BTEE response to the CMA's invitation to comment.
[1496] BTEE response to the CMA's RFI.
[1497] BTEE response to the CMA's RFI.
[1498] BTEE response to the CMA's RFI.
[1499] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.30.
[1500] BTEE call note.
[1501] BTEE response to the Provisional Findings, 4 October 2024.
[1502] BTEE response to the CMA's RFI.

(i) BTEE considers that the Merged Entity would have the incentive to withhold funding that is essential for replacement of [✂]. [✂] compared to the position absent the Merger, leading to [✂]. In turn, this will result in [✂] the Merged Entity could expect to benefit.[1503]

(ii) [✂]. Its 1800MHz spectrum licence contains obligations to maintain coverage of the UK geography, UK nations and roads at certain levels. Whilst VUK and 3UK also have coverage obligations, the Merged Entity's coverage would exceed those 'from day one'. It would therefore not have the same need to maintain coverage, or [✂].[1504]

(iii) BTEE further submitted that BTEE, 3UK and MBNL were aware when the New Business Plan was approved that it would not fully cover the expected costs from [✂]. In particular, BTEE submitted that MBNL had already been forecasting that the number of [✂] beyond those that were allocated spend in the New Business Plan and would be far more expensive than in 2023.[1505]

Parties' submissions

11.41 The Parties have submitted that the Merged Entity would not have the ability to block or limit funding to MBNL, as 3UK has specific funding commitments that extend for the duration of the operation of MBNL. In particular:

(a) the view that the Merged Entity could frustrate the functioning of MBNL by blocking and/or limiting MBNL's funding is not grounded in fact. It fails to acknowledge the overriding obligation to fund MBNL within the MBNL Agreements. [✂].[1506]

(b) a failure by 3UK [✂].[1507]

(c) [✂].[1508]

(d) the only MBNL funding requirement not covered by the New Business Plan is the [✂]. Additionally, the Parties noted that [✂] the New Business Plan's [✂].[1509]

[1503] BTEE response to the CMA's invitation to comment.
[1504] BTEE response to the issues statement, 16 May 2024, paragraph 3.48.
[1505] BTEE letter.
[1506] FMN; and Parties' response to the AIS and working papers.
[1507] Parties' response to the phase 1 Issues Letter.
[1508] Parties' response to the phase 1 Issues Letter; Parties' initial submission, 1 May 2024, paragraph 5.9(ii)(b); Parties' response to the AIS and working papers; Parties response to the CMA's RFI.
[1509] Parties response to the CMA's RFI.

(e) changes to the New Business Plan are highly unlikely to be required and, even if required, would likely be minor.[1510]

(f) [✂].[1511] [✂].[1512]

MBNL's submissions

11.42 MBNL submitted that:

(a) funding for MBNL is set out across various plans that are updated regularly.[1513]

(b) MBNL prepared a new ten-year business plan (ie the New Business Plan). Both shareholders are required to be committed to the MBNL JV until 2031.[1514] MBNL noted that the ten-year plan is relatively high-level. [1515]

(c) the New Business Plan contains £[✂] million for opex and capex to fund the replacement of NTQ sites in 2024, which steadily rises to £[✂] million by 2033. MBNL submitted that it expects to not actually require all the funding budgeted for NTQ sites and for funding to be provided to not limit its ability to build replacement sites up to 2030. MBNL also noted that it expects the number of NTQ notifications to remain at its historic long-run average of approximately [✂] per year.[1516]

(d) the majority of MBNL costs are non-discretionary and relatively fixed (eg rent, rates, operational services, electricity, transmission), which makes long-term forecasting more reliable than for other companies. The main funding need that could impact the budget significantly is a major remediate programme necessitated by a systemic issue with the infrastructure on a number of sites. The probability of this is low and an impact of [✂]% of total opex plus capex costs for a [✂] year period would be a reasonable estimate of the maximum impact.[1517] MBNL also submitted that the New Business Plan contains between £[✂] million and £[✂] million of annual funding to maintain and restore existing site infrastructure and, based on the site inspection and remediation work undertaken by MBNL over the last two years, the probability of this budget being insufficient is considered low by MBNL.[1518]

[1510] Parties' response to the Provisional Findings, 4 October 2024.
[1511] BTEE confirmed to us that MBNL, 3UK and BTEE executed this side letter on [✂]. BTEE email [✂].
[1512] CK Hutchison response to the CMA's s109; CK Hutchison response to RFI.
[1513] MBNL call note.
[1514] MBNL call note.
[1515] MBNL call note.
[1516] MBNL response to the CMA's RFI.
[1517] MBNL call note.
[1518] MBNL response to the CMA's RFI.

(e) an annual operating plan is also proposed by MBNL each year which sets out the funds required for maintaining and improving the network and is thoroughly reviewed by the shareholders.[1519]

Our assessment

11.43 As set out in paragraph 11.6, [✂] and [✂] have agreed a New Business Plan, which contractually obliges them to fund all of MBNL's forecastable costs up to [✂]. In particular:

(a) [✂].[1520]

(b) the New Business Plan covers all forecastable opex and capex costs [✂] the New Business Plan. It provides for £[✂] million in total annual funding for MBNL in 2024, [✂] £[✂] million by [✂], which represents £[✂] billion in total. As context, 3UK's share of this – the maximum amount of funding which the Merged Entity could block and/or limit – represents [✂]% of BTEE's aggregate mobile opex and capex spend for 2024 to [✂].[1521]

(c) BTEE and 3UK are contractually obligated under the New Business Plan and the MBNL Agreements to provide [✂]% and [✂]% of this funding respectively.[1522]

11.44 We consider that the role of the New Business Plan in protecting BTEE against funding risk is supported by BTEE's internal documents. One document, prepared in advance of the New Business Plan being agreed, outlines BTEE's concern that the Merged Entity could frustrate the operation of MBNL and identifies a potential remedy to this as being a [✂].[1523] This suggests that BTEE considers that the New Business Plan could alleviate its concerns in relation to MBNL, but that this would need to be accompanied with [✂].

11.45 As set out in paragraphs 10.17 to 10.18, there are typically limitations in the extent to which contracts are capable of resolving competition concerns. We have considered the factors identified in paragraph 10.17 in relation to the provisions regarding funding for MBNL:

(a) Duration: as set out above, the New Business Plan covers MBNL's forecastable costs and contractually obliges the Merged Entity to provide significant funds to MBNL until [✂]. We consider that this covers the whole of

1519 MBNL call note.
1520 Parties' response to the phase 1 Issues Letter.
1521 CMA analysis based on CK Hutchison Annex to the CMA's RFI.
1522 CMA analysis based on BTEE internal document.
1523 BTEE internal document; and BTEE response to the CMA's RFI.

the period during which 3UK would fund MBNL in the counterfactual as [✂].[1524]

(b) Waiver/renegotiation: concerns may potentially arise as a result of bargaining positions. However, we consider that BTEE is a sophisticated and well-resourced counterparty that is unlikely to waive its rights. Given BTEE's overall strength and that [✂],[1525] we also consider that the Merged Entity will not be in a position to force changes to the relevant contracts.

(c) Scope: based on our review of the MBNL Agreements, the provisions on funding in relation to the New Business Plan are relatively clear and set out precise obligations on 3UK. We note MBNL's submission that the majority of MBNL costs are non-discretionary and relatively fixed, which makes long-term forecasting more reliable than for other companies.[1526] We also note that the New Business Plan covers forecasted costs arising until [✂]. However, we recognise that there may be some funding requirements that are not covered by the New Business Plan for which the Merged Entity could refuse additional funding without breaching its contractual obligations. We understand that, following the agreement of the New Business Plan, the process will take the New Business Plan's funding commitments for that year as its starting point and then assess whether additional funding is needed beyond it. The annual plan is negotiated at the [✂]. We consider below the implications of any funding requirements beyond the New Business Plan.

(d) Consequences of breach: based on our review of the MBNL Agreements, we consider that the provisions regarding a breach of funding commitments provide a degree of protection for BTEE. As set out in paragraph 11.39(a), BTEE submitted that the Merged Entity could block and/or limit funding by obstructing the process by which funding [✂]. Based on our review of the agreements, one shareholder does not appear to be able to obstruct the relevant processes [✂]. However, we recognise that the enforcement of funding obligations may result in delays and whilst BTEE may ultimately have recourse to litigation, this would result in delays and costs to BTEE.

11.46 Having regard to the factors above, we consider that the MBNL Agreements provide some protection against the risk of the Merged Entity frustrating the functioning of MBNL by blocking and/or limiting funding covered by the New Business Plan. However, we consider that these do not remove the ability of the Merged Entity to frustrate the functioning of MBNL given that they could be breached.

[1524] See paragraph 11.6.
[1525] See paragraph 11.148.
[1526] See paragraph 11.42(d).

11.47 For the reasons set out above, we also consider that the contractual provisions do not remove the ability of the Merged Entity to block and/or limit funding outside of the New Business Plan. However, we do not consider that this is able to frustrate the functioning of MBNL. This is because, whilst we acknowledge that there is potential for some costs to arise outside of the scope of the New Business Plan which the Merged Entity would not be obliged to fund, we do not consider the magnitude of these costs to be significant. In particular:

(a) As set out in paragraph 11.42, MBNL told us that 'the majority of MBNL costs are non-discretionary and relatively fixed which makes forecasting more reliable than for other companies'.

(b) As set out in paragraph 11.42, the New Business Plan will cover all the opex and capex funding requirement MBNL forecasted it required ([✂]). As set out in paragraph 11.6, the New Business Plan has been approved by both [✂] and [✂] and [✂] in the New Business Plan.

(c) Additionally, we have seen limited evidence that specific areas will require substantial funding beyond the New Business Plan.

(i) BTEE only submitted one example of MBNL historically [✂], which had an overspend of £[✂] million. We consider that this is very small relative to MBNL's opex budget under the New Business Plan.[1527] Additionally, we note that funding for [✂] is included in the New Business Plan.[1528]

(ii) BTEE submitted two examples of future funding needs which it considered were likely to require funding and were not included in the New Business Plan – [✂].[1529] However, we note that MBNL told us that both have funding allocated to them under the New Business Plan, which it viewed as being sufficient.[1530]

(1) For [✂], we understand that [✂].[1531] As set out above, MBNL told us that on average it receives approximately [✂] per year and that it expects the number of [✂] to stay at this level. We understand that the New Business Plan provides funding for [✂] on the basis of the number of [✂] remaining approximately [✂] per year.

(2) Regarding [✂], as set out in paragraph 11.42, the New Business Plan contains between £[✂] million and £[✂] million of annual funding [✂]. We place material weight on MBNL considering this

[1527] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.30.
[1528] CK Hutchison internal document.
[1529] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.30.
[1530] MBNL response to the CMA's RFI.
[1531] CK Hutchison response to the CMA's s109 notice.

funding of preventative work to be sufficient and the probability of [✂] to be very low.

11.48 Therefore, while the Merged Entity would have a role in approving any additional funding for MBNL, we consider that any additional funding MBNL might need is likely to be insufficiently large to mean that if it were blocked and/or limited by the Merged Entity it would cause material harm to BTEE.

11.49 Therefore, we consider that:

(a) the Merged Entity would have some ability materially to impact, and thereby limit the constraint from, BTEE by frustrating the functioning of MBNL by blocking or limiting funding covered by the New Business Plan. The overall costs of activities undertaken through MBNL, as embodied in the New Business Plan, remain significant and the contractual protections for it do not eliminate the Merged Entity's ability.

(b) the Merged Entity would not, however, have the ability materially to impact BTEE by blocking or limiting any funding needs MBNL has beyond those covered by the New Business Plan. This is because any such funding is unlikely to be significant. Therefore, we consider that the Merged Entity would not have the ability to limit the constraint from BTEE by blocking or limiting funding for MBNL beyond that covered by the New Business Plan.

Whether the Merged Entity could block and/or delay BTEE's network upgrades via MBNL

11.50 In this section we consider whether the Merged Entity would have the ability materially to impact, and thereby potentially limit the constraint from, BTEE by blocking and/or delaying BTEE's network upgrades via MBNL.

11.51 As set out in paragraph 11.13, there are a number of processes by which shareholders manage upgrades to sites via MBNL. We discuss each of these in turn, first setting out some background to the process, before setting out the views of BTEE, the Parties and MBNL, and finally our assessment.

New technology notification

Background

11.52 Shareholders need to declare their high-level technology upgrade plans for technologies which would be used on MBNL sites to MBNL's [✂] and [✂]. This relates to any new equipment designs,[1532] including 'once in a generation'

[1532] MBNL call note.

technologies (eg 6G).[1533] The introduction of new equipment designs (eg new antenna/radio products) is usually driven by new technologies (eg 5G active antennas) or the use of new spectrum bands.[1534]

11.53 The [✂] is not a governing committee, and therefore any decisions taken need to be ratified by the [✂], on which both shareholders have equal representation. As noted in paragraph 11.10, [✂] may be cast in respect of decisions by the [✂] on technology upgrade proposals.

11.54 Where the proposal is for shared equipment, the [✂] has a role in approving the design.[1535]

11.55 Where the proposal is for unilateral equipment (ie not shared), the [✂] is informed, but its approval is not required. In this scenario, shareholders instead rely on MBNL to assess whether the plans comply with certain minimum criteria. These minimum criteria focus on the physical attributes of the equipment, eg the quality and dimensioning of the fixings. This assessment process requires the shareholders to provide key information and undertake tests and trials of new unilateral equipment before it is deployed on shared sites.[1536]

11.56 [✂].[1537]

BTEE's submissions

11.57 BTEE has submitted that the Merged Entity could block and/or delay BTEE's network upgrades by blocking any new programmes of work that BTEE wishes to carry out on the shared network (for example, [✂]). BTEE submitted that:[1538]

(a) if a shareholder's proposed deployment is technically capable of being shared, it must first be submitted to a formal review process which requires [✂]; and

(b) if the shareholder's proposal is blocked by the other shareholder, it may still be allowed to progress as a unilateral deployment. However, this then requires the shareholder to escalate by [✂].

11.58 BTEE submitted that there is currently and will continue to be shared equipment on MBNL sites, specifically [✂] shared antennas used at [✂] MBNL sites. The majority of these antennas are used to provide 2G and/or 4G coverage.[1539] BTEE told us that it submitted approximately [✂] new technology notifications for

[1533] MBNL call note.
[1534] MBNL call note.
[1535] MBNL call note.
[1536] MBNL call note.
[1537] CK Hutchison internal document.
[1538] BTEE response to the issues statement, 16 May 2024, paragraph 1.18 and Box 3.1.
[1539] BTEE response to the CMA's RFI.

antennas from [✂] 2022 to [✂] 2024 and it anticipates continuing submitting new technology notifications for antennas, including approximately [✂].[1540]

11.59 BTEE submitted that because 3UK and BT have [✂] on the [✂], 3UK would have the opportunity to carry out obstructive behaviours to delay or frustrate decisions, citing the example of [✂] before taking a view as required.[1541]

11.60 BTEE submitted that if the parties were to reach a deadlock, BTEE would be unable to progress its proposal and that [✂] is very unlikely [✂] to break such a deadlock. In particular as set out in paragraph 11.21, the [✂].[1542]

Parties' submissions

11.61 The Parties submitted that technology upgrades are governed by a clearly defined process and that the Merged Entity would not have the ability to block or delay technology upgrades by BTEE on the shared network. In particular:

(a) there is a process which BTEE or 3UK need to follow if they wish to enhance or deploy new antennas for the first time on a shared network site. The process involves [✂]. [✂].[1543]

(b) [✂].[1544]

(c) [✂].[1545]

(d) [✂].[1546]

MBNL's submissions

11.62 MBNL submitted that:

(a) Historically there has been a high degree of commonality in the products unilaterally selected by each shareholder.[1547]

(b) Historically when a new piece of equipment was deployed on an MBNL site – eg an antenna or piece of base station equipment – it needed to go through a process called '[✂]'. This process ensured that the equipment could be maintained and operated without having a detrimental impact on the other shareholder.[1548] More recently, as more of the equipment is being procured

[1540] BTEE response to the CMA's RFI.
[1541] BTEE response to the issues statement, 16 May 2024, Box 3.1 and paragraph 3.33.
[1542] BTEE letter.
[1543] CK Hutchison response to the CMA's s109 notice.
[1544] CK Hutchison response to the CMA's s109 notice.
[1545] CK Hutchison email relating to MBNL.
[1546] CK Hutchison, MBNL call transcript.
[1547] MBNL call note.
[1548] MBNL call note.

by the shareholders directly, the role of MBNL has changed; MBNL's role is now more focussed on ensuring that the equipment can be deployed and maintained safely, and the process has been updated to reflect this change.[1549]

(c) Where shareholders are deploying a new technology or equipment design unilaterally, they are required to notify the [✂] and [✂], but the other shareholder does not have any approval role via this process. This is the case under both the old [✂] process, and the new process.[1550]

(d) However, each shareholder's plans are subject to approval from the other shareholder where the proposal relates to shared equipment.[1551]

11.63 MBNL has also submitted that [✂].[1552]

Our assessment

11.64 Firstly, we consider that the circumstances in which the Merged Entity could potentially delay or block approval for BTEE network upgrades via MBNL are limited.

11.65 As submitted by MBNL, the shareholders do not have any role in approving new technologies/equipment unless the equipment is shared and we expect there to be only limited circumstances of equipment sharing in the future. BTEE and 3UK have ceased jointly upgrading sites through MBNL and now perform all upgrades independently of each other and predominantly at their own, rather than shared, expense.[1553]

11.66 As an exception to the decline in equipment sharing, a number of antennas will continue to be shared at MBNL sites. Both BTEE and 3UK told us that there would be a [✂].[1554] Specifically, BTEE told us that it had submitted approximately [✂] new technology notifications for all antennas (ie both shared and unilateral) from [✂] 2022 to [✂] 2024 and plans to submit approximately [✂].[1555] We note that, for there to be a role for 3UK to approve these planned new technology notifications for an antenna, the relevant antenna would have to be a shared antenna.

11.67 Secondly, in the event that approval was withheld by the Merged Entity in respect of a new technology notification, then the [✂] to resolve the deadlock.

[1549] MBNL call note.
[1550] MBNL call note; MBNL call note.
[1551] MBNL call note.
[1552] MBNL response to the CMA's RFI.
[1553] See paragraph 11.12 above.
[1554] CK Hutchison response to the CMA's RFI. BTEE response to the CMA's RFI.
[1555] BTEE response to the CMA's RFI.

11.68 As set out in paragraph 11.10, in the event that there is a role for MBNL shareholder approval via the [✂], and there is a dispute between the shareholders, there is an established governance procedure within MBNL which provides a mechanism to resolve any withheld approval: the [✂].[1556] This applies to all shared equipment, including shared antennas.

11.69 We note that [✂] by the shareholders as a means to resolve deadlock. Although [✂] has not been used to date, we also note MBNL's submission that it has not been necessary for [✂].[1557] We consider that it does not follow that because [✂] has not been needed in the past, that it would not be exercised in the future. BTEE submitted that the [✂] would not be likely to exercise their [✂]. We consider that this does not follow as in a deadlock situation choosing not to [✂].

11.70 BTEE submitted that [✂]. However, we consider that:

(a) The Stanley Agreement substantially changed MBNL's governance structures, particularly the role of the [✂] to resolve disputes in working-level MBNL forums relating to site upgrades. As set out in paragraph 11.11, the Stanley Agreement aims to facilitate, and continue to facilitate, 3UK's and BTEE's ability to pursue their separate technical and operational objectives for their networks, independently of each other.

(b) Any action by the Merged Entity to block or delay BTEE's network upgrades via MBNL would have to be of a sufficient scale to harm BTEE to the point that the constraint from BTEE in the supply of retail and wholesale mobile services would be limited. If the Merged Entity did block or delay BTEE's network upgrades to this scale, its actions would likely be clearly identifiable as being not based on the Stanley Agreement and not being composed of genuine technical concerns.

11.71 We consider that, if the Merged Entity were to cease cooperation with the new technology notification process, this may result in delays to the process. However, there exists an escalation process and mechanism for resolving deadlock in the [✂] through [✂]. We consider that any delays before deadlock on the [✂] could be resolved would not materially impact BTEE.

11.72 We expect there to be limited circumstances of equipment sharing in the future (with the exception of shared antennas) and, in the event that there is a role for shareholder approval via the [✂] because there is a dispute between the shareholders, [✂].

[1556] While we acknowledge governance arrangements are ultimately underpinned by contractual arrangements (at least in part), we consider there is a distinction between governance arrangements of MBNL as a corporate entity including relating to the role and responsibilities of [✂], and contractual obligations that require actions from 3UK and BTEE directly (which could, in theory, be more easily defaulted on by the Merged Entity, such as funding commitments).
[1557] See paragraph 11.63 above.

11.73 For the reasons set out above, we consider that the Merged Entity does not have the ability materially to impact BTEE by blocking proposals for new technologies/equipment.

Change control and change management processes

Background

11.74 The change control process is used when a shareholder wishes to make changes to the configuration of a site. This may be a change to:[1558]

(a) the information or data associated with the site – eg location information, the address of the site, the National Grid reference; or

(b) the on-site equipment – eg a lateral or vertical change to the direction of the antenna.

11.75 The change control process is [✂].[1559]

11.76 MBNL's CMP is a separate process used by shareholders to raise permits to undertake work at a site where, in order to facilitate this work, [✂]. The CMP also governs access to sites so that staff and other stakeholders (eg organisations carrying out surveys) can carry work out safely and effectively. The CMP is wholly administered by MBNL.[1560]

BTEE's submissions

11.77 BTEE has submitted that the Merged Entity could block and/or delay BTEE's network upgrades by disengaging with ([✂]) upgrades to shared sites via the change control process:

(a) [✂].[1561]

(b) [✂].[1562]

11.78 BTEE also submitted that [✂].[1563]

11.79 As set out in paragraph 11.21, BTEE submitted that [✂].

1558 MBNL call note.
1559 MBNL call note.
1560 MBNL call note.
1561 BTEE response to the CMA's invitation to comment.
1562 BTEE response to the CMA's s109.
1563 BTEE call transcript.

Parties' submissions

11.80 3UK submitted that there are several processes for escalating and resolving any issues with the change control process:[1564]

(a) [✂].

(b) [✂].

(c) [✂].

(d) [✂].

MBNL's submissions

11.81 MBNL submitted, in relation to the change control process that:[1565]

(a) in most cases historically, if shareholders have not approved a change request, this has been agreed through further negotiation between the shareholders.

(b) MBNL noted that, to date, it does not recall a scenario where a shareholder has been unable to achieve its desired outcome – there tends to be a collaborative approach aimed at finding solutions.

(c) if, hypothetically, a shareholder did not respond to the dialogue, MBNL would look to make the change decision timebound or follow the escalation route.

11.82 MBNL submitted that the CMP is a separate process used by shareholders to raise permits to undertake work at a site where, in order to facilitate this work, the [✂]. MBNL submitted that this process is wholly administered by MBNL.[1566]

Our assessment

11.83 We consider that the number of change control requests made per month appears material:

(a) BTEE told us that it submits c.[✂] requests for antenna changes per month.[1567]

[1564] CK Hutchison, MBNL call transcript.
[1565] MBNL call note.
[1566] MBNL call note.
[1567] BTEE response to the CMA's invitation to comment.

(b) The Parties told us that in the last 18 months, there were approximately [✂] changes between 3UK and BTEE, approximately [✂] of which were from 3UK.[1568] This amounts to c.[✂] requests made by BTEE per month.

(c) MBNL told us that in the first half of 2024, approximately [✂] requests were submitted, with [✂]% of these submitted by [✂].[1569]

11.84 We consider this frequency an indication that change requests are a routine part of the operation of MBNL and are subject to a well-established process which MBNL told us has worked effectively so far at achieving mutual agreement. If the Merged Entity were to depart from this process, there exists a clear escalation procedure from the [✂] to the [✂] for resolution.

11.85 As set out in paragraph 11.10, [✂]. For the same reasons as set out in paragraphs 11.69 and 11.70, we consider that [✂] in the event of a dispute and therefore there is a mechanism to resolve dispute in the event of delays or refusals.

11.86 We consider that if the Merged Entity were to cease cooperation with the change control process, this may result in delays to the process. However, there exists an escalation process and mechanism for resolving deadlock in the [✂] through [✂]. We consider that any delays before deadlock on the [✂] could be resolved would not materially impact BTEE.

11.87 We also note that because the CMP is wholly administered by MBNL, the Merged Entity does not have the ability materially to impact BTEE via this process.

11.88 We therefore consider that the Merged Entity does not have the ability materially to impact BTEE by blocking and/or delaying BTEE's network upgrades via MBNL through the change control or change management processes.[1570]

[✂]

Background

11.89 As set out in paragraph 11.13, the [✂] are working-level MBNL bodies responsible for managing situations where both shareholders wish to do works at the same

[1568] CK Hutchison call transcript.
[1569] MBNL call note.
[1570] For completeness, we note that MBNL submitted that, in the event of a shareholder disengaging from the change control process, MBNL could change its processes to enable change control requests to still be processed, for example to make decision-making timebound or to have a specific escalation mechanism. BTEE submitted that it was not aware of any mechanisms through which the change control process could be adapted. (BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.18). Given that we do not consider that the Merged Entity has the ability materially to impact BTEE through the existing processes, we have not found it necessary to conclude on whether these processes could be changed.

locations at similar times, and coordinating between the shareholders to avoid clashes. The [✂] and the [✂]. [✂].[1571]

11.90 [✂].[1572]

11.91 [✂].[1573]

BTEE's submissions

11.92 BTEE submitted that the Merged Entity could block and/or delay BTEE's network upgrades by disengaging with or delaying BTEE carrying out unilateral deployments on shared sites, in which case BTEE would need to [✂]. [✂].[1574]

11.93 In relation to the [✂] BTEE submitted that volume has been low but it would expect the volume to increase post-Merger:[1575]

(a) the [✂]. As a result, [✂].

(b) BTEE expects [✂]. This is [✂] and as part of the integration of the Parties' networks post-Merger).[1576]

(c) BTEE told us that it would require about [✂] overtake requests a month to significantly disrupt and delay its network rollout. It calculated this figure on the basis of how many overtake requests would result in a deployment manager losing [✂]% of their working time.[1577]

11.94 As set out in paragraph 11.21, BTEE submitted that [✂].

Parties' submissions

11.95 In relation to each of the above, the Parties have submitted that the overtake process has been rarely used and [✂]:

(a) [✂].[1578] If it is escalated to [✂].[1579]

(b) The Parties expect [✂] because the Merged Entity [✂].[1580]

1571 FMN.
1572 Parties' response to RFI.
1573 FMN.
1574 BTEE response to the CMA's invitation to comment.
1575 BTEE response to the CMA's RFI.
1576 BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.23.
1577 BTEE response to the CMA's RFI.
1578 Parties' initial submission, 1 May 2024, paragraph 5.10.
1579 CK Hutchison, MBNL call transcript.
1580 Parties' initial submission, 1 May 2024, paragraph 5.10.

MBNL's submissions

11.96 MBNL has submitted that where upgrades have only been requested by one party, this process is managed by a staff-led team at MBNL and shareholders do not play any role in each other's unilateral deployments.[1581]

Our assessment

11.97 We consider that there is likely to be limited scope for BTEE's concerns to materialise because:

(a) overtake requests have been used relatively infrequently in the past. BTEE submitted [✂] overtake requests in the period [✂].[1582] As context, MBNL's total portfolio is made up of approximately [✂] shared sites.

(b) we consider that the number of overtake requests would need to increase significantly to lead to a material impact on BTEE. We note that BTEE told us that it would require about [✂] requests a month to significantly disrupt and delay its network rollout, and that the minimum delay would be [✂].[1583]

(c) while there is some uncertainty over the level of overtake requests in the future, we consider that it is likely that the overtake process will be used less post-Merger because the Merged Entity [✂] and as a result plans to exit approximately [✂] of the [✂] MBNL sites.[1584]

(d) even in the circumstances where the overtake process is engaged in future, we note that there are mechanisms for the [✂] to resolve issues in the event of delay by the Merged Entity to carry out its works or refusal by the Merged Entity to consent to an overtake request. In particular:

(i) [✂].[1585] [✂].

(ii) [✂].[1586] For the same reasons as set out in paragraphs 11.69 and 11.70, we consider that [✂] and therefore there is a mechanism to resolve dispute in the event of delays or refusals.

11.98 We consider that if the Merged Entity were to cease cooperation with the [✂] processes, this may result in delays to the processes. However, there exists an escalation process and mechanism for resolving deadlock in the [✂]. We consider

[1581] MBNL call note.
[1582] BTEE response to the CMA's RFI.
[1583] BTEE response to the CMA's RFI.
[1584] FMN.
[1585] CK Hutchison internal document.
[1586] CK Hutchison internal document.

that any delays before deadlock on the [✂] could be resolved would not materially impact BTEE.

11.99 We, therefore, consider that that the Merged Entity would not have the ability materially to impact BTEE by blocking and/or delaying BTEE's network upgrades via MBNL through the [✂].

Our view

11.100 Overall, taking into account the three different potential mechanisms of harm discussed above, we do not consider that the Merged Entity would have the ability materially to impact BTEE via network upgrades through MBNL. Therefore, we consider that the Merged Entity would not have the ability to limit the constraint from BTEE by blocking and/or delaying BTEE's network upgrades via MBNL.

Whether the Merged Entity could increase BTEE's costs after 2031, by reducing the extent of site sharing with BTEE

11.101 In this section we consider whether the Merged Entity would have the ability materially to impact BTEE and thereby potentially limit the constraint from BTEE by reducing the extent of site sharing with BTEE after 2031.

11.102 In 2022, 3UK sold its passive infrastructure assets to Cellnex. Under the terms of the sale agreement, 3UK will transfer to Cellnex [✂] sites which are allocated to it following the division of MBNL network assets in 2031.[1587] [✂] in 2031.[1588]

11.103 The MBNL JV will expire on 31 December 2031.[1589] The Co-operation Agreement[1590] provides that termination can result in [✂]. [✂].

BTEE's submissions

11.104 BTEE has told us that in the absence of the Merger [✂] at its conclusion in 2031.

(a) [✂].

(b) [✂].[1591]

11.105 BTEE submitted that the Merged Entity could limit the constraint from BTEE post-2031 by reducing the extent of site sharing with BTEE. [✂].[1592] Based on BTEE's

1587 FMN.
1588 Parties' response to the CMA's RFI.
1589 CK Hutchison internal document.
1590 CK Hutchison internal document.
1591 BTEE response to the CMA's RFI.
1592 BTEE meeting with Ofcom.

internal analysis discussed in more detail at paragraph 11.113 below, the largest impact comes from [✂], followed by [✂].

11.106 BTEE further submitted that its bargaining power would [✂], compared to [✂]. BTEE told us that in negotiations it will have [✂].[1593]

Parties' submissions

11.107 The Parties submitted that:

(a) the practical and legal implication of the Cellnex Transaction is that the MBNL JV [✂].[1594]

(b) 3UK is contractually committed to transfer a portion of its share of the MBNL sites to Cellnex upon exit of the MBNL JV post-2031, and there is an obligation to deliver a minimum number of sites.[1595]

(c) BTEE will obtain access to these sites from Cellnex. Cellnex has no ability to frustrate BTEE's access to these sites (nor would frustration by Cellnex make any commercial sense given Cellnex revenues are dependent on hosting MNOs on its passive infrastructure).[1596]

MBNL's submissions

11.108 MBNL expects that the continuation of the MBNL JV, when the existing agreement ends in 2031, would be influenced by the outcome of the Merger. [✂].[1597]

Cellnex's submissions

11.109 Cellnex is not a party to the current MBNL agreement between BTEE and 3UK but expects to effectively gain operational control of the 3UK MBNL sites when the agreement expires in 2031, when the sites will be divided between 3UK and BTEE, and Cellnex will gain full ownership and control of 3UK's share. [✂].[1598]

11.110 With regards to the MBNL sites that will transfer to Cellnex, [✂]. [✂].[1599]

Our assessment

11.111 BTEE's internal documents also state that in the absence of the Merger, it expects some form of network sharing to continue post-2031, and that it anticipates that

[1593] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.28.
[1594] FMN; and Parties' initial submission, 1 May 2024, paragraph 5.2(i).
[1595] Parties' initial submission, 1 May 2024, paragraph 5.9.
[1596] Parties' initial submission, 1 May 2024, paragraph 5.9.
[1597] MBNL call note.
[1598] Cellnex call note.
[1599] Cellnex call note.

the Merger, by making continued network sharing post-2031 unlikely, will have a negative impact on its future costs [✂]. In one document from [✂] BTEE stated that absent the Merger [✂].[1600] In the same document, BTEE states that it expects the impact of the Merger on it to be [✂]. It states that it considers that this would impact [✂].[1601]

11.112 BTEE's internal documents contain estimates of the impact on [✂].

(a) In a document from [✂], BTEE estimated the total impact on it of the Merged Entity [✂] at a net present value (**NPV**) of £[✂] million over a twenty-year horizon.[1602] This assumes that post-Merger the Merged Entity will not contribute to [✂] sites. We note that the Merged Entity plans to exit approximately [✂] of the [✂] MBNL sites,[1603] and therefore £[✂] million would be an underestimate.

(b) In another document from [✂], BTEE outlines that it is unclear how many BTEE sites the Merged Entity would stay on after 2031. However, based on an estimate of the Merged Entity not contributing to [✂] sites ([✂]), BTEE estimates it would face a cost of NPV £[✂] million.[1604] BTEE estimated that this would amount to an impact [✂].[1605]

11.113 In July 2024, BTEE submitted that it had revised its estimate of the total impact to NPV £[✂] million over 20 years, to reflect its more recent assessment of [✂]. The £[✂] million figure:

(a) assumes [✂]. In particular, BTEE has assumed that [✂] (its previous estimate).

(b) takes a [✂] view of BTEE's [✂].[1606] BTEE submitted that [✂].[1607]

11.114 Given that the Merged Entity intends to continue to use only approximately [✂] of the [✂] sites currently shared via MBNL, the assumption that the Merged Entity will retain the use of fewer sites appears reasonable (it implies that the Merged Entity will not use many of the sites currently shared via MBNL post-2031, other than those it retains itself post the dissolution of the MBNL JV).

[1600] The net present value of a harm estimate aggregates the harm that would be caused over multiple years into the future into a single figure by discounting the value of the harm in future years. BTEE internal document; BTEE told us that 20 years is a typical planning horizon for a telecommunications infrastructure business case. BTEE response to the CMA's RFI.
[1601] BTEE internal document.
[1602] BTEE internal document.
[1603] Parties' response to RFI.
[1604] BTEE internal document.
[1605] BTEE, Annex to RFI.
[1606] [✂].
[1607] BTEE response to the CMA's RFI.

11.115 We estimate that this revised estimate of £[✂] million would amount to an impact on BTEE's total network spend NPV of c.[✂]% on average across a 20-year period.[1608]

11.116 However, we note that there is considerable uncertainty about the magnitude of the impact on BTEE. This is reflected in the sensitivity of BTEE's estimates to multiple factors which are difficult to accurately forecast, including the number of sites the Merged Entity will contribute to and BTEE's overall need for sites. This uncertainty is reflected in the substantial variation in the estimates BTEE has submitted to us. We consider that BTEE's estimate is likely to be an upper-bound estimate for a number of reasons:

(a) BTEE may have understated its bargaining power given the CMA found in its Cellnex decision that MNOs may use the threat of self-supply to improve the terms they receive.[1609] We note BTEE's submission that [✂]. However, it appears that [✂].[1610] We place material weight on this as evidence that BTEE's bargaining power will likely not be substantially reduced due to [✂].

(b) In 2031, 3UK's sites will transfer to Cellnex, which will have commercial incentives to provide site access to BTEE.

11.117 As such, we consider that BTEE's estimated cost from an increase in its post-2031 site sharing costs is an upper-bound estimate. We consider that this cost to BTEE is likely to be significantly lower than [✂]% of BTEE's total network spend NPV. Therefore, we do not consider that the Merged Entity would likely be able to increase BTEE's costs by reducing the extent of site sharing to an extent which would materially impact BTEE.

11.118 Our view, therefore, is that we do not consider the Merged Entity has the ability materially to impact BTEE by reducing the extent of site sharing with BTEE following the dissolution of MBNL in 2031. Therefore, we consider that the Merged Entity would not have the ability to limit the constraint from BTEE by reducing the extent of site sharing with BTEE after 2031.

Whether the Merged Entity could increase BTEE's costs, by overloading MBNL sites

11.119 In this section we consider whether the Merged Entity would have the ability materially to impact BTEE and thereby potentially limit the constraint from BTEE by overloading MBNL sites. This concern relates to those MBNL sites which the Merged Entity would continue to actively use post-Merger during and after its implementation of the JBP.

[1608] CMA analysis of BTEE response to the CMA's RFI and BTEE, Annex to the CMA's RFI.
[1609] Cellnex / CK Hutchison phase 1 decision, paragraph 191.
[1610] BTEE internal document. BTEE response to the CMA's RFI.

BTEE's submissions

11.120 BTEE submitted that the Merged Entity could overload MBNL sites and that current procedures for addressing overloading would be insufficient to manage this scenario. BTEE submit that this would have the potential to materially increase BTEE's costs:

(a) The Merged Entity could overload MBNL sites with VUK traffic. In particular, post-Merger, [✂].[1611]

(b) In the past [✂].[1612]

(c) If network integration were to occur, [✂].[1613] BTEE told us that shared transmission is done at an individual site through fibre or microwave transmission links, which will either be shared by both 3UK and BTEE or just used by one of them (ie unilateral).[1614]

(d) BTEE would be [✂]. [✂]. [1615]

(e) [✂]. In particular, [✂].[1616]

Parties' submissions

11.121 The Parties submitted that the Merged Entity would not have greater requirements at a given MBNL site than 3UK requires today and that, due to a number of factors, the risk of overloading at sites will reduce in future with or without the Merger:

(a) [✂].[1617]

(b) [✂].[1618]

(c) [✂].[1619]

(d) [✂].[1620]

(e) Under the JBP, the Merged Entity intends to remain using shared microwave links at only approximately [✂]% of retained MBNL sites, [✂].[1621]

1611 BTEE response to the CMA's invitation to comment.
1612 BTEE response to the CMA's invitation to comment.
1613 BTEE response to the CMA's invitation to comment.
1614 BTEE's response to the CMA's RFI.
1615 BTEE response to the CMA's invitation to comment.
1616 BTEE response to the CMA's RFI.
1617 CK Hutchison, MBNL call transcript.
1618 Parties' response to RFI.
1619 CK Hutchison, email.
1620 CK Hutchison, MBNL call transcript.
1621 CK Hutchison response to the CMA's RFI.

Our assessment

11.122 BTEE's internal documents are consistent with its submissions that it is concerned the Merged Entity may overload shared sites. In particular, one BTEE internal document from [✄] quantifies the total potential impact at a NPV of £[✄] million over 20 years.[1622] BTEE submitted that its estimate of £[✄] million [✄].[1623]

11.123 BTEE's methodology for this estimate focuses on the potential cost to BTEE from the Merged Entity [✄] at a MBNL site to an extent that [✄]. BTEE told us that this [✄]. As such, BTEE's estimate is based on [✄]. BTEE identified [✄] MBNL sites where it would [✄] by the Merged Entity.[1624] BTEE submitted that this approach was conservative because:

(a) [✄].

(b) BTEE has only considered [✄]. We note that BTEE's estimate assumes a relatively high proportion of [✄]. However, BTEE told us that as its estimate does not consider the impact of other ways in which MBNL sites could be overloaded, its estimate of the total number of sites which would be affected is reasonable.

11.124 We consider that BTEE's estimate of £[✄] million may overestimate the impact because:

(a) The Merged Entity is [✄]. As a result, there are likely to be MBNL sites which would have run out of capacity in the counterfactual which may no longer do so post-Merger. This is a benefit to BTEE which does not appear to be included in its cost estimate.

(b) It assumes the Merged Entity only exits [✄] sites. Based on the JBP, the Merged Entity intends to exit approximately [✄] MBNL sites.[1625]

(c) It assumes macrocells are never available. As BTEE acknowledges, adding small cells is [✄].

(d) It does not include potential mitigations, for example BTEE bringing forward in time upgrades on sites, which would reduce the potential cost by £[✄] million.[1626]

11.125 Regarding the bringing forward of site upgrades, BTEE submitted that this may require it to build sites where there is not existing or imminent demand or to [✄]

[1622] BTEE internal document.
[1623] BTEE response to the CMA's RFI.
[1624] BTEE told us that 20 years is a typical planning horizon for a telecommunications infrastructure business case. BTEE response to the CMA's RFI.
[1625] Parties' response to the CMA's RFI.
[1626] BTEE internal document.

the Merged Entity.[1627] However, on the latter, we note that BTEE would [✂] if the Merged Entity, whose own network quality may be being affected by the overloading, did not want to upgrade the site. If it also wanted to, under the Stanley Agreement the upgrade may then be categorised as [✂].[1628]

11.126 We note that the costs to BTEE from the overloading of MBNL sites could start to be incurred from shortly after the Merger completes. As such, BTEE would have limited time to take measures to mitigate or pre-emptively reduce these costs.

11.127 However, BTEE's estimate may also underestimate the impact, for example, if the Merged Entity decides to exit fewer sites post-Merger than it plans to under the JBP.

11.128 We have also assessed whether it is practically possible for the Merged Entity to overload an MNBL site.

(a) BTEE submitted that the overloading of sites could occur by the blocking of sites for future upgrades because of:[1629]

(i) [✂]; or

(ii) [✂].

(b) We note that [✂] could not occur because, as set out in paragraph 11.121(d), [✂]. However, the shared microwave wave links on the approximately [✂] MBNL sites which have them could be overloaded because they [✂].[1630] However, we note that, as set out in paragraph 11.121(e), only a small proportion of the MBNL sites which the Merged Entity plans to retain under the JBP have shared microwave links and therefore only a small proportion of MBNL sites could be overloaded through their shared microwave links.

(c) We received no submissions that the other ways BTEE identified through which MBNL sites could be overloaded were not practically possible.

11.129 Therefore, we consider that there are multiple ways in which a MBNL site retained by the Merged Entity could be overloaded.

11.130 Based on the evidence above we have found that the Merged Entity has the ability materially to impact BTEE by overloading sites and thereby to limit the constraint from BTEE. This concern only applies to those sites retained by the Merged Entity under the JBP. However, we consider that BTEE's analysis does not appear to

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1627 BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.32.
1628 Parties' response to the CMA's RFI.
1629 BTEE response to the CMA's invitation to comment
1630 BTEE response to the CMA's RFI.

take into account the potential benefit of there being MBNL sites which would have run out of capacity in the counterfactual which may no longer do so post-Merger.

11.131 We note that while BTEE's estimate of the impact on it from higher post-2031 site sharing costs and from the Merged Entity overloading sites appear similar in magnitude, there are material differences between them.

(a) We consider BTEE's estimate for post-2031 site sharing costs to be an upper-bound estimate with considerable uncertainty relating to it, such that the likely impact is less than BTEE's estimate. In contrast, while there are reasons BTEE's estimate for overloading sites may be an overestimate, it may also be an underestimate if the number of sites retained by the Merged Entity is higher than BTEE anticipated.

(b) We note that, as set out in Chapter 14, Countervailing Factors – Rivalry Enhancing Efficiencies, the JBP envisages VUK customers being given access to 3UK's network, including a number of MBNL sites within 12 months post-Merger completion. Therefore, BTEE could experience greater costs from the overloading of sites shortly after the Merger completed and so would have limited time to take measures to mitigate or pre-emptively reduce these costs.

Our view on the Merged Entity's ability to limit the constraint from BTEE through MBNL

11.132 Based on the evidence above, we have found that the Merged Entity would have some ability materially to impact, and thereby limit the constraint from, BTEE by frustrating the functioning of MBNL in the period up to MBNL's dissolution, by blocking and/or limiting funding provided for in the New Business Plan and by overloading MBNL sites.

Incentive

11.133 In this section we present our assessment of the incentive of the Merged Entity to use its participation in MBNL to limit the constraint from BTEE. The rest of this section is structured as follows:

(a) We first present the submissions from BTEE and the Parties;

(b) We then present, for each mechanism for harm for which we have found ability (blocking and/or limiting funding, and overloading MBNL sites):

(i) BTEE's submissions;

(ii) the Parties' submissions; and

(iii) our assessment.

11.134 We note that the assessment of incentives typically involves a combination of qualitative and quantitative evidence, though the balance will vary between cases. In this case, where the relationships between competitors is complex, a more qualitative approach is appropriate. Nevertheless, we have collected various data to support our assessment, for example on the direct financial savings to the Merged Entity which would result from a reduction in the funding of MBNL.

11.135 As set out in paragraph 11.22, BTEE submitted its concerns are consistent with the European Commission's findings in Hutchison 3G UK/Telefonica UK that the merger in those circumstances would lead to a significant increase in misalignment between the two network sharing partners. We note that there has been significant changes in the nature and role of network sharing since 2016 both across the industry and within MBNL. Furthermore, and in any event, the Commission's investigation related to a different merger situation and the CMA's Merger Assessment Guidelines make it clear that the CMA considers the characteristics of each merger on a case-by-case basis.[1631]

BTEE's submissions

11.136 BTEE submitted that the Merged Entity will have drastically reduced incentives compared with 3UK to invest in MBNL or, more generally, engage co-operatively with BTEE on matters essential to MBNL's proper functioning.[1632] BTEE considers that the Merged Entity has a greater prospect of capturing customers from BTEE, access to CTIL infrastructure means that it has [✂], with this incentive strengthened by the Beacon 4.1 agreement.[1633] Additionally, BTEE submitted that 3UK's obligations to Cellnex are not an effective deterrent because they could still be met even if the Merged Entity disrupted MBNL.[1634]

11.137 BTEE submitted that enforcement of the Merged Entity's commitments under the MBNL Agreements should not be relied on to deter the Merged Entity,[1635] for the following reasons:

(a) Contractual enforcement is often expensive and time-consuming and is unlikely to lead to an effective remedy, and it may not be worthwhile for BTEE to take on the risk of enforcing the MBNL contractual arrangements.[1636]

[1631] CMA129, paragraph 2.17.
[1632] BTEE response to the issues statement, 16 May 2024, paragraph 3.43.
[1633] BTEE response to the CMA's RFI; BTEE response to the Provisional Findings, 4 October 2024, paragraphs 4.39-4.41.
[1634] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.36.
[1635] BTEE response to the Provisional Findings, 4 October 2024, paragraphs 4.6 and 4.15.
[1636] BTEE response to the issues statement, 16 May 2024, paragraph 1.17; BTEE response to the Provisional Findings, 4 October 2024, paragraphs 4.6 and 4.15.

(b) BTEE will remain reliant on 3UK's co-operation in MBNL through the life of the network sharing arrangement, which may act as a disincentive to enforce any contractual protections.[1637]

(c) The Merged Entity would be incentivised to interpret the MBNL contractual arrangements in the way which is most favourable to its own interests, including where this would harm the effective functioning of MBNL.[1638]

Parties' submissions

11.138 The Parties submitted that:

(a) the Merged Entity would not have the incentive to disrupt BTEE through the MBNL network sharing arrangements. This is because [✂].[1639]

(b) BTEE is a sophisticated commercial counterparty and would have ensured that the protections it negotiated as part of the recent [✂] amendments were future-proof and appropriate. For example, BTEE did not consider it necessary to have a '[✂]'.[1640]

Whether the Merged Entity would have the incentive to block and/or limit funding

11.139 We have considered whether the Merged Entity has the incentive to block and/or limit the funding of MBNL set out in the New Business Plan.

BTEE's submissions

11.140 Regarding the contractual obligations on the Merged Entity to provide the funding it is committed to under the New Business Plan, BTEE submitted that it does not consider that clauses [✂], [✂] and [✂] of the MBNL Cooperation Agreement are likely to deter 3UK from failing to comply with or withholding its funding obligations. [✂]. [✂] relies on there being aligned incentives [✂] whereas, in a post-Merger scenario, 3UK may [✂].[1641]

11.141 BTEE submitted that a reputational impact for the Merged Entity would only arise if there was to be a public judgment that 3UK has breached its obligations and that any reputational impact would not disincentivise the Merged Entity from harming BTEE's ability to compete.[1642]

[1637] BTEE response to the issues statement, 16 May 2024, paragraph 1.17.
[1638] BTEE response to the issues statement, 16 May 2024, paragraph 1.17.
[1639] Parties' initial submission, 1 May 2024, paragraph 5.12.
[1640] Parties' initial submission, 1 May 2024, paragraph 5.11.
[1641] BTEE response to RFI.
[1642] BTEE response to the Provisional Findings, 1 October 2024, paragraph 4.6.

Parties' submissions

11.142 The Parties submitted that a failure to meet 3UK's obligations in respect of MBNL could have significant consequences for the Merged Entity:

(a) A failure by 3UK [✂]. [✂].[1643]

(b) [✂].[1644] Under the terms of agreements with Cellnex, 3UK is [✂] the MBNL sites that are subject to the exit provisions in the MBNL JV agreements.[1645]

(c) There are severe cost consequences for not meeting MBNL obligations, which far outweigh any potential benefit to the Merged Entity in withholding funding.[1646]

(d) There are [✂].[1647]

(e) There would be no benefit to the Merged Entity in taking any actions relating to not funding MBNL since this would have adverse consequences for its own network.[1648]

Our assessment

11.143 In this section we consider the potential costs and benefits to the Merged Entity from blocking and/or limiting the funding for MBNL set out in the New Business Plan.

Assessment of costs

11.144 We have assessed the potential financial and competitive costs to the Merged Entity of blocking and/or limiting the funding for MBNL set out in the New Business Plan.

- *Financial costs*

11.145 As set out above at paragraph 11.45, if the Merged Entity were to block and/or limit funding in relation to the New Business Plan, this would amount to a contractual breach in relation to which BTEE could take enforcement action. Additionally, it may also breach its contracts with third party suppliers which could take enforcement action including claiming damages.

[1643] Parties' initial submission, 1 May 2024, paragraph 5.12.
[1644] Parties' response to the phase 1 Issues Letter.
[1645] Parties' initial submission, 1 May 2024, paragraph 5.12.
[1646] Parties' response to the AIS and working papers.
[1647] FMN; and CK Hutchison putback response.
[1648] Parties' initial submission, 1 May 2024, paragraph 5.12.

11.146 We understand that [✂] is as follows:[1649]

(a) [✂].[1650]

(b) [✂].[1651]

(c) [✂].[1652]

(d) [✂].[1653]

11.147 We recognise that dispute resolution, enforcement of funding obligations under the New Business Plan and damages claims have the potential to be time consuming and expensive. However, we also consider that the significance of funding at stake is material and that BTEE in particular has the commercial sophistication and resources to enforce its rights. We therefore consider that:

(a) it is unlikely to be the case in practice given the significance of the funding amounts concerned and the sophistication of BTEE, that BTEE would be unwilling to enforce its rights, notwithstanding its ongoing reliance on the Merged Entity for ongoing participation in MBNL.

(b) such enforcement action or damages claims are likely to be costly, time-consuming and risky for the Merged Entity in the event it failed to meet its funding obligations under the New Business Plan.

11.148 We further note that, as set out in Chapter 10, under Beacon 4.1 [✂]. [✂].[1654] We consider that this would add to the financial cost of the Merged Entity blocking and/or limiting funding to MBNL.

11.149 We have considered the Parties' submission that the Merged Entity would have an additional incentive to fund MBNL as 3UK is contractually obliged to transfer a portion of its share of the MBNL sites to Cellnex upon exit post-2031, and there is an obligation to deliver a minimum of [✂] sites.[1655] We also note that 3UK also is obliged to [✂] prior to the transfer.[1656] We note that BTEE submitted that the Cellnex Transaction would not act as a disincentive for the Merged Entity.[1657]

[1649] CK Hutchison internal document.
[1650] CK Hutchison internal document.
[1651] CK Hutchison internal document.
[1652] CK Hutchison internal document. [✂].
[1653] CK Hutchison internal documents.
[1654] Parties' submission; and Parties' briefing slides.
[1655] Parties' response to RFI. We also consider that the shareholders of the Merged Entity are also incentivised to ensure that 3UK and the Merged Entity comply with the terms of the transfer as they would become financially liable for breach ([✂]).CK Hutchison's response to RFI.
[1656] If 3UK were to breach those obligations, Cellnex would be able to recover damages from 3UK for breach of contract in accordance with the terms of their agreement and applicable English law. CK Hutchison's response to RFI.
[1657] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.36.

11.150 We consider that 3UK's contractual obligations under the Cellnex Transaction would likely increase the costs of blocking and/or reducing funding because Cellnex may bring a damages claim or take enforcement action, for example, against 3UK for breaching its contractual obligations.[1658] However, we note that the Merged Entity may still be able to disrupt MBNL whilst meeting its obligation to deliver at least [✂] sites to Cellnex. For example, the Merged Entity may be able to block or limit funding which relates to the quality of MBNL sites, or could block funding which impacts only a proportion of sites as the obligation only relates to some of 3UK's share of the [✂] total MBNL sites.

11.151 BTEE submitted that the Merged Entity would not be disincentivised from blocking or delaying the funding of NTQ sites because a large number of NTQs could be issued and no replacement sites funded without the Merged Entity breaching its obligation to provide Cellnex with a minimum of [✂] sites.[1659] We consider that this is just one type of cost which MBNL faces and, as set out above in paragraph 11.42, MBNL told us that sufficient funding is provided for NTQ sites in the New Business Plan. We consider that the incentive on the Merged Entity from the Cellnex obligations could be stronger for other types of funding.

11.152 We note that an [✂] internal document from BTEE suggests that its default assumption is that the Merged Entity [✂].[1660] We place weight on this and consider that it is consistent with the Merged Entity having the incentive to fulfil its contractual obligations to MBNL. Following the agreement of the New Business Plan, not exiting MBNL before 2031 would require the Merged Entity to meet its financial obligations to MBNL under the New Business Plan. BTEE submitted that this scenario does not exclude the possibility of the Merged Entity frustrating MBNL through other means.[1661]

- *Competitive costs*

11.153 We consider that blocking and/or reducing funding through MBNL could result in the degradation of the quality of the MBNL network. This could adversely affect the Merged Entity's network quality.

11.154 The Parties' plans show that whilst the Merged Entity intends to rely more on Beacon it will initially use both Parties' sites, before switching off 3UK active equipment at approximately [✂] MBNL sites between 2025 and 2029. MBNL is expected to be dissolved two years after this in 2031. Even once the JBP is fully implemented, the Merged Entity plans to continue to use approximately [✂] MBNL

[1658] This includes [✂] for which the [✂]. Cellnex could also pursue other equitable relief including specific performance. Alternatively, Cellnex could claim a [✂]. CK Hutchison's response to RFI.
[1659] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.36.
[1660] BTEE internal document.
[1661] BTEE response to the Provisional Findings, 4 October 2024, paragraph 4.34(b).

sites (over [✂] of MBNL sites) which will constitute approximately [✂]% of the Merged Entity's sites.[1662]

11.155 We consider that the Merged Entity's continued use of the MBNL network means that the quality of the shared sites will have an impact on the Merged Entity's own network quality both in the short-term and longer-term. Therefore, by blocking and/or limiting funding to MBNL the Merged Entity could also competitively harm itself, as well as BTEE.

11.156 Price and network quality are both important parameters of competition in the supply of retail and wholesale mobile services:

(a) In retail mobile services, as set out in Chapter 8, price is a key parameter of competition. Whilst customers require a minimum level of network quality, and network quality plays an important role in customer decisions, it is less important than price.

(b) We further note that the importance of price and network quality also likely varies across consumers. BTEE, in particular, is likely to have a significant number of customers who value network quality. This is because, as described in Chapter 8, it considers itself to have the best network in the UK and [✂], allowing it to maintain a price premium to competitors and mitigate churn.

(c) In wholesale mobile services, as set out in Chapter 9, both price and network quality are important to MVNOs, although there may be some differences between MVNOs in the relative importance that they attach to these.

11.157 Therefore, a reduction in the Merged Entity's network quality could reduce its competitiveness.

Assessment of benefits

11.158 We have assessed the potential financial and competitive benefits to the Merged Entity of blocking and/or limiting the funding of MBNL.

- *Financial benefits*

11.159 The Merged Entity could make financial savings from blocking and/or limiting the funding of MBNL. 3UK is forecast to contribute a significant amount of funding to MBNL between [✂]. Under the New Business Plan (the total funding of MBNL

[1662] Parties' response to RFI; and FMN. We note that whilst these are the Merged Entity's plans under the JBP, in the absence of remedies, this may not be the course of action the Merged Entity would necessarily adopt in practice.

[✂].[1663] 3UK is expected to contribute £[✂] of this, which represents [✂]% of the Merged Entity's expected total mobile network spend over this period.[1664]

- *Competitive benefits*

11.160 If the Merged Entity blocked and/or reduced the funding of MBNL, BTEE may have to directly fund initiatives itself rather than sharing these with 3UK. In principle, this could reduce BTEE's ability to invest in its network and/or lead to it having to raise prices to recoup these costs. In turn this could lead to a greater proportion of BTEE's retail consumers and/or wholesale MVNOs switching, including to the Merged Entity. We consider that the extent of any additional funding would have to be significant for this potential benefit to occur.

11.161 The funding 3UK is committed to provide under the New Business Plan is substantial. This means that withdrawing or reducing this funding would likely have a material impact on MBNL and hence BTEE.

(a) 3UK's total (opex and capex) funding obligation of £[✂] billion represents [✂]% of BTEE's total planned mobile network spend for 2024 to 2033. In individual years, this proportion varies from [✂]% to [✂]%.[1665] In comparison, 3UK's total funding obligation represents [✂]% of the Merged Entity's planned mobile network spend for 2024 to 2033. On an annual basis, this proportion starts in 2024 at [✂]%, [✂] by 2033.[1666]

(b) 3UK's opex funding obligation of £[✂] billion represents [✂]% of BTEE's total planned opex for 2024 to 2033. On an annual basis, this proportion starts at [✂]% in 2024 and steadily [✂] to [✂]% by 2033. [1667]

(c) 3UK's capex funding obligation of £[✂] million represents [✂]% of BTEE's total planned capex for 2024 to 2033. On an annual basis, this proportion [✂] from [✂]% in 2024 to [✂]% by 2033.[1668]

11.162 As outlined above, network quality is an important parameter of competition in the supply of retail and wholesale mobile services, and so a reduction in BTEE's network quality could reduce its competitiveness, to the Merged Entity's benefit.

[1663] CMA analysis based on CK Hutchison Annex 12.003 to the CMA's RFI.
[1664] CMA analysis based on CK Hutchison Annex 12.003 to RFI.
[1665] CMA analysis based on BTEE Annex 1 to RFI.
[1666] CMA analysis based on CK Hutchison Annex 12.003 to the CMA's RFI.
[1667] CMA analysis based on BTEE Annex 1 to RFI.
[1668] CMA analysis based on BTEE Annex 1 to RFI.

Our view

11.163 Our view is that the Merged Entity would not have the incentive to use its participation in MBNL materially to impact, and thereby limit the constraint from, BTEE through blocking and/or limiting funding to MBNL.

11.164 We consider that in order to achieve material competitive benefits, the Merged Entity would risk incurring significant financial costs by breaching its contractual obligations under the MBNL Agreements in relation to New Business Plan as well as contractual obligations relating to the [✄], the Cellnex Transaction and third party MBNL supply contracts. It would also incur significant competitive costs by harming its own network because the Merged Entity will continue to use MBNL sites both in the short and longer-term.

Whether the Merged Entity would have the incentive to overload MBNL sites

11.165 We have considered whether the Merged Entity would have the incentive to overload MBNL sites by causing the sites to become blocked to upgrades [✄].

BTEE's submissions

11.166 BTEE submitted that the Merged Entity would have the incentive to overload MBNL sites:

(a) even if the Merged Entity [✄] post-Merger, there would be [✄].[1669]

(b) BTEE estimated that of the [✄] MBNL shared sites, the Merged Entity could be expected to retain [✄]. Of these, [✄].[1670]

Parties' submissions

11.167 The Parties submitted that the Merged Entity would have no incentive to overload MBNL shared sites because this would degrade the Merged Entity's customer experience while it seeks to provide a high-quality mobile network.[1671] In particular:

(a) the Merged Entity plans to [✄];[1672]

(b) the Merged Entity plans to exit approximately [✄] MBNL sites;[1673] and

[1669] BTEE response to the CMA's invitation to comment.
[1670] BTEE response to RFI.
[1671] CK Hutchison response to the CMA's RFI.
[1672] FMN.
[1673] Parties' response to RFI.

(c) there is [✂] in the amount of space the Merged Entity expects to use compared to today ([✂]).[1674]

Our assessment

11.168 As described above, the Parties plan to put VUK traffic on the [✂] retained MBNL sites, as well as VMO2 traffic (post-2031).[1675] In this section we consider the potential costs and benefits to the Merged Entity from overloading MBNL sites.

Assessment of costs

11.169 We have assessed the potential competitive and financial costs to the Merged Entity of overloading MBNL sites.

- *Financial costs*

11.170 We consider that there may be financial costs to the Merged Entity from overloading MBNL sites. These financial costs could come first from the actual overloading of MBNL sites and second from mitigating any adverse effects on the Merged Entity's network quality from its overloading of MBNL sites:

(a) The ways in which the Merged Entity would overload a site, as described above in paragraph 11.128 could be costly for the Merged Entity. For example, the Merged Entity would incur financial costs from [✂].[1676]

(a) As well as potentially impacting BTEE's network quality (as discussed below) the overloading of MBNL by the Merged Entity could result in a significant deterioration of the Merged Entity's network quality at retained MBNL sites. This would represent a competitive cost to the Merged Entity. However, in the event that the overloading of MBNL sites had an adverse effect on the Merged Entity's network quality, we consider that the Merged Entity would likely choose to take steps to mitigate or prevent any deterioration in its network quality.[1677] For example, the Merged Entity might install additional equipment at an overloaded site or at a neighbouring site or upgrade the overloaded site's backhaul. The Merged Entity may also seek to jointly fund an upgrade of the site's passive infrastructure with BTEE on a site-by-site basis, as used to occur through MBNL (as described in paragraph 11.24(a)). Alternatively, it could also mitigate any adverse effects by increasing the

[1674] CK Hutchison, MBNL call transcript.
[1675] See Chapter 14, Countervailing Factors – Rivalry Enhancing Efficiencies.
[1676] We note that BTEE's methodology for estimating the harm to itself from the Merged Entity overloading its retained MBNL sites is based on the Merged Entity [✂] at a MBNL site [✂]. BTEE response to the CMA's RFI.
[1677] As set out in Chapter 2, Parties, Merger and Rationale, the Parties told us that following the Merger they aim for the Merged Entity to have the highest quality network among the MNOs. Therefore, we consider that the Merged Entity would prefer to incur these preventative or mitigatory financial costs, rather than experience the competitive costs of any deterioration in its network quality.

capacity of Beacon sites near to the overloaded retained MBNL sites. These preventative or mitigatory steps would incur financial costs.

11.171 The costs of installing additional equipment and other site upgrades to overload a site and/or to prevent or mitigate any adverse effects on the Merged Entity's network quality are potentially substantial. For example, one estimate for the cost of certain site upgrades provided to us is a capex cost of deploying and operating a [✂] GHz carrier of £[✂] and a capex cost of deploying and operating [✂] small cells of £[✂].[1678] We note that these costs would increase proportionately with the number of sites being overloaded and/or requiring preventative or mitigatory action by the Merged Entity.

11.172 Therefore, we consider that there are likely to be significant financial costs to the Merged Entity if it successfully overloaded a significant number of retained MBNL sites. We note that in the scenario where the financial costs incurred by the Merged Entity were small, this would suggest that fewer MBNL sites would be overloaded and therefore the potential harm to BTEE would also be smaller.

- *Competitive costs*

11.173 As explained above, we consider that the Merged Entity would likely choose to incur financial costs to prevent or mitigate any adverse impacts from the overloading of MBNL sites on its own network quality, rather than experience the competitive costs of any deterioration in its network quality.

11.174 Therefore, we consider that there would likely not be significant competitive costs to the Merged Entity from the overloading of MBNL sites.

11.175 We note that if the Merged Entity chose to not incur the financial costs involved in overloading a site, that would reduce the magnitude of any harm to BTEE. Additionally, we note that if the Merged Entity chose to not incur the financial costs of preventative or mitigatory actions in response to its own network quality deteriorating due to the overloading, it would incur competitive costs instead.

Assessment of benefits

11.176 We have assessed the potential benefits to the Merged Entity of overloading MBNL sites.

[1678] These were the figures used in BTEE's methodology for calculating the harm to it from overloading by the Merged Entity. BTEE response to the CMA's RFI.

- *Financial benefits*

11.177 We do not consider there to be any financial benefits to the Merged Entity from overloading MBNL sites and have therefore focused on the potential competitive benefits.

- *Competitive benefits*

11.178 If the Merged Entity were to overload MBNL sites, this would lead to BTEE facing higher costs and/or having lower network quality (where the upgrade is not carried out either at the existing, overloaded site, or at an alternative site).

11.179 As set out in paragraph 11.139, we consider that price and network quality are important parameters of competition in the supply of retail mobile services and of wholesale mobile services.

11.180 However, we consider that the competitive benefit to the Merged Entity of overloading sites is unlikely to be material:

(a) The Merged Entity plans to exit [✂] MBNL sites, and retain [✂] MBNL sites, which limits the scope for overload and therefore the competitive benefits.

(b) BTEE estimated that overloading MBNL sites would amount to an impact on BTEE's total network spend NPV of [✂].[1679]

(c) Whilst the Merged Entity plans to continue using [✂] 3UK sites, this may not be the course of action the Merged Entity would adopt in practice (in the absence of remedies). We consider that, if there was a reduction in the number of sites shared via MBNL, this would further limit the scope for overloading of sites and therefore potential competitive benefits. As set out above in paragraph 11.127, if instead the Merged Entity were to continue to use more MBNL sites than BTEE anticipated, BTEE's estimate of the cost to it from overloading would be an underestimate. However, we note that in staying on more MBNL sites, the financial costs to the Merged Entity of overloading would also increase. Therefore, the net effect on the Merged Entity's incentive would likely be small.

Our view

11.181 Our view is that the Merged Entity would not have the incentive to use its participation in MBNL materially to impact, and thereby limit the competitive constraint from, BTEE through overloading MBNL sites. In particular, we note that the likely competitive benefits, in terms of the impact on BTEE, appear limited, and

[1679] BTEE response to RFI.

the Merged Entity will likely also incur financial or competitive costs from overloading MBNL sites.

Our view on the Merged Entity’s incentive to limit the constraint from BTEE through MBNL

11.182 Based on the evidence above, we have found that the Merged Entity would not have the incentive materially to impact, and thereby limit the competitive constraint from, BTEE by blocking or limiting funding, or overloading sites:

(a) We consider that, in order to materially benefit from blocking/limiting funding, the Merged Entity would have to risk incurring significant financial costs by breaching contractual obligations.

(b) We further consider that the fact that the Merged Entity will continue to use 3UK sites both in the short and longer-term and would require BTEE to secure rights for VMO2 to access 3UK sites would further act as a disincentive as it will mean that there is a degree of mutual dependency between BTEE and the Merged Entity, incentivising both to act constructively and in accordance with their contractual obligations.

(c) BTEE’s default assumption, based on its internal documents, is also that the Merged Entity would not seek to exit from MBNL before 2031. This requires it to honour its commitments under the New Business Plan.

(d) In relation to overloading sites, we note that the likely competitive benefits, in terms of the impact on BTEE, appear limited and the Merged Entity may have to incur additional financial costs in terms of extra equipment and site upgrades which it would not otherwise have done or competitive costs if the overloading of MBNL sites worsened its own network quality.

Effect

11.183 In light of our conclusion that the Merged Entity does not have the incentive to limit the constraint from BTEE via MBNL, we have not assessed the effect on competition.

Our conclusion on the impact of the Merger on the constraint from BTEE through MBNL

11.184 For the reasons set out above, our conclusion is that:

(a) the Merged Entity would not have the ability to limit the constraint from BTEE through MBNL by blocking and/or limiting funding for MBNL beyond that covered by the New Business Plan, by blocking and/or delaying BTEE's upgrades via MBNL, or by reducing the extent of site sharing post-2031;

(b) the Merged Entity would have the ability but not the incentive to limit the constraint from BTEE through MBNL by blocking or limiting funding for MBNL set out in the New Business Plan, or overloading sites; and

(c) therefore, the Merged Entity's involvement in MBNL would not harm BTEE's ability to exert a competitive constraint in the retail and wholesale markets.

12. POTENTIAL COMPETITIVE EFFECTS FROM SHARING OF COMMERCIALLY SENSITIVE INFORMATION VIA THE MERGED ENTITY'S PARTICIPATION IN BOTH NETWORK SHARING ARRANGEMENTS

12.1 This section sets out our conclusions regarding the potential competitive effects of the Merger resulting from the sharing of commercially sensitive information (**CSI**) via the Merged Entity's participation in both network sharing arrangements. In particular, we have considered whether the Merged Entity's participation in both network sharing arrangements could result in it being able to gain access to CSI of the two other MNOs, notably concerning their investment plans.

12.2 The rest of this section is structured as follows:

(a) How sharing of CSI could impact incentives.

(b) Background to the network sharing arrangements (MBNL and Beacon).

(c) MBNL's submissions.

(d) Parties' submissions.

(e) Third party submissions.

(f) Our assessment.

(g) Our conclusion on the potential competitive effects from sharing of CSI via the Merged Entity's participation in both network sharing arrangements.

How sharing of commercially sensitive information could impact incentives

12.3 As set out in the retail and wholesale chapters, we consider that quality is an important parameter of competition for wholesale and retail mobile, although less important than price, which means that MNOs are incentivised to invest in their networks.

12.4 There could be a risk that by getting access to information on network investments planned by the only other MNOs, the Merged Entity could decide how to time and target its own investments.[1680] This may reduce or postpone investments by the Merged Entity and the other MNOs compared to the scenario absent the Merger:

[1680] CMA129, paragraph 7.3.

(a) For example, absent the Merger, VUK might have plans to roll out 5G in a particular area because it predicts that BTEE has plans to do so (and absent the Merger, VUK would not have any information about BTEE's investment plans because it is part of a different network sharing arrangement). In order to limit the risk that it loses retail share to BTEE, VUK would be incentivised to invest. Following the Merger, the Merged Entity might be able to deduce that BTEE does not have 5G roll-out plans in that particular area (or that its plans are delayed), and therefore may cancel or postpone the previous plans of VUK. Based on our review of the Parties' internal documents, we understand that MNOs' network plans [✄] for 5G roll-out as part of broader national plans, evident in 3UK's network strategy for example.[1681] Therefore, we believe there is a hypothetical risk that the Merged Entity could cancel or postpone the Parties' previous roll-out plans on the basis of receiving information regarding competing MNOs' roll-out plans.

(b) In addition, BTEE and VMO2's incentives to invest in their networks may also be reduced. Indeed, if BTEE and VMO2 know that the Merged Entity can use information in relation to their investment plans to develop its own investment plans, this may weaken their incentive to invest in the first place.

(c) Knowing that its competitors may have reduced incentives to invest as a result of the increased information sharing, the Merged Entity might respond in turn by reducing its own investment plans.

12.5 The result of any reduction in MNOs' incentives to invest in their networks could be that the quality of services offered may be lower than would otherwise have been the case absent the Merger.

Background to the network sharing arrangements (MBNL and Beacon)

12.6 As set out in Chapter 5, there are two network sharing arrangements in the UK:

(a) MBNL, which includes primarily passive network sharing between 3UK and BTEE; and

(b) CTIL/Beacon, which includes passive and active network sharing between VUK and VMO2.

12.7 We set out below a description of the key teams and forums involved in information sharing within each of the network sharing arrangements.

[1681] CK Hutchison internal documents.

MBNL

12.8 MBNL was established in 2007 and is a private company, jointly owned by BTEE and 3UK.

12.9 As set out in Chapter 5, MBNL has ongoing responsibilities on behalf of both BTEE and 3UK to support the management of the passive infrastructure, including [✂].

12.10 MBNL has its own staff who are independent from the shareholders and who have delegated responsibility for day-to-day operations.[1682] MBNL's leadership team includes [✂]. [✂].[1683]

12.11 [✂].[1684]

12.12 [✂],[1685] and facilitate a degree of information sharing between BTEE and 3UK. [✂] is notified, for example, where a shareholder intends to deploy a new technology for the first time.[1686]

12.13 [✂].[1687,1688] [✂] are responsible for managing situations where both shareholders wish to do works at the same locations at similar times, and coordinating between the shareholders to avoid clashes.[1689] In order to fulfil this function, shareholders need to share with them certain information regarding their rollout plans, some of which is then shared with the other shareholder, as discussed in more detail below.

12.14 The MBNL Cooperation Agreement contains the principles and key obligations regarding the sharing of CSI within MBNL.[1690] The Key principles are designed to ensure that the sharing of CSI by shareholders with MBNL is appropriate and necessary. The principles are as follows:

(a) [✂].

(b) [✂].

1682 FMN.
1683 MBNL call note.
1684 CK Hutchison email.
1685 FMN.
1686 MBNL call note.
1687 Parties response to the CMA's RFI.
1688 CK Hutchison MBNL call transcript.
1689 MBNL call note.
1690 CK Hutchison internal documents.

Beacon

12.15 As set out in Chapter 5, Cornerstone Telecommunications Infrastructure Ltd (**CTIL**) is a joint venture concerning passive infrastructure between Vodafone (through its subsidiary Vantage Towers) and VMO2.

12.16 However, in contrast to MBNL, the Beacon network sharing arrangement relating to the active infrastructure is managed bilaterally (ie between the Beacon parties directly rather than through an independent party). The Beacon parties have agreed guidelines regarding the sharing of CSI in order to restrict information sharing: the Beacon Competition Law Guidelines.[1691]

12.17 The Beacon Competition Law Guidelines are premised on the key principle of limiting the sharing of any information to what is strictly necessary to enable the implementation of the Beacon arrangements. The purpose of the Beacon Competition Law Guidelines is ensuring that any exchange of CSI is strictly controlled and that both the Beacon parties [✂] comply with their competition law obligations.[1692] To achieve this, the Beacon Competition Law Guidelines set out detailed protocols [✂].

12.18 Information sharing is managed within Beacon by restrictions on both the type of information shared and who that information is shared with. In relation to the latter, the most sensitive information is handled by a joint '[✂]', made up of staff from the Beacon parties. This team is ring-fenced from the respective businesses and is subject to strict information sharing requirements.[1693] [✂].[1694] The Beacon parties [✂].[1695]

12.19 Information [✂].[1696] The Beacon Competition Law Guidelines also state that '[✂]'.[1697]

12.20 VUK and VMO2 [✂] in the Beacon Competition Law Guidelines.[1698] VUK stated that: [✂]. [✂].[1699]

12.21 These safeguards were approved by Ofcom in 2012 in the course of its review of the original Beacon arrangements.[1700]

[1691] Vodafone internal document.
[1692] Vodafone internal document.
[1693] FMN.
[1694] Vodafone internal document.
[1695] Parties' response to the phase 1 Issues Letter.
[1696] Parties' response to the phase 1 Issues Letter.
[1697] Parties' response to the phase 1 Issues Letter.
[1698] Vodafone response to the CMA's s109 notice.
[1699] Vodafone response to the CMA's s109 notice.
[1700] FMN.

12.22 We note that as part of the Beacon 4.1 Agreements, the Beacon parties have agreed a [✂]. We understand that the Beacon information sharing [✂] and ring-fencing arrangements [✂].

MBNL's submissions

12.23 MBNL has its own staff who are independent from the shareholders. Given this, we place particular weight on the submissions of MBNL.

12.24 MBNL submitted that there are three types of information shared by MBNL with the shareholders:[1701]

(a) Information regarding the current configuration of sites

(b) Forecast rollout plans

(c) High-level technology upgrade plans

12.25 Under the Stanley Agreement (the most recent iteration of the MBNL agreements which came into effect in April 2023), BTEE and 3UK have ceased jointly upgrading sites through MBNL and now perform all upgrades independently of each other and predominantly at their own, rather than shared, expense.[1702] MBNL still undertakes work on the shared estate in its role as infrastructure manager including maintenance, remediation, and site replacements both for NTQs and emergency site reinstatements. As part of the site replacement activity, work is done on behalf of the shareholders to replace their unilateral RAN equipment. MBNL also manages and maintains the shared transmission estate.[1703]

12.26 Now that the majority of deployment and upgrade work is being undertaken by the shareholders, MBNL has reviewed and reduced the scope of the information that the shareholders are required to share with MBNL.[1704] When the majority of deployment or upgrade work on site was undertaken by MBNL on behalf of the shareholders, a greater level of information and documentation was required.[1705]

Current configuration of sites

12.27 MBNL told us that information regarding the current configuration of sites needs to be provided to the other shareholder so that if they are undertaking design work on a site, they can factor the current configuration of the sites into their designs. As

[1701] Notes of calls with MBNL.
[1702] FMN.
[1703] MBNL call note. See also MBNL email.
[1704] MBNL call note.
[1705] MBNL call note.

new designs are completed, they are provided to MBNL and at that point they become available to each shareholder should they be required.[1706]

12.28 In particular, for each shareholder to undertake design or deployment work on a given site they need to understand the current configuration of the site in terms of [✂] as a basis for their own design.[1707]

12.29 Information regarding the configuration of a site was intended to become available to both shareholders [✂] days after work had been completed. However this deadline was often not met and MBNL is now working with the shareholders to streamline the information sharing process with new targets for when this information needs to be provided to MBNL.[1708]

12.30 [✂]:[1709]

(a) [✂].

(b) [✂].

12.31 MBNL told us that it is currently replacing the legacy databases with a modern set of inventory tools ([✂] and [✂] referred to above). MBNL told us that neither the current nor planned tools enable shareholders to see information regarding the others' forecast rollout plans:

(a) In its current form, the [✂] does not capture or share any forward-looking, demand sequencing/optimisation information and one of the key requirements of [✂] development is the ability to segregate shareholder information.[1710]

(b) [✂] (a legacy system which it is looking to move away from, also known as '[✂]') nor the [✂] (its new system) contain any forward-looking information; this information is currently stored in [✂] reports, discussed below.[1711]

Forecast rollout plans

12.32 MBNL submitted that 3UK and BTEE submit demand forecasts to [✂]. This enables MBNL to coordinate between the shareholders to avoid clashes in a situation where both shareholders wish to do works at the same locations at similar times.[1712]

1706 MBNL call note.
1707 MBNL call note.
1708 MBNL call note.
1709 MBNL call note.
1710 MBNL call note.
1711 MBNL call note.
1712 MBNL call note.

12.33 This process emerged from the Stanley Agreement. As a lot of the work was now being undertaken by the shareholders individually, there needed to be a mechanism whereby MBNL could have sight of the shareholders' demand forecasts. This allowed MBNL to identify overlaps and opportunities for cost saving and demand optimisation/sequencing.[1713]

12.34 The process entails the shareholders [✂].[1714]

12.35 The forecasts include committed demand for the next [✂] (which has committed budget) as well as forecast demand for the next [✂] (which does not yet have committed budget).[1715]

12.36 MBNL told us that historically its reports have also included information about the [✂], see paragraph 12.50 below), but that this has been recently revisited:

(a) [✂].[1716]

(b) MBNL told us that [✂].[1717]

(c) [✂],[1718] and is not an essential requirement for shareholders.[1719]

(d) Furthermore, MBNL was not comfortable that sharing this [✂]. As a result, MBNL decided [✂].[1720]

(e) MBNL noted that if both shareholders' competition teams were to be comfortable with the [✂] being shared, MBNL would be able to reinstate the information sharing immediately.[1721]

(f) MBNL noted that [✂].[1722] Emails between MBNL and the shareholders suggest that [✂].[1723]

12.37 Since the new process was introduced under the Stanley Agreement, MBNL has reviewed the submissions of the shareholders to check whether forecasts have actually translated into real deployments, in order to assess whether there has been an abuse of the process. In particular, MBNL recently reviewed the volume of activity, type of activity and unique sites where activity was forecasted to be undertaken. It then compared this to the actual activity that had been undertaken by the shareholders. The headline findings of MBNL's review included that the

1713 MBNL call note.
1714 MBNL call note.
1715 MBNL call note.
1716 BTEE response to the CMA's s109 notice.
1717 MBNL call note.
1718 CK Hutchison response to the CMA's section 109 notice.
1719 MBNL call note .
1720 MBNL call note.
1721 MBNL call note .
1722 MBNL call note .
1723 BTEE response to the CMA's s109 notice.

total volume of activities reaching ‘build complete’ status was [✂]% of the volume forecasted, the volume of specific sites was [✂]% of the forecast, and the volume of specific activities was [✂]% of the forecast.[1724]

12.38 MBNL told us that if BTEE thought the Merged Entity was abusing the process and/or not meeting its obligations relating to [✂] as set out in the JV agreements it could either informally ask MBNL to investigate the matter and report via working forums; formally request MBNL to investigate the matter and report via JV governance forums; or follow the escalation procedure set out in the JV agreements. MBNL also told us that it is possible that BTEE could reduce the level of information that it provides to [✂] but this could result in BTEE not meeting its own obligations relating to [✂] as set out in the JV agreements and, depending on the nature of the information, could impact MBNL’s ability to undertake its role.[1725]

12.39 MBNL told us that in addition to the information which is shared by [✂] in order to manage clashes, the shareholders receive up to [✂] days’ notice of when their spectrum on a given site needs to be switched off because the other shareholder has plans to undertake work on that site. This is managed by a separate process — MBNL’s CMP — and ensures that each shareholder has sufficient time to mitigate any issues caused by a scheduled outage. MBNL told us that it would be a very involved process to discern a pattern or plan from these scheduled outages.[1726]

High-level technology upgrade plans

12.40 MBNL submitted that shareholders need to declare their high-level technology upgrade plans to [✂].[1727] This relates, firstly, to the introduction of a technology (eg 6G), which occur roughly every [✂] years (referred to as a [✂]) and, secondly, new solution or product design documents to support the implementation and upgrade of a new technology.[1728]

12.41 MBNL submitted that the information requirements for [✂] are set out in the JV agreements and would typically include:[1729]

(a) Name of the project.

(b) A description of the project (including confirmation that it was unilateral and that the other shareholder would not have the option to buy into the project or equipment), if it was a trial or deployment project, the technology or

[1724] MBNL response to CMA RFI.
[1725] MBNL response to CMA RFI.
[1726] MBNL call note. MBNL call note.
[1727] MBNL call note.
[1728] MBNL call note. MBNL call note.
[1729] MBNL call note; see also the MBNL [✂].

frequency bands involved and confirmation that the criteria for unilateral deployments had or would be met.

12.42 MBNL submitted that the declaration does not include details of which sites the shareholder is rolling out to and when. [1730]

12.43 MBNL also submitted, in relation to new equipment designs, that the majority of antenna/radio products have already been developed, and that to date there is a high degree of commonality between the shareholders. The introduction of new antenna/radio products is usually triggered by or driven by new technologies (eg 5G Active Antennas) or the use of new spectrum bands.[1731]

Parties' submissions

12.44 The Parties submitted that:

(a) this theory of harm does not take into account the reality that the Merger will lead to an increase in network investments across the industry, as evidenced by the pre-agreed network strategy for the Merged Entity and [✂]. This in turn will incentivise BTEE and VMO2 to improve their network quality in response.[1732]

(b) the concern ignores the rationale for the Merger which is to achieve the scale necessary to increase network investment significantly.[1733]

12.45 The Parties submitted in relation to MBNL that there is limited information sharing, which is subject to robust safeguards:

(a) the limited scope of the information exchanged since Project Stanley, [✂], does not provide any basis to discern BTEE's investment strategy and therefore inform 3UK's network decisions.[1734]

(b) the limited information sharing within MBNL is subject to robust safeguards governing the disclosure of any CSI between the shareholders. Under the MBNL Cooperation Agreement, 3UK and BTEE are [✂]. [✂]. A key principle is that [✂].[1735]

(c) the only occasion where information ([✂]) is shared [✂] (we understand that 'clash' refers to the scenario in which both shareholders have submitted planned demand for the same site, in which case MBNL needs to manage

[1730] MBNL call note.
[1731] MBNL call note.
[1732] Parties' initial submission, 1 May 2024, paragraphs 5.19, 5.26.
[1733] Parties' initial submission, 1 May 2024, paragraphs 1.13, 5.19, 5.23.
[1734] Parties' response to the AIS and working papers.
[1735] FMN.

the process by which it is decided which shareholder rolls out first, assuming they do not want to jointly roll out).[1736]

(d) the factual premise on which this theory of harm is based is incorrect as the ‘clash’ is only identified after the investment decision is made (ie the Merged Entity cannot reduce or postpone its investment in response to the CSI it receives via the MBNL ‘clean team’).[1737]

(e) [✂].[1738]

(f) [✂].[1739]

(g) [✂].[1740]

(h) [✂].[1741] [✂]% of 3UK’s total network capex in 2023 was 3UK unilateral spend.[1742]

(i) 3UK has access to publicly available information in respect of BTEE’s unilateral sites from its planning applications.[1743]

12.46 In relation to high level technology upgrades, 3UK has stated that it [✂] adopted upgrades involving the introduction of ‘once in a generation’ technology in [✂]. 3UK has [✂].[1744]

12.47 The Parties submitted in relation to Beacon that:

(a) information sharing under Beacon is closely controlled by [✂].[1745]

(b) [✂].[1746]

(c) [✂]. [1747]

(d) these safeguards were developed in consultation with Ofcom. [✂].[1748]

(e) a contractual breach of this nature would cause significant damage to the Merged Entity’s own business and reputation. [1749]

[1736] Parties’ initial submission, 1 May 2024, paragraphs 5.19.
[1737] Parties’ initial submission, 1 May 2024, paragraphs 5.19.
[1738] CK Hutchison response to the CMA’s section 109 notice.
[1739] CK Hutchison response to the CMA’s section 109 notice.
[1740] Parties’ initial submission, 1 May 2024, paragraphs 5.20.
[1741] Parties’ initial submission, 1 May 2024, paragraphs 5.20.
[1742] Parties response to the CMA’s RFI.
[1743] Parties response to the CMA’s RFI.
[1744] Parties response to the CMA’s RFI.
[1745] Parties’ initial submission, paragraphs 1.13, 5.19, 5.23. Parties’ response to the AIS and working papers.
[1746] Parties’ initial submission, paragraphs 1.13, 5.19, 5.23. Parties’ response to the AIS and working papers.
[1747] Parties’ initial submission, paragraphs 1.13, 5.19, 5.23. Parties’ response to the AIS and working papers.
[1748] Parties’ initial submission, 1 May 2024, paragraphs 5.19(ii) and 5.24. Parties’ response to the AIS and working papers.
[1749] Parties’ initial submission, 1 May 2024, paragraph 5.23(iv).

(f) even in the unlikely event that the information sharing safeguards failed, and information relating to VMO2's deployment plans was inadvertently shared with VUK strategy teams (or vice versa) [✂] ahead of deployment, this information would not be commercially useful to the MNO in receipt of that information. MNOs set their network strategy and deployment plans several years ahead of physical deployment. The amount of work that is needed to develop these plans means that it is not possible to change them at short notice.[1750]

Third party submissions

12.48 We have considered the submissions of the other MNOs which are participants in the MBNL and Beacon network sharing arrangements: BTEE and VMO2.

BTEE's submissions

12.49 BTEE submitted that the sharing of CSI within the network sharing arrangements could impact incentives to invest:

(a) the Merged Entity could take into account information it accesses regarding network investments planned by the other MNOs when deciding how to time and target its own investments, and in particular, could cancel or postpone previous roll-out plans on the basis of information it receives regarding competing MNOs' roll out plans. Put simply, if the Merged Entity becomes aware that both rivals are unlikely to make certain investments, it would no longer need to do so.[1751]

(b) BTEE's and VMO2's incentives to invest may also be reduced.[1752]

12.50 BTEE submitted that the Merged Entity could access CSI via MBNL and Beacon:

(a) the Merged Entity's position in both network sharing arrangements may afford it significant visibility as to the network upgrades and/or launch of new technologies planned by BTEE and VMO2.[1753]

(b) while safeguards in place may provide some protection, the Merged Entity could breach these safeguards, and there is scope for information sharing without the safeguards being breached. [1754]

[1750] Parties' response to the AIS and working papers.
[1751] BTEE response to the issues statement, 2 May 2024, paragraph 1.11.
[1752] BTEE response to the issues statement, 2 May 2024, paragraph 1.11.
[1753] BTEE response to the issues statement, 2 May 2024, paragraph 1.11.
[1754] BTEE response to the issues statement, 2 May 2024, paragraph 1.11.

12.51 BTEE submitted that MBNL provides each shareholder with certain information on a regular basis. In particular, MBNL provides [✂]:

(a) This allows BTEE [✂].[1755]

(b) The output also allows each shareholder [✂], including:[1756]

(i) [✂].

(ii) [✂].

(iii) [✂].

(iv) [✂].

(c) MBNL has recently [✂].[1757]

(d) BTEE [✂].[1758]

(e) BTEE submitted that this information could be used on its own or in combination with other information to make commercial decisions.[1759] For example, by [✂].[1760]

12.52 BTEE also submitted that there are other sources of information we should take into account. In particular, [✂]:

(a) MBNL shareholders receive information regarding [✂]. [✂].[1761]

(b) The Merged Entity will also [✂].[1762] [✂].[1763]

12.53 BTEE submitted that:

(a) the contracts governing MBNL are insufficient to ensure the proper functioning of the network sharing arrangements without aligned incentives.[1764]

(b) if 3UK either intentionally or negligently breached the terms of the contracts, [✂].[1765]

1755 BTEE response to the CMA's RFI.
1756 BTEE response to the CMA's RFI.
1757 BTEE response to the CMA's section 109 notice.
1758 BTEE response to the CMA's s109 notice.
1759 BTEE response to the issues statement, 2 May 2024, paragraph 3.17.
1760 BTEE response the CMA's RFI.
1761 BTEE meeting note.
1762 BTEE response to the CMA's section 109 notice.
1763 BTEE response to the CMA's RFI.
1764 BTEE response to the issues statement, 16 May 2024, paragraphs 3.20-3.23.
1765 BTEE response to the issues statement, 16 May 2024, paragraph 3.23.

12.54 BTEE also provided information about the process of notification for high level technology changes. BTEE detailed two examples of changes to high level technology prior to Project Stanley detailing the timelines taken for senior approval of the projects, procurement and launch. Both of these projects were [✂].[1766]

VMO2's submissions

12.55 VMO2 submitted that:[1767]

(a) in order for the Beacon network sharing arrangements to operate effectively and efficiently, it is necessary for VUK and VMO2 to share a certain degree of information. This includes information on [✂].

(b) due to the contractual and practical safeguards relating to information exchanges, the Merged Entity should not be able to use VMO2 Beacon information for any purpose other than the operation of the Beacon agreements.

(c) as a mandatory and integral part of the Beacon network sharing arrangements, VUK and VMO2 agreed and implemented detailed Competition Law Guidelines.[1768]

Our assessment

12.56 In the absence of the Merger, the Parties are each participants in one of the two network sharing arrangements, MBNL and Beacon. As discussed above, 3UK already has access to certain CSI pertaining to BTEE through MBNL. Whilst certain teams within VUK have access to CSI pertaining to VMO2, as discussed at paragraphs 12.18 and 12.19 above, this information is ring-fenced from the retail, wholesale and strategy teams in particular.

12.57 Given there is already a certain level of information sharing pre-Merger between BTEE and 3UK, on the one hand, and VUK and VMO2, on the other hand, in our assessment we have focused on the potential Merger impact, ie whether the Merged Entity would have an incentive to combine the CSI received through MBNL with the CSI received through Beacon. Given the Merged Entity would only be able to share VMO2's information with its retail, wholesale and strategy teams by breaching the Beacon information sharing safeguards, we have considered whether post-Merger, the Merged Entity would have the incentive to breach the Beacon safeguards.

1766 BTEE response to the CMA's RFI.
1767 VMO2 response to the CMA's RFI.
1768 VMO2 response to the CMA's RFI.

12.58 To assess this, we first consider the importance of the CSI shared within MBNL to the Merged Entity's investment plans. As explained below, we find that the CSI shared via MBNL is of limited use beyond the purpose for which it is intended. Therefore, we consider that the potential benefit from combining the information the Merged Entity would receive on the MBNL side and the Beacon side is limited. Accordingly, we do not consider that the Merged Entity would have an increased incentive to breach the Beacon information sharing safeguards in order to share VMO2's information with its retail, wholesale and strategy teams compared to VUK's current incentives in the counterfactual.

12.59 Currently, the following types of information are shared between BTEE and 3UK via MBNL:

(a) Current configuration of sites;

(b) Forecast rollout plans; and

(c) High-level technology upgrade plans.

12.60 We consider below the importance of each of these types of information to the Merged Entity's investment plans (by considering, where relevant, both the scale and characteristics of the information shared).

12.61 As part of our assessment regarding forecast rollout plans, we also consider whether more CSI will be shared via MBNL post-Merger, which could make it more useful to the Merged Entity. We note that there is no change to the CSI shared via Beacon post-Merger. As set out in paragraphs 12.18 to 12.19 and 12.22, the Beacon parties currently submit all of their forecast demand at a site level [✂], and will continue to do so post-Merger. [✂] is subject to strict information sharing requirements which continue to apply post-Merger.

Current configuration of sites

12.62 As set out above in paragraph 12.27, BTEE and 3UK have access to information regarding the current configuration of shared sites via MBNL.

12.63 We have considered the risk that by getting access to information regarding the current configuration of MBNL sites, the Merged Entity could infer BTEE's future rollout strategy and thereby use the information to decide how to time and target its own investments. In particular we have considered whether the sharing of this information might reduce or postpone investments by the Merged Entity compared to the scenario absent the Merger.

Our assessment

12.64 We consider that the usefulness of this information for this purpose is likely to be limited for a number of reasons:

(a) we understand that some of the information is already available to MNOs via other sources and therefore that the benefit of the information gained via MBNL in relation to the configuration of sites is limited. In particular:

(i) BTEE and 3UK publish data on their own 5G coverage.[1769]

(ii) [✂].[1770] These include local sources of quality data. For example, MNOs can purchase the underlying data provided by Umlaut on a quarterly basis, which provides a more disaggregated view within the locations covered by its drive testing. This includes data on overall network quality and reliability.[1771]

(iii) VUK told us that the spectrum deployed by any MNO across a given area could be obtained by any MNO through desktop research.[1772]

(b) the current configuration of MBNL sites is indicative of historic rollout, which may not be a guide to future rollout:

(i) the characteristics of sites BTEE has yet to roll out to may be different to those it has already rolled out to.

(ii) BTEE's rollout strategy may change.

(c) the information shared via MBNL [✂].[1773]

12.65 We therefore do not consider that the information shared via MBNL regarding the current configuration of sites would be particularly useful to the Merged Entity and therefore that the benefit of the information gained via MBNL in relation to the configuration of sites is limited.

Forecast rollout plans

12.66 As set out in paragraphs 12.32 to 12.36, the Merged Entity would have access to some information on BTEE's forecast rollout plans via MBNL:

[1769] Mobile Network Coverage Checker | 3G, 4G & 5G | BT Mobile, accessed by the CMA on 11 September 2024; and Three 5G Coverage - Check coverage in your area accessed by the CMA on 11 September 2024.
[1770] Vodafone internal document; Vodafone internal document; and Parties response to the CMA's RFI.
[1771] Parties' response to the CMA's RFI.
[1772] Parties' initial submission, 1 May 2024, paragraph 5.25.
[1773] [✂].

(a) As set out in paragraph 12.39, we understand the Parties receive [✂] days' notice of when their spectrum on a given site needs to be switched off because the other shareholder has plans to roll out on that site.

(b) [✂].[1774] This team includes employees of MBNL only. [✂].[1775] [✂].[1776]

(c) Information on demand forecasts is only shared with shareholders where they have separately indicated that they wish to upgrade the same site within the next [✂] (and only relates to information regarding those specific sites).[1777]

(d) [✂].[1778,1779] [✂].

(e) As set out in paragraphs 12.36 and 12.50 above, we understand that historically MBNL's reports have included some information about not only the [✂].

12.67 We have considered the risks that by getting access to information described above regarding BTEE's forecast rollout on MBNL sites, the Merged Entity could:

(a) identify areas where BTEE does not have plans to rollout and reduce/postpone its own investment in response;

(b) infer BTEE's overall rollout strategy, and thereby use the information to decide how to reduce/postpone its investment in areas where it does not expect BTEE to roll out.

12.68 To assess these risks we have considered both the scale and characteristics of information regarding forecast rollout plans shared via MBNL, as well as the role of competitor information in the Parties' rollout plans.

12.69 We have also considered the risk that BTEE's incentive to invest in its network may be reduced. As explained below, we find that the CSI shared via MBNL is of limited use to the Merged Entity. Accordingly, we do not consider that BTEE's incentives to invest would be materially reduced.

Scale of the information shared

12.70 We have gathered evidence from 3UK on the number of sites where it submitted requests but BTEE did not have demand, which might enable it to identify areas

[1774] FMN.
[1775] FMN.
[1776] FMN.
[1777] BTEE response to the CMA's RFI.
[1778] CK Hutchison internal document.
[1779] Parties' response to the CMA's RFI.

where BTEE does not have plans to rollout and reduce/postpone its own investment in response. [✂].[1780] Based on [✂] ([✂]% [✂]).[1781]

12.71 Multiplying by three to give an [✂] period shows this relates to:

(a) [✂]% of 3UK's rollout sites (shared and unilateral sites over this period on which 3UK has completed upgrade work);[1782]

(b) [✂]% [✂];[1783] and

(c) [✂]% of the Merged Entity's total sites (assuming it has a total site count of approximately [✂] sites, which is the current plan under the JBP).[1784][1785]

12.72 The Parties submitted that [✂].[1786] The Parties have told us that the Merged Entity will only retain approximately [✂]% ([✂] sites) of 3UK's current MBNL shared sites.[1787] Even if the Merged Entity were to eventually invest in all of the MBNL sites it currently plans to retain, if BTEE continues to invest at a similar rate as it has done historically, the number of sites at which the Merged Entity might discover BTEE had no plans to invest would amount to less than 10% of the Merged Entity's sites.

12.73 We have also considered whether the scale of information shared regarding where BTEE does and does not have plans to roll out might enable the Merged Entity to infer BTEE's overall rollout strategy, and thereby use the information to decide how to reduce/postpone its investment. If we assume the Merged Entity eventually submits demand forecasts for all MBNL sites it plans to retain, this would amount to information regarding BTEE's plans (whether it is upgrading or not) at a maximum of [✂]% of BTEE's sites and [✂]% of the Merged Entity's sites (this difference is due to the relative proportion of shared and unilateral sites for BTEE and the Merged Entity post-Merger). Focusing only on sites where BTEE does not have plans and assuming the same proportion of demand for sites that BTEE did not submit demand for, the information relates to a maximum of [✂]% of BTEE's sites and under 10% of the Merged Entity's sites.

12.74 We note that post-Merger, the level of information sharing may also decrease. 3UK has suggested that there may be [✂] on retained sites post-Merger as [✂]. [✂].[1788]

1780 Parties' response to the CMA's RFI.
1781 BTEE response to the CMA's RFI.
1782 3UK response to the CMA's RFI.
1783 BTEE response to the CMA's RFI.
1784 The JBP incorporates the JNP.
1785 Parties' response to the CMA's RFI.
1786 Parties' initial submission, 1 May 2024, paragraph 5.20.
1787 Parties' response to the CMA's RFI.
1788 CK Hutchison MBNL call transcript.

Our assessment

12.75 Based on the above, we consider that the scale of information shared via MBNL is unlikely to be material.

12.76 Whilst the Merged Entity could submit forecast demand which is intentionally misleading, in order to extract more information from the process, this behaviour is monitored by MBNL, as described at paragraph 12.37.

12.77 MBNL told us that if it thought the shareholders were abusing the process it could escalate informally or formally (via the governance forums and to MBNL Board). It also stated that BTEE could respond by asking MBNL to investigate, via the JV escalation procedure.[1789]

Characteristics of the information shared

12.78 Depending on the characteristics of the information shared, the information may be more or less useful to the Merged Entity. In particular we have considered:

(a) the contents of the information shared,

(b) the timeframe the information relates to (whether it gives the Merged Entity sufficient notice to respond), and

(c) the geographical nature of the information (whether the information is useful given how the Parties select areas and sites to roll out).

12.79 In relation to the contents of the information shared via MBNL's [✂], we understand that the shareholders are moving towards limiting the information being shared between them:

(a) [✂];[1790]

(b) [✂];[1791] and

(c) this information could be reinstated if both shareholders give their permission.[1792] 3UK and BTEE [✂].[1793] 3UK has informed us that it remains of the view that [✂] and does not intend to change its current approach [✂]. 3UK further stated that MBNL has functioned with no difficulties [✂] in the past.[1794]

[1789] MBNL response to the CMA RFI.
[1790] CK Hutchison response to the CMA's section 109 notice.
[1791] MBNL call note; and CK Hutchison response to the CMA's section 109 notice.
[1792] MBNL call note.
[1793] MBNL call note .
[1794] Parties response to the CMA's RFI.

12.80 In relation to the timing of the information:

(a) as set out above, the [✂] provided to the shareholders include committed demand for the next [✂] (which has committed budget) as well as forecast demand for the next [✂] (which does not yet have committed budget and is therefore likely less reliable). The shareholders also receive notice of spectrum being switched off [✂] days in advance.

(b) the Parties have long-term rollout plans. [✂], [✂] (reviewed each financial year), and the JNP is a ten-year plan (2024-2034).[1795]

(c) historically the Parties have reviewed their rollout plans annually. [✂].[1796] However the Parties submitted that the amount of work that is needed to develop these plans means that it is not possible to change them at short notice.[1797]

12.81 In relation to the geographical nature of the information, the data shared via [✂] is provided [✂]. In contrast, the Parties told us that their rollout strategies are based on [✂]:

(a) [✂].[1798]

(b) VUK told us that when it decides to invest in [✂].[1799]

12.82 This is consistent with the Parties' internal documents.[1800]

Our assessment

12.83 We consider that given its characteristics, the information shared via MBNL is unlikely to be useful to the Merged Entity in determining where BTEE does not have plans to roll out. In particular:

(a) The shareholders receive notice of spectrum being switched off [✂] days in advance. While the Merged Entity might be able to infer from the absence of a notification that BTEE does not have plans to roll out to a particular site, we consider that this does not give the Merged Entity much advance notice. By this time the Merged Entity may be very limited in its ability and incentive to respond to the absence of a notification given that it may have already started investing and/or because it would incur costs to change plans at late notice. We note that forecasts of up to [✂] with associated budget are

1795 Parties' response to the CMA's RFI; and FMN.
1796 Parties' response to the CMA's RFI.
1797 Parties' response to the AIS and working papers.
1798 Parties' response to the CMA's RFI.
1799 Parties' response to the CMA's RFI.
1800 For example, CK Hutchison internal documents.

considered 'committed' by MBNL, which suggests that [✂] days is very short notice for the Merged Entity to change its plans.

(b) The Merged Entity would only obtain information via [✂] in relation to sites where it already has plans (either committed or forecasted). Therefore, in any case, its incentive to reduce or postpone investment based on information relating to BTEE may be limited given that it may have already started investing and/or because it would incur costs to change plans at late notice, in particular for sites where the Merged Entity's plans are 'committed' (ie the rollout is expected to take place within the next [✂] and the Merged Entity has assigned budget).

(c) Information on 'forecast' plans with uncommitted budget ([✂]) may be unreliable.

(d) Site-level information may be difficult to respond to (eg if information shared via MBNL enables the Merged Entity to determine that BTEE is, for example, not rolling out to one site in Brighton or one in Edinburgh). This is because it would be at odds with the [✂].

12.84 It may also be practically difficult for the Merged Entity to use the information shared via MBNL to infer BTEE's overall rollout strategy, including because:

(a) the Merged Entity may not be able determine whether the information shared with it via MBNL is representative of BTEE's wider rollout, for example because it is a small sample.

(b) the information is at most [✂] forward-looking. This limits the Merged Entity's ability to predict BTEE's rollout strategy beyond this point. In relation to sites where the Merged Entity discovers that BTEE has no plans to invest, it has no visibility as to whether BTEE has no plans to roll out to these sites, or has plans to roll out at [✂], for example.

(c) there are different factors that affect MNOs' decisions to rollout in a given area, eg the MNO's capacity constraints, population density and demographics.

(d) rollout strategies may change over time eg BTEE's business strategy may change, or BTEE may roll out to different profiles of sites at different times.

The role of competitor information in the Parties' rollout plans

12.85 In relation to whether the Parties place material weight on the rollout of competitor MNOs vs other factors, the Parties told us that their rollout plans rely on a range of factors:

(a) VUK submitted that its rollout plans are informed by [✂].[1801]

(b) VUK uses some information related to its competitors when deciding its roll-out, but this is high-level:

(i) VUK submitted that a report [✂].[1802] This report [✂].[1803]

(ii) A VUK internal document, [✂].[1804]

(c) 3UK submitted that its rollout plan is informed by 3UK's [✂].[1805] 3UK also submitted that it uses internal and external metrics to monitor its network performance, including to compare its performance against its competitors, [✂]. [✂], the metrics provide a view on 3UKs relative network performance across a range of parameters and allow 3UK to attempt then to optimise its performance [✂] and try to improve customer experience as required [✂].[1806]

Our assessment

12.86 The Parties' rollout plans rely on a range of factors and do not consider competitors' rollout at an individual site level. We consider that this limits the potential usefulness of the information shared via MBNL.

High-level technology upgrade plans

12.87 As set out in paragraphs 12.40 to 12.42, the shareholders are required to submit their high-level technology upgrade plans and new equipment designs [✂] which includes a description of the project (including, if it is a trial or deployment project, the technology or frequency bands involved and confirmation that the criteria for unilateral deployments have or will be met). We have received information from both BTEE and 3UK on historical examples of high-level technology upgrades and new equipment designs.

12.88 We have considered the risk that by getting access to information regarding BTEE's planned upgrades to MBNL sites, the Merged Entity could reduce/postpone its own investment in response.

[1801] Parties' response to the CMA's RFI.
[1802] Parties' response to the CMA's RFI.
[1803] Vodafone internal document.
[1804] Vodafone internal document.
[1805] Parties' response to the CMA's RFI.
[1806] Parties' response to the CMA's RFI.

Our assessment

12.89 We do not consider that the information which shareholders submit to MBNL regarding their plans to launch technologies is likely to be very useful to the Merged Entity for the following reasons:

(a) the MNO may have plans to launch a new technology across only a very limited number of sites.

(b) the timings of upgrade plans may change.

(c) the frequency of information being shared appears limited. MBNL submitted that the information relating to technologies only relates to 'once in a generation' technology upgrades, which take place every 5-10 years. Given MBNL is due to end in 2031, this implies the number of technology upgrade plans likely to be notified before the end of the JV is limited.

(d) MBNL submitted, in relation to new equipment designs, that the majority of antenna/radio products have already been developed, and that to date there is a high degree of commonality between the shareholders.

Our conclusion on the potential competitive effects from sharing of commercially sensitive information via the Merged Entity's participation in both network sharing arrangements

12.90 Based on our assessment of the evidence set out above, our view is that:

(a) Given its position in MBNL, the Merged Entity may have some visibility as to the network upgrades planned by BTEE.

(b) However it is unlikely that this information shared via MBNL would be useful to informing the Merged Entity's investment plans given its limitations (including, for example, how far in advance the information is shared and the scale of information shared). It is therefore unlikely to lead to the Merged Entity materially reducing or postponing its investments.

(c) Given this, we also do not consider that BTEE's incentive to invest would be materially reduced and have not needed to assess the usefulness of the information currently being shared via Beacon. This is because, as set out in paragraph 12.55 above, we have focused our assessment on the Merger impact, whether the Merged Entity would have an incentive to combine the CSI received through MBNL, with the CSI received through Beacon (by breaching the Beacon information sharing safeguards).

(d) We also note that there is no change to the information being shared via Beacon resulting from the Merger, in particular because the Beacon parties currently submit all of their forecast demand at a site level to [✂], and will continue to do so post-Merger.

12.91 Therefore, we consider that the Merger does not give rise to an SLC resulting from the sharing of commercially sensitive information via the Merged Entity's participation in both network sharing arrangements.

13. COUNTERVAILING FACTORS – ENTRY AND EXPANSION

13.1 Countervailing factors can prevent an SLC arising from a merger. There are two main ways in which this could happen: through the entry and/or expansion of third parties in reaction to the effects of a merger or through merger efficiencies. We consider entry and expansion first and then efficiencies.

Entry and expansion

13.2 As set out in CMA129, any analysis of a possible SLC includes consideration of the direct responses to the merger by rivals, potential rivals, and customers. If effective entry and/or expansion occurs as a result of a merger and any consequent adverse effect (for example, a price rise), the effect of the merger on competition may be mitigated, and in some cases the CMA may conclude that there is no SLC. In assessing whether entry or expansion might prevent a SLC, the CMA considers whether such entry and/or expansion would be timely, likely and sufficient.[1807]

13.3 The CMA will seek to ensure that the evidence is robust when presented with claims of entry or expansion being timely, likely, and sufficient to prevent an SLC from arising. It is likely to place greater weight on detailed consideration of entry or expansion and previous experience of entry and expansion.[1808]

13.4 In Chapters 8 and 9, we found that there is scope for an SLC in the retail and the wholesale markets subject to countervailing factors. For entry and expansion to be sufficient, it would need to prevent the adverse effects we have identified in the wholesale and retail markets.

Parties' submissions

13.5 The Parties submitted that:

(a) the retail market is characterised by low barriers to entry and expansion for MVNOs;

(b) MNOs face disintermediation from consumers due to the potential entry by large tech platforms at the retail level; and

(c) entry of private networks and cloud players will also constrain the Parties (and other MNOs) at the network level.[1809]

[1807] CMA129, paragraphs 8.28 – 8.32.
[1808] CMA129, paragraph 8.30.
[1809] FMN.

13.6 With respect to barriers to entry and expansion by MVNOs, the Parties submitted that all an MVNO needs to enter the retail market is to enter into an agreement for wholesale access to an MNO's network.[1810] MVNOs can therefore enter without having to incur the upfront costs and investments that MNOs incur to build and upgrade mobile network infrastructure.[1811] The Parties also noted that many MVNOs do not require any authorisation or spectrum licences to enter the retail market, although they may be required, like MNOs, to comply with the conditions of general application, published by Ofcom under the Communications Act (**CA03**).[1812] They noted that some MVNE platform providers also ensure MVNOs are compliant with regulation, which further simplifies matters for MVNOs that utilise their infrastructure.[1813]

13.7 The Parties submitted that in the last ten years, the retail market has seen a significant number of new entrants, with as many as 150 MVNOs launched, as reported by Ofcom. The Parties submitted that MVNOs are credible competitors to MNOs, as reflected by their aggregate share of supply by subscribers in the consumer segment increasing to [✂]% in 2023 compared to [✂]% in 2016.[1814] They also highlighted that 'MVNOs as a group accounted for the largest share of consumer retail gross adds (24%) in the market in 2023'. The Parties submitted that they expect further entry by MVNOs, including potentially from big tech companies, existing brands that are active in various UK markets that would be able to leverage their brands and/or customer base, including existing providers of fixed broadband services (such as Shell Energy and Hyperoptic), established retail brands (such as Waitrose, Boots and Selfridges) and technology companies (including Netflix, TikTok and Uber), MVNOs with established strategies in other countries, IoT MVNOs, and Telecoms as a Service MVNOs (**TaaS**).[1815]

13.8 In addition to entry, the Parties also submitted that they expect existing MVNOs to continue to expand and grow their share of subscribers across the retail market. The Parties submitted this is because:

(a) MVNOs have secured relatively faster access to new technology, including 5G, compared to earlier technologies such as 4G;

(b) MVNOs are often large, sophisticated customers with significant negotiating experience and bargaining power and are accordingly able to negotiate stronger commercial wholesale terms;

[1810] FMN.
[1811] FMN.
[1812] FMN.
[1813] FMN.
[1814] FMN.
[1815] FMN.

(c) MNOs have taken a more partnership-based approach to their relationships with MVNOs, enabling MVNOs to be more flexible in their retail offerings and to become increasingly competitive;

(d) A number of market trends are expected to facilitate MVNO growth, such as:

(i) increased penetration of eSIMs;

(ii) the introduction of the 'text to switch' process which assists customer switching;

(iii) growth of the SIMO segment; and

(iv) growth of MVNE platforms, which reduces the investment and development required by MVNOs to enter the market.[1816]

13.9 With respect to disintermediation, the Parties further submitted that the advent of eSIMs is likely to pave the way for entry by large tech platforms into the retail market (by acting as MVNOs or leveraging their positions as operators of leading mobile operating systems), potentially resulting in MNOs losing the customer relationship and being relegated to the role of wholesale connectivity providers.[1817]

13.10 With respect to private networks and cloud providers, the Parties submitted that these players may be able to establish themselves as providers of private mobile network connectivity without any involvement from an MNO, which has important consequences for MNOs, increasing competition for business customers. The Parties further noted that these players do not require the same scale or financial investment in infrastructure as MNOs to enter the market.[1818]

Assessment

Introduction

13.11 In this section we assess the evidence on the potential impact from entry and expansion of MVNOs:

(a) Sources of entry and expansion.

(b) Evidence of MVNO expansion.

(c) The competitive position of MVNOs.

(d) The impact of the Merger on MVNO expansion.

[1816] FMN.
[1817] FMN.
[1818] FMN.

Sources of entry or expansion

13.12 To consider the extent to which entry and/or expansion may prevent an SLC we have first focused on the most likely sources of entry or expansion. To do this we looked at what evidence has been provided by the Parties or is available to us.[1819]

Credible sources of entry

13.13 The Parties have made a number of submissions regarding potential market entry (see paragraphs 13.5 to 13.10 above), including that MNOs face disintermediation from consumers due to the potential entry by large tech platforms at the retail level, entry of private networks and cloud players and entry from new MVNOs.

13.14 In terms of entry by large tech platforms, private networks and cloud players, whilst a possibility, the Parties have not provided any evidence of this occurring in the UK, and we have not seen any such evidence during our Inquiry. Moreover, we are not aware of any particularly significant moves in this space outside of the UK that might indicate a future change to the UK market. We do not consider the Merger changes the likelihood of entry by these players and thus we do not consider these to be likely sources of effective and timely market entry. They are not considered further in our assessment.

13.15 In terms of entry by new MVNOs, there are examples of MVNO entry in recent years with a large number of MVNOs currently operating in the UK. However, most MVNO entry in the past has been very small scale with Sky Mobile a notable exception. Based on 2023 data, in the overall retail market, only two independent MVNOs have a market share by subscribers greater than [✂]%,[1820] Sky Mobile ([0-5]%) and Lebara ([0-5]%), and only Sky Mobile has a market share by revenue greater than [✂]% ([0-5]%).[1821]

13.16 The Parties have not put forward any evidence of any third party with actual plans to enter the market at scale and we are not aware of any third parties with such plans.

13.17 In the absence of evidence, we consider it unlikely that potential entry by new MVNOs would be sufficient to offset the adverse effects of the Merger. We therefore do not consider entry further.

[1819] The Parties do not submit that a new MNO could enter nor that current MNO expansion would be sufficient for our assessment, as such, MNOs are not considered in this chapter.
[1820] As explained in in Chapter 8, we do not consider Tesco Mobile to be a fully independent MVNO.
[1821] As set out further in Chapter 8, Table 8.9.

Credible sources of expansion

13.18 The Parties have submitted that current MVNOs are growing and there are market trends that indicate this growth will increase going forward.

13.19 Given the current growth of MVNOs we consider MVNO expansion could in principle have an impact on our assessment of the impact of the Merger on the supply of retail mobile services.[1822] The remainder of our assessment is focused on MVNO expansion and whether it could be timely, likely and sufficient to prevent an SLC.

Evidence of MVNO expansion

13.20 As outlined in the competitive assessment (see Chapter 8, Market Shares), the combined market share of independent MVNOs in the overall retail market was [5-10]% by revenues and [10-20]% by subscribers in 2023. This increased from [0-5]% by revenues and [5-10]% by subscribers in 2020. At this rate of growth, all other things being equal, MVNOs could be expected to continue to increase their market share going forward and this may have the effect of increasing competition against the MNOs.

13.21 Some MVNOs indicated that barriers for MVNOs to expand in the retail mobile services market are low. For example, one MVNO noted that there are 'no significant barriers which exist to the entry or expansion' should it wish to pursue expansion, noting that resource and time would need to be considered and would need to be weighed up with customer requirements, and the cost benefit.[1823]

13.22 One large MVNO noted that there has been a growth of MVNOs with MNOs also launching their own MVNOs and anticipated that this would continue in the future. However, it noted that long-term competitive supply by MVNOs is 'threatened' in a post-Merger scenario with fewer MNOs to agree competitive wholesale arrangements with.[1824]

13.23 However, another MVNO told us that the market had seen the 'exit of previous key MVNO players (eg TalkTalk, Plusnet[1825]), showing how difficult and fragile the commercial model is for MVNOs'. It further noted that even in relation to sub-brands or partially owned MVNOs, 'their ability to expand may be limited by the fact that the controlling MNOs will want to limit cannibalisation of their own retail

[1822] MVNO expansion would not impact the CMA's assessment of the Merger on competition in the wholesale market as wholesale competition is between MNOs.
[1823] [✂] response to the CMA's questionnaire.
[1824] [✂] response to the CMA's questionnaire.
[1825] BT acquired Plusnet in 2007 with Plusnet Mobile services ceasing in June 2024.

businesses' and they are therefore likely to provide very limited competitive constraint.[1826]

13.24 Another MVNO explained that it is 'difficult to enter the MVNO market due to significantly thin margins' and the companies that are likely to expand would be 'in-house MVNOs', that is those owned by the MNOs.[1827]

13.25 Whilst MVNOs could continue to incrementally expand their share of the market, to prevent an SLC from arising, expansion needs to be of sufficient scope. Small-scale expansion, which we consider to be the most likely scenario in this case is not comparable to the constraint eliminated by the Merger and thus would not prevent an SLC. This is before taking into account the impact of the Merger on MVNOs, see 'The impact of the Merger on MVNOs' below.

The competitive position of MVNOs

13.26 As set out in our competitive assessment in Chapter 8, we consider that MVNOs are differentiated, each having different strategies and consumer focuses. The majority of MVNOs (including Lebara, Lyca Mobile, and iD Mobile) primarily target the value segment of the market and therefore provide no or only a limited constraint on the Parties outside the value segment. Sky Mobile, and to a lesser extent Tesco Mobile,[1828] are the main exceptions to this as they have a wider tariff offering and position themselves to compete more against the MNOs' main brands.

13.27 We also consider that MVNOs cannot, to a large extent, compete on network quality parameters, as these are set by the MNOs.

13.28 As set out in the section below, we have also found that the constraint from MVNOs is likely to reduce due to the impact of the reduction in competition in the supply of wholesale mobile services.

The impact of the Merger on MVNOs

13.29 Wholesale terms from MNOs play a critical role in the ability of MVNOs to be competitive and therefore grow. Post-Merger there will be one fewer option for MVNOs and we have concluded that the Merger gives rise to the scope for an SLC in the wholesale market.

13.30 Based on our assessment of the evidence as set out in Chapter 9, we concluded that the intensity of competitive outcomes in the supply of wholesale mobile services has varied over time and by type of MVNO, and that VUK and 3UK are

[1826] [✂] response to the CMA's questionnaire.
[1827] [✂] response to the CMA's questionnaire.
[1828] As outlined in previous chapters, we do not consider Tesco Mobile to be a fully independent MVNO.

close competitors. There are only two alternative suppliers of wholesale mobile services to the Parties in the UK: BTEE and VMO2, and the market will therefore be highly concentrated post-Merger. This could lead to MVNOs receiving worse price and/or non-price terms. A number of MVNOs expressed this concern to us.

13.31 We consider that a less competitive wholesale market is likely to reduce the likelihood of MVNOs expanding sufficiently to offset an SLC, in response to the Merger.

Conclusion on entry and expansion

13.32 The Parties have provided limited evidence on how entry and expansion might impact our competitive assessment. Based on the evidence available we consider that the most likely source of entry or expansion would come from MVNOs, in particular expansion from existing MVNOs.

13.33 Expansion by MVNOs would not be capable of preventing or mitigating an SLC in the wholesale market, as only MNOs are capable of supplying wholesale network access.

13.34 However, in principle, MVNO expansion could impact our conclusion that there is scope for an SLC in the retail market as a result of the Merger.

13.35 We consider that there is some evidence in support of MVNOs expanding and thus acting as a stronger constraint in the future. MVNOs have been increasing their market share in recent years. In addition, whilst most individual independent MVNOs have achieved only limited growth, with Sky Mobile and Lebara achieving the most success.

13.36 As outlined in Chapter 8, the majority of MVNOs primarily target the value segment and no MVNOs can compete on network quality. Taking the evidence in the round, our conclusion is that that even assuming MVNOs can obtain competitive wholesale terms, MVNOs are limited in their ability to independently price, are constrained by the wholesale terms offered by MNOs and do not offer the same competitive constraint as MNOs.

13.37 To prevent an SLC from arising, expansion needs to be of sufficient scope and effectiveness to prevent the SLCs arising. Continued expansion, which we consider to be the most likely scenario in this case, is not comparable to the constraint eliminated by the Merger and thus would not prevent an SLC.

13.38 Finally, we consider that our conclusion that there is scope for an SLC in the wholesale market reduces the potential for timely, likely and sufficient expansion by MVNOs to prevent an SLC in the retail market.

13.39 Our view is therefore that it is not likely that entry or expansion of sufficient scale would occur in a timely manner in order to prevent or mitigate any SLC from arising as a result of the Merger.

14. COUNTERVAILING FACTORS – RIVALRY-ENHANCING EFFICIENCIES

Introduction

14.1 Rivalry-enhancing efficiencies are an example of a countervailing factor that may prevent an SLC arising from a merger.[1829] These are efficiencies that change the incentives of the merger firms and induce them to act as stronger competitors to their rivals – for example, by reducing their marginal costs giving them the incentive to provide lower prices or a better quality, range or service.[1830]

14.2 Rivalry-enhancing efficiencies may prevent an SLC by offsetting any anticompetitive effects.[1831] In order for us to take efficiencies into account, they must:

(a) enhance rivalry in the supply of those products where an SLC may otherwise arise;

(b) be timely, likely and sufficient to prevent an SLC from arising;

(c) be merger-specific; and

(d) benefit customers in the UK.[1832]

14.3 Most of the information relating to efficiencies such as synergies and cost reductions resulting from a merger is held by the merger firms.[1833] Accordingly, our guidance notes that it is for the merger firms to demonstrate that the merger will result in efficiencies.[1834] Merger firms who wish to make efficiency claims are encouraged to provide verifiable evidence to support their claims in line with the CMA's framework.[1835] Our guidance notes that many efficiency claims by merger firms are not accepted by the CMA because the evidence supporting those claims is difficult to verify and substantiate.[1836]

14.4 The Parties have claimed that the Merger gives rise to efficiencies relating to network capacity and quality.[1837] The Parties submitted that:

(a) the Merger would deliver a step change in network quality and capacity; and

[1829] CMA129, paragraph 8.1.
[1830] CMA129, paragraph 8.3(a).
[1831] CMA129, paragraph 8.4.
[1832] CMA129, paragraph 8.8.
[1833] CMA129, paragraph 8.7.
[1834] CMA129, paragraph 8.15.
[1835] CMA129, paragraph 8.7.
[1836] CMA129, paragraph 8.6.
[1837] Parties' initial submission, 1 May 2024, paragraph 6.3.

(b) the Merged Entity's superior network quality would increase the competitive pressure on rivals and create a strong incentive for the Merged Entity to compete aggressively in both the supply of retail and wholesale mobile telecommunication services to win customers in order to fill its expanded capacity.[1838]

14.5 The principal evidential base for the Parties' rivalry-enhancing efficiency claims is the Joint Business Plan for the Merged Entity (**JBP**), which encompasses their joint network plan (**JNP**) setting out how the networks will be integrated (for example, in terms of the sites that will be retained and the deployment of spectrum).

14.6 As set out in more detail below, the JBP was prepared as follows:

(a) Each Party produced [✂].

(b) The [✂] were then reviewed by a consultancy, Altman Solon (**AS**), which [✂].[1839]

(c) AS, working with the Parties, made an assessment of network and non-network synergies and, together with [✂], this was used to create the JBP.

14.7 In order to illustrate the economic incentive for the Parties to follow through on the JBP, the Parties also produced a hypothetical scaled back scenario (**SBS**) involving a less ambitious post-Merger network plan (with fewer sites retained and less spectrum deployed) and endeavoured to model the value accretion to them of carrying out the JBP as opposed to the SBS.[1840] The major benefits claimed by the Parties of implementing the JBP as opposed to the SBS were increasing the Merged Entity's market share by achieving best network status (which was modelled to increase operating free cashflow (**OFCF**) by £[✂] million over [✂] years, on a net present value (**NPV**) basis) and selling advanced 5G use cases (which was expected to increase OFCF by £[✂] million over [✂] years on an NPV basis).[1841]

14.8 We consider below the Parties' claimed efficiencies in relation to the factors set out above in line with CMA guidance. This section should be read in conjunction with Appendix G, which sets out further detail relevant to our analysis of these issues and in particular considers in detail the Parties' standalone capacity and congestion position in the counterfactual.

[1838] Parties' initial submission, 1 May 2024, paragraph 1.2.
[1839] Vodafone internal document. [✂].
[1840] See paragraph 14.56 below.
[1841] Parties' submission, The pro-competitive effects of the Vodafone/Three merger. Net present value means the value of future cashflows 'discounted' to today's value to take account of the 'time value of money', ie that – as a result of avoided opportunity costs and increased certainty - income (ie revenue and profits) earned 'today' is more valuable than expected future income.

14.9 We then reach a view on whether there is an expectation (ie a more than 50% chance) that an SLC may be expected to result or not, following our competitive assessment above[1842] and our assessment of countervailing factors, including the claimed efficiencies.[1843]

Parties' submissions

14.10 The Parties submitted that their JBP, underpinned by the JNP, presents a 'robust, credible view of how the MergeCo network will evolve'. The Parties submitted that the JBP is 'not only a plan but has been agreed by the shareholders as part of the commercial arrangements in the Transaction documents'.[1844]

14.11 The Parties submitted that the JBP will deliver a substantial step change in network capacity and quality which will make the Merged Entity a much more effective competitor than 3UK and VUK would otherwise be in the counterfactual. The Parties submitted that:

(a) The JBP will deliver substantial and timely improvements in network quality in terms of coverage, performance and reliability, from 'Day 1'[1845] and beyond:[1846]

(i) the Merger will provide a transformational uplift in terms of network key performance indicators (**KPIs**) and customer experience; and

(ii) the quality efficiencies are timely and will begin immediately post-Merger.

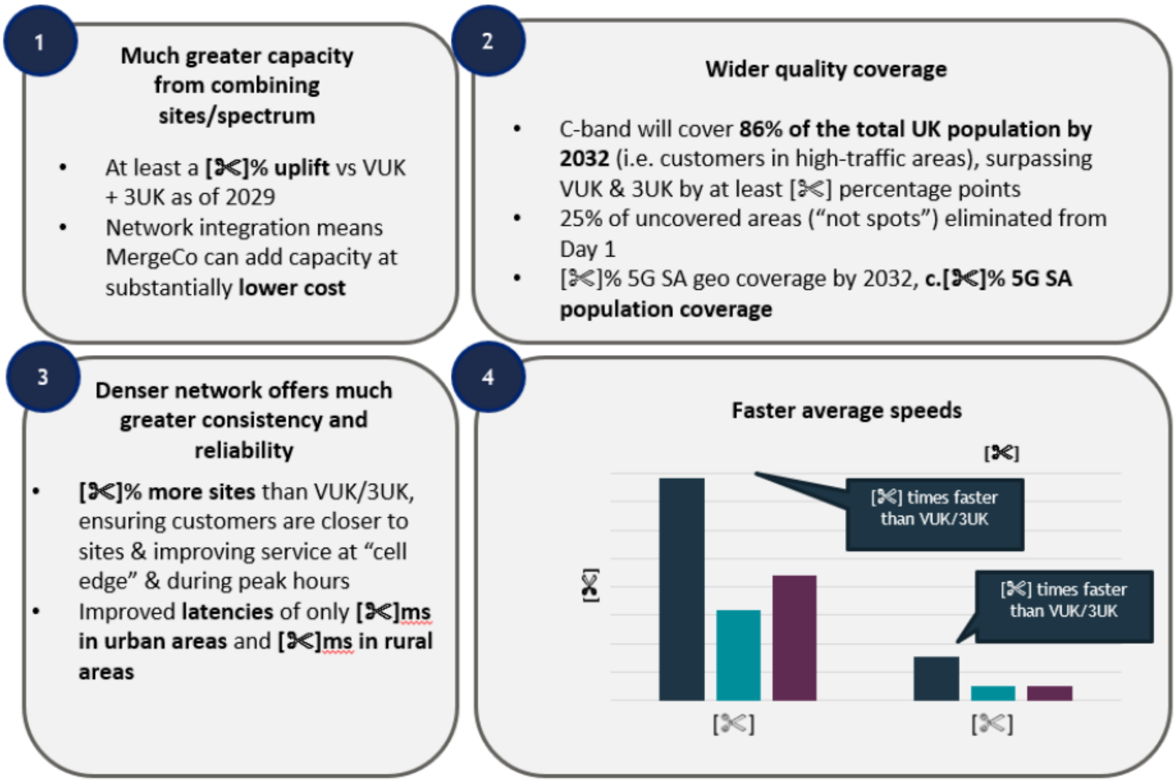
(b) The quality efficiencies will benefit customers directly.

(c) The step change in network quality is verifiable.

14.12 In particular, the Parties submitted that under the JBP the Merged Entity would deliver a denser network ([✂]% more sites than each of VUK and 3UK), resulting in greater consistency and reliability, reduced latency, significantly reduced congestion (up to [✂]% reduction on the Merged Entity's sites in the first year), and faster average speeds (two to five times faster than VUK and 3UK by 2032).[1847]

[1842] See Chapters 8 and 9.
[1843] CMA129, paragraph 8.4.
[1844] Parties' initial submission, 1 May 2024, paragraph 1.17.
[1845] That is, within 12 months post-Merger completion.
[1846] Parties' initial submission, 1 May 2024, paragraph 6.3(i).
[1847] Parties, efficiencies meeting slides.

Figure 14.1: Projected improvement in quality parameters



Source: Phase 1 decision meeting slides.

14.13 The Parties also submitted that the JBP leads to a progressive increase in capacity compared to the counterfactual, with beneficial effects for quality parameters such as congestion and speed. In particular, the Parties submitted that the Merged Entity would benefit from a 'transformational' capacity uplift of at least [✂]% compared to the standalone networks by [✂]. They claimed that this means that the Merged Entity 'will face a very low incremental cost of adding additional customers to its base, which in turn will incentivise [it] to compete aggressively to fill that capacity.'[1848]

[1848] Parties' initial submission, 1 May 2024, paragraph 6.11.

Table 14.1: Forecasts of Standalone and the Merged Entity network capacity in 2029

	C-band deployed	*Other*	*Total*
#Sites			
3UK	[✂]	[✂]	[✂]
VUK	[✂]	[✂]	[✂]
Merged Entity	[✂]	[✂]	[✂]
Capacity units per site			
3UK	[✂]	[✂]	
VUK	[✂]	[✂]	
Merged Entity	[✂]	[✂]	
Total capacity units			
3UK	[✂]	[✂]	[✂]
VUK	[✂]	[✂]	[✂]
Merged Entity	[✂]	[✂]	[✂]

Source: Parties response to the CMA's Capacity Uplift Query.

14.14 The Parties submitted that the rollout of high capacity 5G C-band in particular will ensure high quality and fast connectivity.[1849]

Figure 14.2: C-Band indoor population coverage of top 20 cities – 2032

[✂]

Source: Parties' Submission: Impact of the Transaction on customer experience.

14.15 The Parties submitted these changes would transform mobile connectivity and daily customer experience, because (they submitted) today's unreliable networks and congestion means customers cannot access basic web services and applications and frustratingly slow speeds are unable to keep up with customers' online activities.[1850]

[1849] Parties' RCBs Meeting Presentation.
[1850] Parties' RCBs meeting slides.

Figure 14.3: Indicative impact on customer experience at 1 Mbps, 2 Mbps and 5 Mbps

Speed	Browsing / web content	Video streaming	Video conferencing	File download (6 GByte)	Gaming
< 1 Mbps	Struggle to access basic web services/ applications e.g. online banking, reading the news, parking apps, etc.	Low resolution, some buffering	Not possible	c. 800 mins for HD movie	Not possible
< 2 Mbps	Poor browsing experience, with standard web pages taking several seconds to load Insufficient for media-rich social media content (Instagram, TikTok, Facebook, etc.)	Low resolution		c. 400 mins for HD movie	
< 5 Mbps	Heavy webpages slow to load (> 9 seconds)	Basic (720p) HD video possible at > 3 Mbps but susceptible to buffering	Susceptible to buffering/ stalling, particularly as more users join	c. 160 mins for HD movie	Unreliable / inconsistent experience

Source: Parties' Submission: Impact of the Transaction on customer experience.

14.16 The Parties also submitted that the Merged Entity's best-in-class network will incentivise rivals, in particular BTEE and VMO2, to compete more effectively, and told us that:

(a) The Merged Entity's best-in-class network will bring better quality offers and additional capacity into the market:

(i) the Merged Entity's capacity uplift will incentivise it to price aggressively; and

(ii) the Merged Entity's capacity increase will not be short-lived.

(b) The Merged Entity's best-in-class network will substantially increase competitive rivalry:

(i) the Merger efficiencies will have a pro-competitive effect on rivals' price responses; and

(ii) the Merger efficiencies will have a pro-competitive effect on rivals' incentives to invest.[1851]

14.17 In support of these points, and as noted above, the Parties submitted that the Merged Entity will have a strong incentive to roll out a best-in-class network.[1852] In

[1851] Parties' initial submission, 1 May 2024, paragraph 6.3(ii).
[1852] Parties' initial submission, 1 May 2024, paragraph 6.3(iii).

support of these points, the Parties also submitted two merger simulations, which we consider in Appendix F.

14.18 The Parties also submitted that the implementation of Beacon 4.1 would lead to an increase in the quality of VMO2's mobile network and therefore competitiveness. This is because VUK's sale of spectrum would enable VMO2 to increase its capacity and performance; [✂].[1853]

14.19 The Parties further submitted that the rivalry-enhancing efficiencies are specific to the Merger and cannot be delivered by other alternatives to the Merger.[1854]

Our approach

General considerations relevant to our assessment

14.20 The CMA assesses whether claimed efficiencies are to be realised (and the resultant rivalry-enhancing effects felt) within the same timeframe as the CMA has adopted in the rest of its analysis.[1855] However, usually the longer the time period necessary for efficiencies to be realised, the greater will be the level of doubt that efficiencies will be realised at all.[1856]

14.21 We consider that assessing the Parties' efficiency claims requires us to deal with a considerable amount of uncertainty, given the long time period over which it is claimed some of them will be realised, the scale of each Party's current operations (which would need to be integrated), the extent of the claimed additional investment and the potential uncertainty as to how competitors and customers would respond.[1857] The Parties submitted that we had mischaracterised or overstated the specific areas of uncertainty and that they had demonstrated that the Merger would generate substantial efficiencies, reflecting the underlying technological and economic realities and the Parties' incentives.[1858] We address these points in the remainder of this chapter.

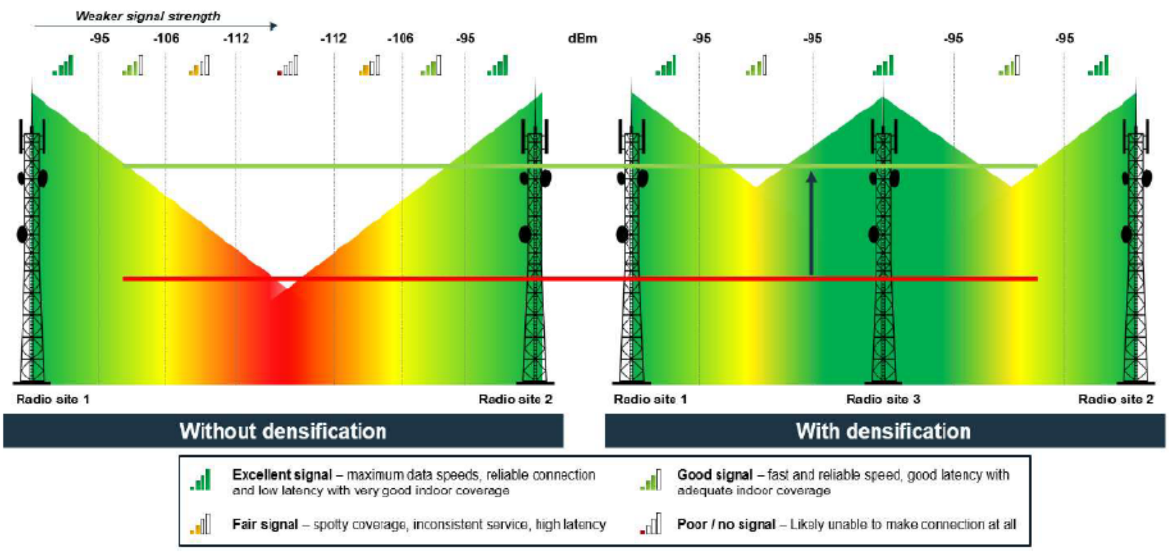
14.22 We also recognise that investment in mobile networks requires a long-term perspective, particularly with regard to the proposed integration of two of the four mobile networks in the UK, as is the case here. We have therefore sought to balance these considerations.

14.23 We note that in principle there are underlying economic reasons why a merger of MNO networks may lead to rivalry-enhancing efficiencies. These relate in the first instance to the Merged Entity having more sites and more spectrum than the

[1853] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[1854] Parties' initial submission, 1 May 2024, paragraph 6.3(iv).
[1855] CMA129, paragraph 8.12.
[1856] CMA129, paragraph 8.12.
[1857] CMA, Issues Statement, 2 May 2024, paragraph 48.
[1858] Annex 3 to the Parties' response to the AIS and working papers.

networks of each Party, enabling the merged network in principle to achieve better coverage and deploy greater capacity than either of the Parties' networks could do individually (other things remaining equal). An improvement in coverage represents a quality improvement while an increase in capacity can facilitate other quality improvements, such as reducing congestion and increasing download and upload speeds. In light of evidence that network quality factors are competitive variables in the mobile industry, albeit less important than price,[1859] such quality improvements may make the Merged Entity a stronger rival and result in a competitive response, and therefore represent rivalry-enhancing efficiencies.

Figure 14.4: Benefits of site densification for customer experience

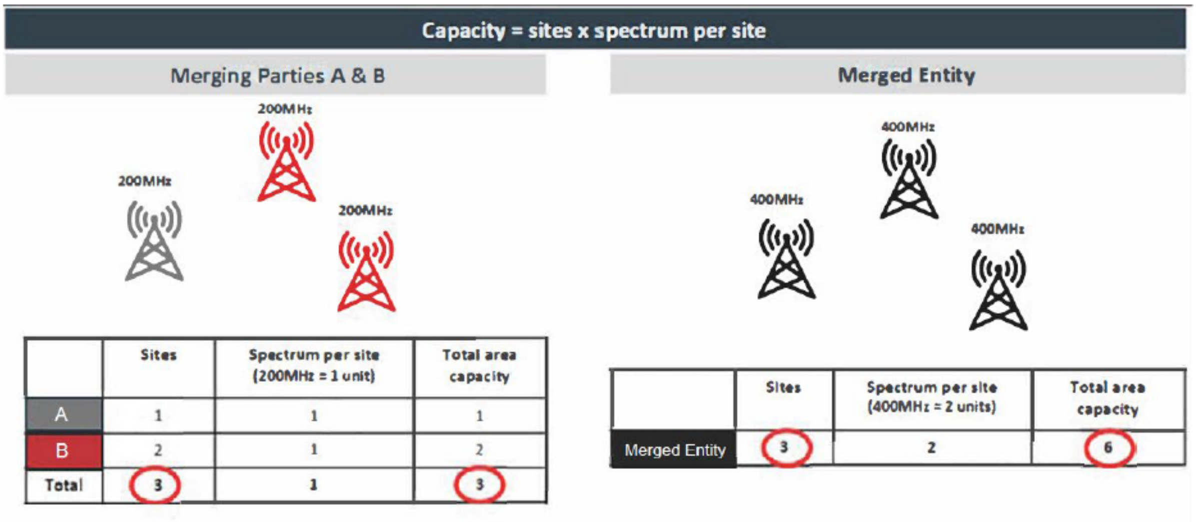


Source: Parties RCBs meeting slides.

14.24 Figure 14.5 is an illustrative example provided by the Parties of how a merger of networks can increase capacity. This sets out the 'multiplicative' effect of increasing both site numbers and spectrum per site on overall network capacity compared to the sum of two standalone networks.[1860] We note that this illustration does not allow for factors that would reduce the size of the effect, such as site rationalisation and a spectrum transfer conditional on such a merger (such as that provided for under the Beacon 4.1 agreement).

[1859] See analysis of competitive parameters in Chapter 8 on horizontal unilateral effects in the supply of retail mobile services in the UK.
[1860] FMN.

Figure 14.5: Illustrative example: capacity increase from a merger

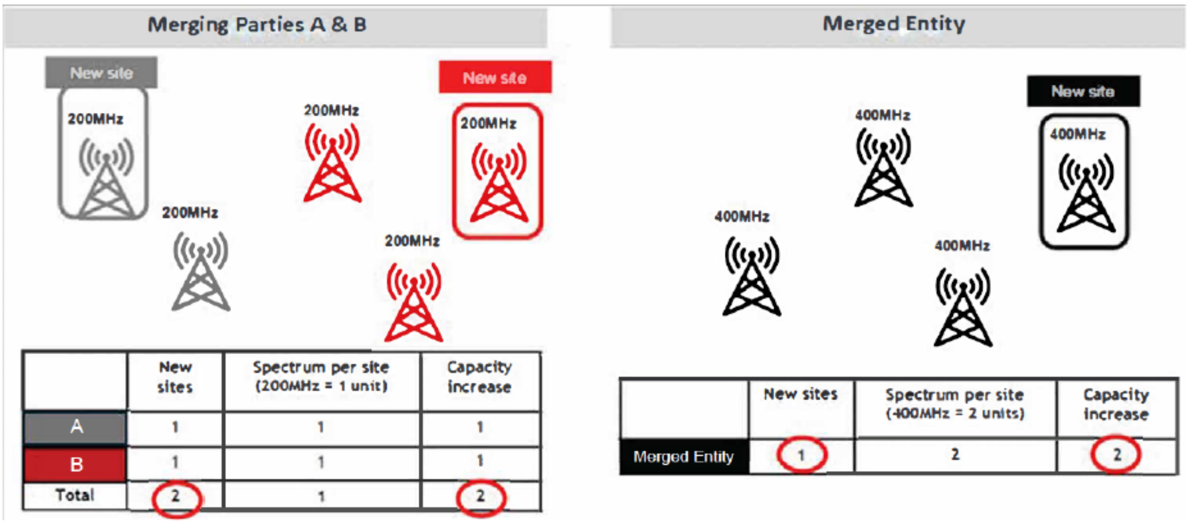


Source: CMA based on Parties' illustration at FMN.

14.25 In the longer term, the unit cost of expanding capacity (for example through adding more sites or new technology) may also be reduced as the Merged Entity can deploy more spectrum on its network than the Parties are able to deploy on each of the standalone networks in the counterfactual. Given that mobile operators need to increase capacity to meet growing demand, this reduction in unit cost of capacity may represent a reduction in long-term incremental cost which could potentially give the Merged Entity (all else being equal) an incentive to provide a better quality of service and/or lower prices, for example in the wholesale market (compared to a scenario where there is no reduction in unit cost of capacity).

14.26 Figure 14.6 is an illustrative example provided by the Parties of how a merger of networks can also reduce the unit cost of expanding capacity by adding new sites (in the absence of the merger, investment, for example in antennas, masts and backhaul lines, in the standalone networks is needed at two sites; whereas to achieve a similar increase in capacity, investment in the merged network is only needed at one site given the greater amount of spectrum that can be deployed at the site). We note that this illustration does not allow for any spectrum transfer conditional on such a merger (such as that provided for under the Beacon 4.1 agreement), which would reduce the size of the effect.

Figure 14.6: Illustrative example of lower incremental cost of expanding capacity following a merger



Source: CMA based on Parties' illustration at FMN.

14.27 These effects could in principle enhance rivalry in the supply of retail mobile telecommunications services and wholesale mobile telecommunications services (compared to the situation in the absence of such effects) as we consider below at paragraph 14.172 to paragraph 14.176. However, they need to be supported by evidence that they satisfy the requirements set out above (see paragraph 14.2), ie that they are likely to be realised, timely and large enough to offset any loss of competition due to the Merger, are merger-specific and such that customers in the UK will benefit.

The Parties' plans

14.28 The Parties rely on the JBP, which incorporates the JNP, to support their claims about how the Merged Entity would act and therefore of the timeliness, likelihood and sufficiency of the claimed rivalry-enhancing efficiencies.

14.29 The Parties' plans include the following:

(a) The Parties intend by Day 1 (ie within 12 months post-Merger completion) to use Multi-Operator Core Network (**MOCN**) to provide 3UK's customers with access to VUK's network and vice versa, as soon as possible, in areas with limited interference between their existing networks, and where there is sufficient network capacity to serve both customer sets. The Parties estimate that this will eliminate 25% of 'not-spots' (ie the areas of each of VUK's and 3UK's networks that do not currently have coverage), with 4G national geographic coverage increasing from 88% to 91%,[1861] and also reduce congestion.[1862]

(b) Additionally, in the short term, spectrum sharing from Day 1 would allow specific VUK spectrum (in particular, in the 1800 MHz band) to be deployed on 3UK sites. The Parties submit this will lead to a significant reduction in congestion and improved performance on 3UK's 4G network, benefitting at least 7 million customers.[1863]

(c) Most importantly, the JBP is a plan for integrating the VUK and 3UK networks over the period up to FY34. Key features of the JBP are:

(i) [✂] combined sites from VUK and 3UK would be integrated to form a larger denser network with significantly more sites (by comparison each of 3UK and VUK have around [✂] sites currently);[1864]

(ii) high band (as well as medium and low band) spectrum would be deployed [✂] in high traffic areas, increasing capacity relative to the counterfactual;[1865] and

(iii) the revised network sharing agreement with VMO2 (Beacon 4.1) [✂].[1866] As part of this agreement, [✂]. Additionally, as part of the associated Spectrum Transfer Agreement, [✂] of spectrum would also be transferred to VMO2.[1867]

Our approach to assessing the Parties' plans

14.30 Most of the information relating to the synergies and cost reductions resulting from a merger is held by the merger firms.[1868] In the present case, we recognise the detailed modelling that has been undertaken by the Parties in preparing the JBP and JNP. We have considered these plans, and the assumptions on which they

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[1861] FMN. The 88% figure reflects VUK's and 3UK's separate networks in 2025 and the 91% figure reflects the 4G coverage available to all subscribers of the Merged Entity in 2025. CK Hutchison response to the CMA's s109 notice.
[1862] Parties' submission, Further evidence on network efficiencies and associated customer benefits enabled by the Transaction suggest that in the first year the MOCN decreases the number of congested sites by 15% and the number of subscribers in congested areas by five percentage points.
[1863] FMN; and Parties' submission, Further evidence on network efficiencies and associated customer benefits enabled by the Transaction suggest that in the first year 1800MHz spectrum sharing decreases the number of congested sites by 19% and the number of subscribers in congested areas by two percentage points.
[1864] FMN.
[1865] FMN.
[1866] FMN. Network sharing between Vodafone and VMO2 operates outside of the main cities. Currently, there are about [✂] Vodafone sites in the west of Great Britain shared with VMO2 and [✂] VMO2 sites in the east of Great Britain, Scotland and Northern Ireland shared with Vodafone. Vodafone and VMO2 operate their network separately in the main cities (representing about 32.5% of the UK population), with about [✂] 'unwind' sites in these cities: FMN. The Parties' plans envisage including about [✂] sites in the Merged Entity's integrated network of which about [✂] would be included in the Beacon grid and shared with VMO2 and the remainder in the main cities, which would not be shared with VMO2: Annex 3 to Parties' submission.
[1867] Parties' Beacon 4.1 CMA briefing.
[1868] CMA129, paragraph 8.7.

are based, as part of our assessment of the ability and incentive of the Merged Entity to deliver rivalry-enhancing efficiencies.

14.31 We have also considered other relevant evidence, including seeking technical input on the Parties' claimed post-Merger plans from Ofcom, the Parties' internal documents, information from the other MNOs (particularly VMO2) and the results of the CMA surveys to understand the potential impact of the JBP on competition.

14.32 In the next sections, we consider the following:

(a) The process underlying the development of the JBP and the Parties' projections for the rivalry-enhancing efficiencies that they claim will result from it (if fully implemented), including:

(i) A summary of our views on the likely network capacity and congestion of the Parties' networks on a standalone basis;

(ii) The potential quality rivalry-enhancing efficiencies which the Parties claim will result; and

(iii) The Parties' estimates of a claimed reduction in the incremental cost of capacity and its potential impact, particularly on price.

(b) The Parties' ability to deliver the JBP;

(c) Whether the Parties have any obligation to implement the JBP and whether they have the ability to amend it post-Merger;

(d) The Parties' incentive to deliver the JBP;

(e) The impact of the Merger on VMO2 through Beacon 4.1;

(f) Merger-specificity; and

(g) Our findings on likelihood, timeliness, and sufficiency including whether we consider the claimed rivalry-enhancing efficiencies are rivalry-enhancing and benefit customers in the UK.

Parties' plans and projections

Introduction

14.33 As part of our assessment of the Parties' rivalry-enhancing efficiencies we have considered the Parties' plans and projections (standalone and for the JBP) which underpin their claims regarding efficiencies. These include projections relating to standalone capacity and congestion as well as network quality KPIs for the Merged Entity. We set out below the process underlying the development of the

JBP, and our analysis of the claimed benefits of the JBP (both the 'Day 1' benefits and the longer-term benefits) relative to the counterfactual.

14.34 This section assumes the JBP is implemented in full. We then consider the likelihood of full implementation in subsequent sections.

Process underlying the development of the JBP

14.35 We summarise below the process underlying the development of the JBP.[1869]

14.36 VUK and 3UK put forward their [✂].

14.37 A firm of independent consultants, AS, reviewed [✂]. The AS adjustments [✂].[1870]

14.38 AS also [✂]. This was based on [✂]. The [✂] was agreed with the Parties.

14.39 Based on five key principles set out by the Parties (see Figure 14.7), and working with the Parties, AS developed the JNP and JBP for the Merged Entity. These were also agreed with the Parties and included the following key aspects:

Figure 14.7: Key principles underlying development of JNP and JBP

[✂]

Source: Altman Solon call slides.

14.40 The JBP sets out the development of the network up to FY34. This includes the early implementation of MOCN and spectrum sharing and the subsequent development of the integrated network. AS, working with the Parties, determined the integrated network on the basis that [✂].[1871] On this basis, inter-site distances implied a FY32 integrated network with [✂] sites. This is around [✂] more sites than each of VUK and 3UK currently have. The bulk of the integration is planned to be carried out over [✂], see Figure 14.8.

14.41 Of the [✂] sites in the integrated network, about [✂] are VUK sites and [✂] 3UK sites. Of these [✂] 3UK sites, about [✂] are in the Unwind areas (where Vodafone does not share RAN equipment with VMO2) and about [✂] are in MORAN areas (where Vodafone shares RAN equipment with VMO2). Of these [✂], about [✂] are outside MBNL or are MSP (third party operated) and about [✂] are non-MSP.[1872]

14.42 [✂].[1873]

[1869] CK Hutchison internal document; and FMN. [✂].
[1870] CK Hutchison internal document.
[1871] Vodafone internal document.
[1872] FMN.
[1873] Vodafone internal document.

14.43 However, we understand that in practice, if Beacon 4.1 is implemented, [✂].[1874] Regarding BTEE consent, we note that: (a) [✂];[1875] and (b) as part of the Spectrum Transfer Agreement, the Beacon parties have proposed [✂] which would [✂].[1876] With regard to [✂].[1877] We consider that MSPs are likely to be incentivised to grant VMO2 site permissions in order to increase their revenue.

Figure 14.8: Development of the Merged Entity's network in the JBP

[✂]

Source: Parties' teach-in slides.
Note: Figure 14.8 is not in the JBP provided to the CMA, but the CMA understands it reflects the JBP.

14.44 AS – in conjunction with the Parties – also created a combined forecast for the Merged Entity up to FY34 (the JBP).[1878] This reflected the costs of integrating the two businesses and:

(a) the [✂], for example due to [✂];

(b) [✂], including [✂]; and

(c) [✂].

14.45 AS considered synergies within the following four categories: commercial (including revenue synergies and cost synergies in the retail and wholesale businesses), network, organisation and IT. The largest synergies were in the [✂].

14.46 The Parties told us that the final JBP was in an AS document dated [✂],[1879] [✂]. Subsequently, the Parties carried out further work to develop the post-Merger plans and submitted further modelling during the course of our inquiry.

14.47 In particular, the Parties submitted comparisons of the quality parameters that they submitted the Merged Entity would achieve with those that would be achieved by VUK and 3UK in the counterfactual; and a comparison of the JBP with the SBS which the Parties submitted showed that the Merged Entity had the incentive to deliver the JBP:

(a) The Parties' quality comparisons showed much lower congestion,[1880] and a variety of other benefits including increased coverage, greater consistency

[1874] Parties' Beacon 4.1 CMA briefing.
[1875] Vodafone response to the CMA's RFI.
[1876] Parties' Beacon 4.1 CMA briefing.
[1877] Parties' Beacon 4.1 CMA briefing; Parties' response to the CMA's RFI; Vodafone response to the CMA's s109 notice; and [✂].
[1878] CK Hutchison internal document.
[1879] CK Hutchison internal document.
[1880] Parties' submission, The pro-competitive effects of the Vodafone/Three merger. The Parties' projections show the percentage of sites congested at 5Mbps declining significantly from over [✂]% in FY24 ([✂]% VUK, [✂]% 3UK) to below 5% in FY30-FY34 for the Merged Entity with no comparable decline in the counterfactual.

and reliability, lower latency and faster average speeds, see Figure 14.1, compared to the counterfactual.

(b) The comparison with the SBS is considered below.

Standalone capacity and congestion projections for VUK and 3UK

14.48 Network capacity is essential to providing a good service to mobile customers. Congestion is caused when demand exceeds the available capacity, and is often experienced in terms of reduced bandwidth available to each customer trying to use the network at the same time.[1881]

14.49 Operators seek to meet demand by deploying a sufficiently dense network of sites, and ensuring there is sufficient equipment (eg high-capacity mMIMO antennae) and spectrum deployed at each site.[1882] In recent years, all MNOs have invested heavily in their networks to meet rapid growth in mobile traffic as customers use more data-intensive applications such as video calling. However, growth in demand appears to have slowed in the past two years.[1883] MNOs have also been investing in 5G deployment since 2019.[1884]

14.50 The Parties submitted that in the counterfactual both standalone networks would face congestion, which would limit their ability to compete.[1885] In particular, one of the Parties' core claims about the rivalry-enhancing efficiencies arising from the Merger is, as set out above, that there will be capacity uplift relative to their standalone networks that will be 'transformational'.[1886]

14.51 We consider in more detail the likely extent of standalone congestion on the Parties' networks in Appendix G, but summarise key parts of our analysis relevant to our assessment of potential rivalry-enhancing efficiencies resulting from the Merger here.

3UK

14.52 The Parties described 3UK as a '[✂]' which '[o]ver more than two decades' has developed a reputation for poor network quality due to [✂] resulting in high customer churn. The Parties submitted that, without the ability to sustain sufficient network investment, [✂].[1887]

1881 Ofcom, response to the CMA's 19 April 2024 letter.
1882 See Appendix G.
1883 Ofcom, response to the CMA's 19 April 2024 letter referring to Ofcom's Connected nations UK report 2023, 19 December 2023, page 35 and Vodafone results, published May 2024, accessed by the CMA on 14 June 2024
1884 See Appendix G.
1885 See Appendix G, Congestion on the Parties' Standalone Networks.
1886 Parties' initial submission, 1 May 2024, paragraph 6.11.
1887 Parties' initial submission, 1 May 2024, paragraphs 2.10-2.11.

14.53 The Parties said that congestion currently affects [✂] of 3UK's sites, with this figure expected to [✂].[1888] However, we note that sites are made up of a number of 'cells'[1889] only some of which may be congested, but which may lead to the overall site being classified as congested.[1890] In our view, considering sector-specific and spectrum band-specific congestion together allows a fuller assessment of the extent of congestion for the reasons set out in Appendix G.

14.54 Our analysis indicates that while [✂]% of 3UK sites are affected by congestion, this is lower at the cell level, with only [✂]% of 3UK's network congested at the cell level. However, we recognise the Parties' claim that the number of customers affected by this congestion may be much higher than the absolute cell level percentage, given that more customers and more traffic are in the busiest areas (and therefore rely disproportionately on certain cells).[1891] As set out in more detail in Appendix G, we consider that congestion appears more acute for traffic relying on [✂] and [✂]. 3UK does not expect to experience significant congestion on C-band spectrum [✂],[1892] where this is deployed.

14.55 3UK scaled back its network investment plans after it entered into merger discussions with VUK.[1893] However, it has continued to roll out its 5G network, and is making progress on a '4G Congestion Reduction Programme'. According to 3UK's own standalone projections, it expects [✂].[1894] 3UK currently has [✂]% C-band 5G population coverage[1895]and forecasts achieving 5G C-band population coverage on a standalone basis of [✂]% by 2032.[1896]

14.56 While we recognise that third party metrics only provide partial indications of quality, 3UK's network appears to be performing strongly overall relative to the other MNOs across a range of different metrics. For example, Ofcom metrics show 3UK performing well on 4G and 5G coverage, while RootMetrics found that 3UK had the second-best network after BTEE on most measures in 2024, and was a close second to BTEE for the best 5G network.[1897] Survey evidence in internal documents on reasons for leaving 3UK also indicate that the incidence of ex-customers saying they left for network-related reasons [✂] from 2021 to 2022, suggesting that 3UK's increased capex spend from 2020 to 2022 has had a [✂] effect on customer experience.[1898]

1888 See Appendix G.
1889 'Cells' here refer to different geographic areas around the site, in which different site antennas and spectrum bands may be used to send and receive mobile signals between the site and users' handsets. See Appendix G.
1890 See Appendix G.
1891 Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.7(ii)
1892 CMA, Provisional Findings Report Appendices, 13 September 2024, paragraph G.137(b). Annex 4 to the Parties' response to the AIS and working papers.
1893 CK Hutchison internal document.
1894 See Appendix G.
1895 Parties' submission, Relevant customer benefits.
1896 FMN.
1897 See Appendix G.
1898 See Appendix G.

14.57 However, as discussed at Appendix C and Chapter 8, we have also found evidence from 3UK's internal documents that it [✂], and it has been [✂], partly exacerbated by (and expected following) [✂].[1899]

14.58 In respect of capital investment, we have found that this has been influenced by a number of factors, including (i) a group-wide aim [✂], and (ii) [✂].[1900] However, we also recognise that – as a result of 3UK's relative size and therefore lower revenue relative to other players (as discussed by Ofcom (below) and as shown in Chapter 8), it has lower revenues which can fund additional investment to significantly alter its performance. We also found evidence that 3UK has been generating negative cashflows for some time, [✂], and it has required [✂].[1901] While we consider that its shareholder is likely to be incentivised to support 3UK – including by way of investment – to protect the value of its shareholding, 3UK's financial performance over a significant period (while showing recent material revenue growth) may influence the attractiveness of additional investment to materially change its network performance profile (for example, to match that envisaged under the JBP).

14.59 We have also found that third party documents recognise 3UK's challenges of relative size and scale,[1902] and some suggest an expectation that its investment activity and momentum may be limited by this (and its capex constraints). As also set out at in Appendix C:

(a) [✂].[1903]

(b) [✂].[1904]

14.60 Since publication of our Provisional Findings, Ofcom submitted that while it recognises that 3UK has shown itself to be innovative in finding ways to generate additional revenues, it considers that this may not be long lived (as a result of competitors' response and a continued 'scarcity' of capex),[1905] and it considers that this would likely impact its longer term investment decisions.[1906] Ofcom confirmed its view to us that – in the context of MNOs' current relative financial performance – it considers 3UK to be subject to greater capital constraints than VUK and may face a continued 'scarcity' of capex (funding).[1907]

14.61 Overall, we consider that 3UK has made significant progress in addressing congestion and is performing strongly overall on third party metrics. We also find

[1899] See Appendix C.
[1900] See Appendix C.
[1901] See Appendix C.
[1902] See Appendix C.
[1903] See Appendix C.
[1904] See Appendix C.
[1905] Ofcom, response to the CMA's 1 October 2024 letter.
[1906] Ofcom, response to the CMA's 1 October 2024 letter.
[1907] Ofcom, response to the CMA's 1 October 2024 letter.

(see Chapter 8) that 3UK has seen recent revenue growth, particularly in more recently established business lines. This could – over time – allow for further funding of network investment, and we consider that, in any case, CK Hutchison would likely be incentivised to support 3UK to protect the value of its shareholding. As set out elsewhere in this report, this means that – absent the Merger – we consider that 3UK would likely continue to compete actively and provide competitive constraint, including by making network investments, broadly as it does today.

VUK

14.62 The Parties submitted that a standalone VUK would 'likely [✂] its current strategy of targeted 5G SA rollout limited to certain urban areas. They submitted that over time this will allow [✂], reducing VUK's strength as a competitor in the retail and wholesale markets.[1908] [✂] VUK forecasts 'a significant increase in congestion peaking at [✂]% of its sites in [✂]'.[1909]

14.63 We note that Ofcom does not consider that VUK is subject to capital constraints to the same extent as 3UK.[1910] VUK's congestion levels currently appear to affect around [✂]% of cells on its network, across [✂]% of sites. However, we again recognise the Parties' claim that the amount of customers affected by this congestion may be much higher than the pure cell level percentage, given that more customers and more traffic are in the busiest areas (and therefore rely disproportionately on certain cells).[1911]

14.64 As with 3UK, [✂].[1912] While modelling for the Parties suggests that congestion could increase over the coming years, this result is sensitive to modelling assumptions,[1913] and we have not seen any evidence from internal documents that VUK is [✂] congestion. Internal documents indicate that [✂].[1914] It has been planning [✂].[1915]

14.65 On third party metrics, we note that RootMetrics results suggest that VUK has recently been overtaken by 3UK as the second-best UK network.[1916]

14.66 Overall, we consider that VUK appears to have recently improved its congestion levels, and in internal documents [✂]. We have not seen any evidence from internal documents that it is [✂] congestion, as indicated in the Parties' modelling

[1908] Parties' initial submission, 1 May 2024, paragraph 2.33.
[1909] Parties' initial submission, 1 May 2024, paragraph 2.37(ii).
[1910] Ofcom, response to the CMA's 1 October 2024 letter.
[1911] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.7(ii)
[1912] See Appendix G, paragraphs G.75-G.76 and Table G.4.
[1913] See Appendix G, paragraph G.73 and Figure G.17.
[1914] See Appendix G, paragraphs G.79-G.83.
[1915] See Appendix G, paragraphs G.92-G.94.
[1916] See Appendix G, paragraphs G.98-1.100 and Figure G.19.

in support of the Merger. With respect to network investment, we observe plans of VUK to continue to improve its network performance (see Chapter 8).

Potential quality rivalry-enhancing efficiencies from the Merger

14.67 As noted above, the Parties submitted that (if fully implemented) the JBP will create a much higher quality network than either Party's standalone network that will achieve increased coverage, greater consistency and reliability, lower latency and faster average speeds, making the Merged Entity a stronger rival. In order to assess the extent of any network quality improvements likely to result from the full implementation of the JBP, and in line with our guidance in relation to merger investigations involving regulated sectors, we have engaged closely with Ofcom, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views, we have ultimately reached our own conclusions on each of the relevant questions.

14.68 In this section we summarise our assessment of these claims in relation to network quality, distinguishing between what the Parties call the 'Day 1' benefits and longer-term benefits as the networks are integrated. In the next section, we consider the potential impact on price that the Parties claim would result from the Merged Entity having a lower incremental cost of capacity than the standalone networks.

'Day 1' benefits

14.69 As set out above, there are two main elements to the claimed 'Day 1' benefits. The first is MOCN, which would allow the Parties' customers to access the other Party's 5G C-band coverage in areas where the other Party does not have C-band coverage. The second is spectrum sharing, which would allow 3UK customers to gain access to VUK's 1800MHz spectrum, which is currently underutilised.

MOCN

14.70 The Parties submitted that MOCN would increase coverage by removing 25% of not-spots (see Figure 14.1). We note that the Parties' standalone networks currently cover 81% (3UK) and 84% (VUK) of the UK's geography. However, their coverage of UK premises is considerably higher ([✂]% each for outdoor premises). MNOs are also currently increasing mobile coverage through the Shared Rural Network (**SRN**) scheme, which aims to increase 4G mobile geographic coverage.[1917] The Parties submitted that '[r]eciprocal access to each other's sites will […] deliver over 95% 4G geographic coverage by 2027, exceeding the Government's SRN target of 90%, for each mobile network'.[1918]

[1917] See About - Shared Rural Network, accessed by the CMA on 20 June 2024.
[1918] FMN.

While we therefore understand that MOCN would lead to some increase in geographic coverage, given the existing and future projected coverage of the Parties' standalone networks, this is likely to be in areas where there is limited use of mobile connectivity.

14.71 However, even if the impact of MOCN on overall coverage is limited, Ofcom told us that it would have a significant impact in reducing patchiness and therefore improve the quality of coverage.[1919] This is because even if both Parties technically have coverage in one area, obstacles or distance to the site may mean that the signal offered by one Party is less reliable compared with the combined standalone networks (see further discussion of the impact of site density below).

14.72 We also consider that the use of MOCN would alleviate congestion in some areas where VUK is congested and 3UK is not and vice versa. However, we also note that the benefits of MOCN will reduce over time as the combined grid is rationalised.

Spectrum sharing

14.73 In relation to the second 'Day 1' benefit (spectrum sharing), Ofcom told us that the addition of VUK's 1800MHz spectrum to 3UK's sites could play a significant role in alleviating congestion on 4G experienced by 3UK's customers.[1920] We understand this additional spectrum could help to alleviate 4G congestion in areas where 3UK is currently experiencing mid-band congestion, given the extent of traffic that 3UK carries on this band and the extent of unutilised 1800MHz spectrum that VUK holds. However, we understand that it would not address congestion in low-band spectrum (which we discuss further in Appendix G).

Longer-term benefits from network integration

14.74 Next, we consider the impact of network integration envisaged under the JBP over the longer term. As noted above, in order to assess the extent of any network quality improvements likely to result from the full implementation of the JBP, and in line with our guidance in relation to merger investigations involving regulated sectors, we have engaged closely with Ofcom, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views, we have ultimately reached our own conclusions on each of the relevant questions.

14.75 We asked Ofcom for its view on the overall impact that the Merger would have on the Parties' network quality (assuming delivery of the full JBP). Ofcom told us that the integration of the standalone networks envisaged in the JBP is a unique opportunity to deliver a significant improvement in the quality of the Parties'

[1919] Ofcom's response to the CMA's email of 5 September 2024.
[1920] Ofcom, response to the CMA's 19 April 2024 letter.

networks which is otherwise unlikely to be delivered by the market and is unlikely to be delivered subsequently if sites were decommissioned in the short term beyond the quantities envisaged in the JBP.[1921] Ofcom told us that the three (primary) areas of quality improvement would be from greater coverage reliability, reduced congestion and greater availability of C-band spectrum coverage,[1922] but that the improvements in coverage reliability were likely to be more valuable to customers than the increase in speeds and reduction in congestion. Cumulatively, Ofcom said these benefits would be significant for customers.

14.76 Ofcom explained that densification (over the longer term) would improve coverage reliability on the Merged Entity's networks. This densification, alongside the deployment of spectrum, would (also) provide a significant increase in capacity, and in combination with the Merged Entity's lower incremental cost of capacity would therefore result in lower levels of network congestion. Densification alongside widespread deployment of C-band in urban areas would (also) provide a broad footprint of C-band coverage that would enable high bandwidth applications.[1923]

14.77 With regards to network coverage, Ofcom observed different benefits of densification (through reduced patchiness of coverage and increased reliability of coverage) likely to materialise across each of low and medium traffic areas, urban areas and indoors. Ofcom also told us that in its view, reliability of coverage is (overall) an important dimension of competition.

14.78 In low and medium traffic areas, Ofcom told us that the densification provided by the JBP would deliver a significant improvement (in coverage quality). Ofcom noted it had undertaken analysis of the inter-site distances of the sites the Parties intend to retain and decommission, which suggests that a large proportion of the sites to be decommissioned in low and mid traffic areas provide little or no unique coverage, whereas the large majority of the retained (3UK) sites provide some unique coverage. Ofcom noted that it is (therefore) likely that in these areas, all other things being equal, the greater the additional unique coverage a site provides, the greater the value it provides to customers and to the Parties. Ofcom submitted that it is reasonable to believe that customers in these areas (and to some extent all customers) would value the improved network quality, and that these improvements in reliability not only increase the proportion of attempts to use mobile that will be successful, but may also unlock latent demand from those who choose to not attempt to use mobile in areas where it is (currently) unreliable.[1924]

[1921] Ofcom, response to the CMA's 23 July 2024 letter.
[1922] Ofcom, response to the CMA's 1 October 2024 letter.
[1923] Ofcom, response to the CMA's 1 October 2024 letter.
[1924] Ofcom, response to the CMA's 1 October 2024 letter.

14.79 In urban areas and indoors, Ofcom told us that under the JBP the densification in urban areas along with the deployment of C-band spectrum on these sites will provide a contiguous outdoors coverage layer in many cases and better indoor coverage with the high-capacity high-bandwidth and low-latency capabilities of 5G SA. It noted that absent the densification, coverage with these capabilities would likely be more patchy. Ofcom also noted that, given the limited evidence of customer willingness to pay a premium for services that rely on these 5G SA capabilities it is unlikely that MNOs would invest in densification (envisaged in the JBP) solely to address this potential market opportunity unless and until evidence of demand emerged. However, Ofcom also told us it would expect MNOs to deploy C-band spectrum across many of their sites in urban areas using 5G SA, albeit on less dense site networks than envisaged in the JBP and delivering a more patchy coverage with less in-building coverage.[1925]

14.80 With regards to network capacity, while Ofcom did not express a view on the Parties' [✂]% capacity uplift claim, noting the relativity of this claim against the standalone networks in 2029,[1926] Ofcom observe that analysis of the total spectrum deployed across all sites in 2024 and under the 2032 JBP (based on the latest site information provided to Ofcom by the Parties) provides a first order indication of the relative capacity uplift compared to the sum of capacities of both Parties in rural and urban areas from full implementation of the JBP. Ofcom's analysis indicates a relative uplift in capacity in rural areas of at least [✂] compared with a relative uplift in urban areas of at least [✂].[1927]

14.81 As noted above, Ofcom told us that overall, the densification alongside the deployment of spectrum in line with the JNP will provide a significant increase in capacity, which in combination with the Merged Entity's lower incremental cost of capacity will result in lower levels of congestion.[1928] Ofcom expects that in rural areas this capacity uplift would result in congestion being alleviated to a significant extent, and also noted that its analysis indicates that the JBP has targeted capacity in the most urban parts of the UK where the demand for data is greatest.[1929]

14.82 With regards to network speed, Ofcom told us that the maximum speed that can be provided in a sector is directly a function of the amount of spectrum deployed.[1930] That maximum speed is then shared between customers using the service simultaneously. The speed available to customers is (therefore) a function of the spectrum deployed and the extent to which the available (spectrum)

[1925] Ofcom, response to the CMA's 1 October 2024 letter.
[1926] Ofcom, response to the CMA's 19 April 2024 letter.
[1927] Ofcom, response to the CMA's 1 October 2024 letter. Ofcom notes that the calculation of capacity used here is simply sites x spectrum, so if 10MHz is deployed on 20 sites and 5MHz is deployed on 30 sites, that total capacity is 350 (across 50 sites).
[1928] Ofcom, response to the CMA's 1 October 2024 letter.
[1929] Ofcom, response to the CMA's 1 October 2024 letter.
[1930] Ofcom, response to the CMA's 1 October 2024 letter.

capacity must be shared between users simultaneously;[1931] ie the average / median speed is a function of the spectrum available and the level of congestion.[1932] The JBP envisages a [✂] increase in the spectrum deployed and a reduction in congestion (ie an increase in capacity relative to demand), which, all other things equal, would also lead to fewer customers using the available capacity simultaneously (as the higher speeds means each user is connected to the network for less time for any given task).[1933] This would result in a large increase in the average speed that consumers would experience.[1934] Ofcom also noted that median speeds are (currently) likely to be lower in low traffic areas as only a limited amount of spectrum will be deployed on each sector in these areas.[1935] In that respect, the JBP will deliver a notable improvement in network quality in terms of speed in low traffic / rural areas, as a result of more spectrum being deployed and densification.[1936]

14.83 With regards to network latency, Ofcom told us that the Parties' forecasts of latency suggest that the JBP would deliver latency far better than is achieved by today's networks and at an average that is more than necessary to support most services used today. Ofcom noted however, that it had no way to assess the reliability of the Parties' forecasts of latency.[1937]

14.84 Based on the evidence above, we consider that if fully implemented, the JBP would, in time, lead to significant and long-lasting quality improvements in a way that positively affects customer experience. Although certain network quality attributes promised by the JBP may exceed current user requirements in some cases, we agree with Ofcom's view that the JBP represents a unique opportunity to bring forward the delivery of the higher network quality ahead of evidence of demand,[1938] and consider it is reasonable to expect, based on evidence of increasing customer demands over time, that user expectations of network quality are likely to increase over time.

The Parties' estimates of the incremental cost of capacity

14.85 As part of our assessment of rivalry-enhancing efficiencies, we consider here the Parties' submissions regarding the impact of the Merger on the incremental cost of expanding capacity. We considered both the magnitude of any relevant cost savings and the likelihood that these would be passed on to customers via lower prices.

[1931] Ofcom, response to the CMA's 1 October 2024 letter.
[1932] Ofcom, response to the CMA's 1 October 2024 letter.
[1933] Ofcom, response to the CMA's 1 October 2024 letter.
[1934] Ofcom, response to the CMA's 1 October 2024 letter.
[1935] Ofcom, response to the CMA's 1 October 2024 letter.
[1936] Ofcom, response to the CMA's 1 October 2024 letter.
[1937] Ofcom, response to the CMA's 1 October 2024 letter.
[1938] Ofcom, response to the CMA's 23 July 2024 letter.

14.86 We noted above that a merger of MNO networks enables more spectrum to be deployed at each site, and this may – in principle – increase capacity and reduce the unit cost of expanding capacity (see paragraphs 14.24 to 14.28).

14.87 Whether these cost reductions would be passed on to customers via lower prices or higher quality depends on a range of factors, including – for example – the intensity of competition between MNOs, an operator's anticipation of competitors' responses to price reductions, or an operator's ability to profitably monetise capacity in other ways (for example by offering other services such as FWA).

The Parties' calculations

14.88 The Parties calculated the 'incremental cost of capacity' reduction for VUK and 3UK in the counterfactual by calculating the additional capex and opex that would be needed over a ten-year period (FY25 to FY34) to maintain congestion at a constant level, following a 10% increase in subscribers in FY25, sustained throughout the period, for both of VUK and 3UK. The Parties compared this to the costs to the Merged Entity, which the Parties submitted would be negligible. The resulting cost was expressed as an incremental cost per subscriber-year.[1939]

(a) The results for VUK show that the incremental cost per subscriber-year is £[✂], equivalent to about [✂]% of VUK's retail consumer mobile ARPU in FY25.

(b) The results for 3UK show that the incremental cost per subscriber-year is £[✂], equivalent to about [✂]% of 3UK's retail consumer mobile ARPU in FY25. Though the Parties state that the impact of additional subscribers on congestion levels on the 3UK network is lower than the impact on VUK's network, the incremental cost per subscriber-year is higher, reflecting higher capex only partially offset by lower opex.[1940]

(c) These calculations do not account for the residual value of capex at the end of the period. The Parties subsequently provided estimates of the impact of taking residual capex values into account on incremental cost per subscriber-year. This was [✂] for VUK (£[✂] per subscriber-year or less), based on an assumed asset life of [✂].[1941] For 3UK, it would reduce incremental cost per subscriber year by about £[✂], ie from £[✂] to £[✂] per subscriber-year.[1942]

[1939] This was calculated by discounting the incremental costs in £million and dividing by incremental subscriber-years (similarly discounted).
[1940] Parties' submission, The pro-competitive effects of the Vodafone/Three merger. Updated figures for 3UK were provided in CK Hutchison internal document.
[1941] Parties' response to the CMA's RFI.
[1942] Parties' response to the CMA's RFI. CK Hutchison told us that 3UK depreciates mobile active equipment based on asset lifetimes of between [✂] and [✂] years.

14.89 The Parties did not initially calculate a similar incremental cost per subscriber-year for the Merged Entity, submitting that under the JBP the Merged Entity would face virtually no congestion for the foreseeable future and hence could accommodate additional traffic / subscribers without triggering the need for additional investments in capacity.[1943] However, the Parties' modelling shows some congestion even in the JBP (with around [✂]% of subscribers in congested areas at busy hour by Year 10)[1944] and in the absence of additional investment, this would clearly increase with 10% more subscribers.

14.90 The Parties carried out subsequent analysis on the incremental cost of capacity on the Merged Entity following a hypothetical 10% increase in subscribers, enabling a like-for-like comparison with the figures presented above for VUK and 3UK.[1945] This analysis gave an incremental cost of £[✂] per subscriber-year (£[✂] Core and £[✂] RAN) where congestion levels are held constant, relative to the baseline. This equates to [✂]% of total ARPU.[1946] In their response to our Provisional Findings, the Parties said that the inclusion of RAN costs was incorrect because, even with a hypothetical 10% increase in subscribers, the Merged Entity's number of congested sites would remain low ([✂]% on average between FY25-34) and in practice, no additional RAN costs would be incurred.[1947] We do not agree the inclusion of RAN costs is incorrect because we consider that the calculation for the Merged Entity should be done on a like-for-like basis to those for VUK and 3UK.

14.91 Given the investment planned for the Merged Entity, it is unsurprising that the incremental cost of capacity would be smaller than for VUK and 3UK, but it is clearly not a zero cost on a like-for-like basis. Moreover, the calculations reflect the incremental cost of capacity over a 10 year period (including the JBP implementation); and therefore the lower incremental cost of capacity that the Parties estimated for the Merged Entity reflects the increase in capacity following the Merger (ie the effect identified in paragraph 14.21) as well as the longer term reduction resulting from being able to deploy more spectrum (ie the effect identified in paragraph 14.22).

Effect of incremental cost of capacity on prices

14.92 The Parties' calculations of the incremental costs of capacity reflect estimated costs over ten years. While VUK's and 3UK's prices may reasonably be expected to take account of costs that can be avoided over the period of a customer's contract, such costs would not necessarily be the same as the Parties' calculation

[1943] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[1944] Parties' submission, Further evidence on network efficiencies and associated customer benefits enabled by the Transaction.
[1945] Parties' submission, MergeCo's incremental cost of adding capacity.
[1946] Parties' submission, MergeCo's incremental cost of adding capacity.
[1947] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.29(i).

of the incremental costs of capacity. This is because (i) contract periods are considerably shorter than the 10 years covered by the Parties' calculation and (ii) the relationship between capacity and avoided costs over customer contract periods may be affected by capacity changes being subject to lags and lumpy.

14.93 Moreover, while these points mean that capacity is slow to adjust to changes in customer numbers, and therefore that additional customers also have the effect of reducing quality for other customers on the network (because additional customers cause additional congestion and reduced speed for others on the network), it is not clear that this would feed through into pricing decisions by suppliers. In principle, capacity considerations could be reflected in pricing decisions, for example because other customers have to be compensated for lower quality (by way of lower prices) and/or because a sufficient number leave for another network (and prices are reduced with the aim of improving customer retention). In practice, this may only occur in limited circumstances, for example in relation to unlimited tariffs.

14.94 We therefore considered evidence on whether and how far lower incremental costs of capacity feed through into retail and wholesale prices.

Effect on retail prices

14.95 In relation to retail prices, we have seen a detailed 'Pricing Principles' document from 3UK, which [✂]. It states that [✂].[1948] There is also a note that [✂].[1949]

Figure 14.9: 3UK's Pricing Principles

[✂]

Source: CK Hutchison internal document.

14.96 The same Pricing Principles document for 3UK includes a note to '[✂]',[1950] and [✂] which states [✂],[1951] [✂].[1952] 3UK also provided an example where constrained capacity led to [✂].[1953]

14.97 For VUK, we have not seen a similar detailed document on pricing. However, pricing strategy is extensively discussed in VUK's internal documents. Notably, we have identified recurrent references to VUK's pricing strategy being [✂].[1954] The CMA understands that [✂]. However, one recent document suggests that [✂].[1955] In either case, the VUK approaches to pricing are not related to costs.

[1948] CK Hutchison internal document.
[1949] CK Hutchison internal document.
[1950] CK Hutchison internal document.
[1951] CK Hutchison internal document.
[1952] CK Hutchison internal document.
[1953] Annex 3 to the Parties' response to the AIS and working papers.
[1954] For example, Vodafone internal documents.
[1955] Vodafone internal document.

14.98 3UK also submitted a theoretical scenario of a business plan anticipating a 10% increase in subscriber numbers through a price reduction, which would lead to additional traffic on the network. [✂], 3UK stated that [✂].[1956] In this theoretical example, we consider that prices, traffic, congestion and churn do not have simple relationships, and the overall revenue impacts differ depending on the degree of each impact. Therefore, we consider that there is not a simple impact on the pricing decisions.

14.99 Vodafone provided the following evidence of how capacity, congestion and the cost of capacity affected VUK's pricing in the mobile market:

(a) [✂].[1957] It calculated that an unlimited data bundle offer at [✂] Mbps (with a [✂]% cell congestion), [✂].[1958] VUK said this [✂],[1959] but we did not see evidence of this.

(b) [✂].[1960] [✂].[1961] [✂], we considered that it was not clear from this evidence how additional network costs affected prices.

(c) VUK was currently testing a [✂] according to which:

(i) Customers using more than [✂] of data per month would receive a communication saying that if they continued, they would be removed from the network; and

(ii) Customers [✂].[1962]

14.100 Vodafone submitted that this evidence demonstrated that some of VUK's customers were [✂].[1963] We note, however, that a VUK internal document discussing [✂], see Appendix G paragraph 82(c).

14.101 CKH provided the following evidence of how capacity, congestion and the cost of capacity affected 3UK's pricing in the mobile market:

(a) Constrained capacity had led to 3UK restricting access to unlimited data at times, for example, 3UK ceased to offer its £17 a month unlimited data and calls package to new customers in 2014.[1964]

1956 Annex 3 to the Parties' response to the AIS and working papers.
1957 Parties' response to the Provisional Findings, 4 October 2024, Annex 3, Table 5.2.
1958 Parties' response to the CMA's RFI.
1959 Parties' response to the CMA's RFI.
1960 Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.72(i).
1961 Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.72(ii).
1962 Parties' response to the CMA's RFI; and Parties' response to the Provisional Findings, 4 October 2024, Annex 3, Table 5.2. Vodafone also submitted examples relating to FWA; we have not included these as we are considering the mobile market.
1963 Parties' response to the CMA's RFI.
1964 Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.73(ii).

(b) [✂] ([✂] the introduction of a 250 GB plan in the second half of 2022).[1965] As a result, between December 2022 and June 2024, 3UK's customer base on unlimited post-paid tariffs had [✂]%, according to 3UK's internal data.[1966]

(c) More generally, [✂].[1967] This planning process [✂], such that [✂], it could accommodate [✂] and would be able to [✂].[1968] We note that [✂] and we did not consider that this general point added to the specific evidence at paragraphs 14.101(a) and 14.101(b), above, regarding how capacity and congestion had affected 3UK's prices.[1969]

14.102 Summing up this evidence from the Parties' internal documents, we saw some evidence of 3UK and VUK taking account of traffic growth and capacity in pricing, for example in data allowances and the pricing of unlimited tariffs. However, we considered this evidence was of limited value in showing that reductions in the incremental cost of capacity fed through into lower prices because there were a small number of examples, which mainly related to unlimited tariffs, and because it was not clear how the calculations of additional capacity costs were incorporated into prices, given 3UK's and VUK's approach to pricing described at paragraphs 14.164 to 14.166 above.

14.103 In their response to our Provisional Findings, the Parties submitted that the substantial new capacity that the Merged Entity and VMO2 (through Beacon 4.1) will bring to the market will benefit consumers market-wide by expanding output and putting downward pressure on prices.[1970] In this context, they said that the fundamental finding of economic theory that marginal costs impacted prices created a presumption of significant pass-through of incremental cost savings; and that empirical evidence showed that reductions in the cost of capacity were associated with lower prices per GB in a capacity-driven market (eg the historic 96% decline of revenue per GB between 2010 and 2017, and 3UK's revenue per GB falling from £[✂] per GB in February 2019 to £[✂] per GB in March 2024).[1971] They also submitted that capacity considerations were not ordinarily considered in short-term, tactical retail pricing decisions, but MNOs typically considered these forms of cost specifically in the context of major decisions involving significant numbers of subscribers; and that they had provided extensive evidence showing there was a link between capacity, capacity costs and an MNO's ability to offer attractive prices and data packages in both the retail and wholesale markets.[1972]

[1965] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, Table 5.2.
[1966] Parties' response to the CMA's RFI.
[1967] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, Table 5.2.
[1968] Annex 3 to the Parties' response to the AIS and working papers.
[1969] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, Table 5.2. CKH also submitted examples relating to [✂]; we have not included these as we are considering the mobile market.
[1970] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.53.
[1971] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 5.60, 5.64, 5.32 and 5.36.
[1972] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 5.50-5.51 and 5.71.

14.104 Our observations on these points are:

(a) In the short term capacity tends to be fixed, as the Parties acknowledge,[1973] and the impact of a reduction in an MNO's cost of providing additional capacity is not necessarily to reduce its short term variable cost. In the longer term the effect is to increase the MNO's capacity, which potentially incentivises it to improve its quality of service and/or lower its prices (as we noted above). This would increase consumer welfare. However, as this increase in consumer welfare may occur through increased quality at similar prices (ie lower quality-adjusted prices), it does not necessarily follow that actual (unadjusted for quality) prices would be lower.

(b) The decline in average revenue per GB over time likely reflects the extent of competition in the market and longer term investment by MNOs in improved technologies (such as those increasing spectral efficiency) resulting in suppliers increasing data allowances, and consumers using more data. However, the decline in average revenue per GB over time cannot necessarily be relied on to make inferences about pass through of lower costs in the context of a merger that we have found reduces competition (though we acknowledge the impact of the Merger on the capacity and costs of VMO2, via Beacon 4.1, as well as on those of the Merged Entity).

14.105 For these reasons, while we agree that the reduction in incremental cost of capacity contributes to improving quality and increasing consumer welfare, we do not consider that we can use the Parties' estimate of the effect of the Merger on incremental cost of capacity to provide a numerical estimate of the extent to which possible rivalry-enhancing efficiencies may reduce prices.

14.106 In their response to our Provisional Findings, the Parties also referred to the substantial new capacity that the Merged Entity and VMO2 (through the spectrum and sites provided by Beacon 4.1) would bring to the market, and to the fact that capacity drives an MNO's ability and incentive to offer competitive prices for its data bundles.[1974] We agree that increases in capacity by the Merged Entity and VMO2 would in principle give them an incentive to fill that capacity by making more attractive offers to customers, though that needs to be assessed in light of the other factors we have set out above.

14.107 Overall, in relation to the retail market, we saw some evidence of 3UK and VUK taking account of traffic growth and capacity in pricing, for example in data allowances and the pricing of unlimited tariffs. This evidence was limited and, in light of this, we do not consider that we can use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which

[1973] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 5.50.
[1974] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 5.33 and 5.36.

possible rivalry-enhancing efficiencies may reduce retail prices that could be set against any adverse effects due to a loss of competition. However, we agree with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle and over time give them an incentive to fill that capacity by making more attractive offers to customers.

Effect on wholesale prices

14.108 In relation to bidding for wholesale contracts to supply MVNOs, we note that pricing decisions at the wholesale level are longer-term than at the retail level; therefore, when an MNO is considering its bid for an MVNO contract, the MNO's predicted capacity in the future is more likely to affect its decision than when setting retail prices. We have seen some evidence that the incremental cost of capacity is taken into account in bidding, along with a range of other factors.

14.109 In relation to VUK:

(a) One internal document [✂].[1975]

(b) Similarly, in the context of wholesale discussions with [✂], VUK evaluated the impact of the deal in terms of [✂].[1976]

(c) Vodafone also said that, [✂] in connection with the opportunity to [✂], VUK estimated the incremental cost of [✂] that would be required to [✂], which VUK estimated was [✂].[1977] We noted this estimate of the incremental cost per subscriber-year, based on calculations made in the ordinary course of business, was less than the estimate VUK submitted to us (see above). However, Vodafone said that the estimates would [✂], for example because the [✂] estimate made in connection with the [✂], rather than VUK's position now; and because subsequent experience suggested that VUK had tended to [✂].[1978]

(d) Another VUK internal document stated that [✂].[1979]

14.110 In relation to 3UK, an internal document in relation to [✂]. It also notes [✂].[1980]

14.111 In their response to our Provisional Findings, the Parties said that the fact that the relationship between cost and price was not precisely quantified in the internal documents did not provide a reasonable basis for us to dismiss the cost efficiency, particularly given that the likelihood of pass-through was increased by VMO2 also

[1975] Vodafone internal document.
[1976] Annex VF REE WP 2 to Annex 3 to the Parties' response to the AIS and working papers.
[1977] Vodafone response to the CMA's s109 notice.
[1978] Vodafone response to the CMA's s109 notice.
[1979] Vodafone internal document.
[1980] CK Hutchison internal document.

benefitting from increased capacity; and that significant pass-through could be expected even in concentrated markets.[1981] We accept these points, though we note that when it comes to pass-through a wide range of outcomes is possible.

14.112 Overall, in relation to bidding for wholesale contracts to supply MVNOs, we recognise that there is more evidence than for retail that any additional cost of capacity is taken into account in bidding. However, while this evidence indicates that additional costs of capacity are taken into account, it does not establish that these costs are similar to the incremental costs of capacity estimated by the Parties; and nor does it indicate the extent of the effect on the price ultimately agreed with MVNO customers. Therefore, we do not consider that we can use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which possible rivalry-enhancing efficiencies may reduce wholesale prices that could be set against any estimates of any adverse effects due to a loss of competition. As in regard to retail, we agree, however with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle, and over time, give them an incentive to fill that capacity by making more attractive offers to customers.

Ability to deliver the JBP

14.113 As noted above, the Parties' projections assume the full implementation of the JBP. In this section, we consider whether there may be technical or practical constraints that might affect the ability of the Parties to implement the JBP. In order to assess this, we have engaged closely with Ofcom, given its specialist mobile network expertise. In the following sections, we then consider whether the Parties are legally obligated or otherwise commercially incentivised to implement the JBP.

14.114 In relation to MOCN, the Parties submitted there are limited barriers to its implementation, and that some of its benefits can be realised quickly, without requiring a site visit.[1982] Ofcom told us that it does not consider there to be any significant practical, technical or commercial risks that are likely to delay or threaten the realisation of the Day 1 benefits.[1983]

14.115 Ofcom noted that there could in principle be technical or practical constraints in the Parties' ability to deliver the integration of the two networks under the JBP, such as physical constraints at sites that limit the equipment that can be deployed at some sites and, particularly in areas of high demand density (where sites are closer together), inter-site interference and power limitations (eg for health and

[1981] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 5.54 and 5.63.
[1982] Annex 3 to the Parties' response to the AIS and working papers.
[1983] Ofcom, response to the CMA's 19 April 2024 letter.

safety compliance), which might hinder, for example, the deployment of additional spectrum.[1984]

14.116 The Parties submitted that these practical constraints were factored into the development of the JBP, and will not materially affect the Parties' ability to add more spectrum in areas of high demand, with both Parties having a number of well-established mitigation processes to manage potential issues due to interference and transmission power limitations.[1985] Ofcom told us that based on its analysis of inter-site distances and evidence provided by the Parties of how they currently do and plan to manage interference constraints, it did not have concerns that interference and restrictions on power would materially constrain the Parties in deploying the sites and spectrum envisaged in the JBP.[1986]

14.117 We therefore consider that technical and practical considerations are unlikely to materially impact the ability of the Merged Entity to implement the JBP.

The Parties' obligation to implement the JBP and ability to amend it post-Merger

14.118 The Parties submitted that the JBP is not only a plan but has been agreed by the shareholders as part of the commercial arrangements in the Merger documents.[1987]

14.119 As part of our assessment of whether rivalry-enhancing efficiencies would be likely to be realised, we have considered whether the Merged Entity is likely to deliver the full JBP post-Merger (or whether it might pursue a less ambitious network plan). In that context, we consider here whether the Merged Entity has the ability to adopt a business plan that differs from the JBP.

Adoption of the business plan and budget at closing

14.120 A draft business plan and draft budget for the Merged Entity is annexed to the Parties' Contribution Agreement.[1988]

14.121 [✂].[1989] The updated initial business plan and updated initial budget will be adopted by the JV Entity at closing.[1990]

1984 Ofcom, response to the CMA's 19 April 2024 letter.
1985 Annex 3 to the Parties' response to the AIS and working papers.
1986 Ofcom, response to the CMA's 23 July 2024 letter.
1987 Parties' initial submission, 1 May 2024, paragraph 1.17.
1988 Parties' internal document. We understand that these are the same set of numbers as the JBP, reported in a different way: Annex 3 to the Parties' response to the AIS and working papers.
1989 Vodafone internal document. See also Annex 3 to the Parties' response to the AIS and working papers.
1990 Vodafone internal document.

14.122 The Contribution Agreement also provides that prior to closing, the Parties will agree an integration plan.[1991] This merger integration plan will form part of the initial business plan at closing.[1992]

14.123 In any event, we note that the Parties could renegotiate the Contribution Agreement.[1993]

14.124 Accordingly, we find that the Merged Entity's business plan and budget adopted at closing may differ from the draft business plan and draft budget appended to the Contribution Agreement.

Business plans post-closing

14.125 [✂].[1994] As above, we also note that, in any event, the Parties could renegotiate the relevant agreements.

14.126 Accordingly, we find that, post-closing of the Merger, the Parties have the ability to agree on a new or modified Merged Entity business plan. We consider the Merged Entity's incentives to adopt the JBP below.

Incentive to deliver the JBP

14.127 As part of our assessment of whether rivalry-enhancing efficiencies would be likely to be realised,[1995] we have considered whether the Parties, even if not legally obligated, have in any case the commercial incentive to deliver the JBP.

14.128 The Parties submitted that the JBP was commercially more attractive than any alternatives.[1996] They based this primarily on a comparison between the JBP and the SBS, with the latter maximising the available cost synergies of the Merger (by reducing the number of sites in the combined network from [✂] to [✂] sites) but without materially increasing the competitiveness of the Merged Entity's network or achieving significant customer benefits in the longer term.[1997]

14.129 They also submitted that their incentive to deliver the JBP was also provided by exit mechanisms under the Merger agreements that depend on a valuation threshold;[1998] and by the terms of Beacon 4.1.

1991 Vodafone internal document.
1992 Vodafone internal document.
1993 CMA129, paragraph 7.15.
1994 Vodafone internal document. [✂].
1995 See from paragraph 14.169 onwards.
1996 Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
1997 Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
1998 Annex 3 to the Parties' response to the AIS and working papers.

14.130 In this section, we consider the Merged Entity's incentive to deliver the JBP as a result of the exit mechanisms under the Merger agreements and the provisions in Beacon 4.1; and then turn to the comparison of the JBP and SBS.

14.131 Our overall findings regarding whether the Parties have the incentive to deliver the JBP are set out below at paragraphs 14.183 to 14.189.

Incentive to deliver the JBP as a result of the exit mechanisms under the Merger agreements

14.132 The Parties submitted that the exit mechanisms in the Merger agreements (discussed at Chapter 2) incentivise both Parties to achieve full implementation of the JBP.[1999]

14.133 Under the Merger agreements, conditional upon the Merged Entity reaching a verified valuation of at least £16.5 billion (the **FMEV Threshold**), Vodafone can exercise a call option to purchase CK Hutchison's 49% shareholding in the JV Entity and CK Hutchison can exercise a put option to require Vodafone to purchase its 49% shareholding. The consideration for either option would be an amount which is related to the verified valuation of the Merged Entity.[2000] These options may only be exercised from the JV Entity's fourth financial year post-closing.[2001] For CK Hutchison's put option, the requirement to meet the FMEV Threshold falls away after the JV Entity's seventh financial year post-closing.[2002]

14.134 The Parties submitted that these mechanisms are only deliverable on the achievement of the full JBP.[2003]

14.135 To consider this, we asked the Parties for evidence that demonstrated the way in which the FMEV Threshold was developed, or which linked the FMEV Threshold to the development of the JBP forecasts.[2004]

14.136 The Parties referenced evidence of the FMEV Threshold being developed [✂], during a period in which [✂]. An email from a senior executive of CK Hutchison, [✂]:[2005]

(a) [✂];

(b) [✂]; and

[1999] Annex 3 to the Parties' response to the AIS and working papers.
[2000] Vodafone internal document.
[2001] Vodafone internal document.
[2002] Vodafone internal document.
[2003] Annex 3 to the Parties' response to the AIS and working papers.
[2004] Parties' response to the CMA's RFI.
[2005] CK Hutchison internal document.

(c) [✂].

14.137 These points and suggestions received a response from Vodafone a few days later ([✂]), which largely set out agreement and understanding on the areas important to CK Hutchison. In respect of the suggested put/call exit mechanism, Vodafone commented that [✂]:

> '[✂]'.[2006]

14.138 CK Hutchison told us that the FMEV Threshold was agreed by [✂].[2007] The engagement of AS [✂] (see paragraph 14.55), after the FMEV Threshold had been finalised.

14.139 In response to our request, Vodafone referenced an internal document, produced in May 2023, which shows it considering the JBP alongside the FMEV Threshold.[2008] We consider that this evidences Vodafone perceiving the JBP – after having been largely agreed – to be the 'blue print' and initial business plan for the Merged Entity, on which sensitivities could be conducted to test valuation assumptions relating to the FMEV Threshold.

14.140 However, we consider that the Merged Entity would be incentivised to pursue a credible commercial strategy, which may evolve and develop over time in response to different circumstances, and thus divert from the JBP, in order to achieve strong financial performance and increase the likelihood of it achieving the FMEV Threshold. For example, we conclude elsewhere (see Appendix E and Chapter 8, CMA analysis on the impact of the Merger on prices) that the Merged Entity would likely have the incentive to increase prices as compared to the counterfactual. This could be one aspect of an evolving strategy which aims to achieve increased profitability.

14.141 We have not found evidence of an inherent or direct link between the JBP – as presented to our inquiry – and the FMEV Threshold, or evidence which demonstrates that the Parties consider the JBP to be the 'only' way in which the exit mechanisms envisaged by the Merger agreements can be achieved.

Incentive to deliver the JBP as a result of provisions in Beacon 4.1

14.142 The Parties submitted that the Beacon 4.1 Agreements underpin the delivery of the JBP and incentivise the delivery of the full JBP/JNP.[2009] The Parties further submitted that the Beacon 4.1 Agreements set out financial and operational

[2006] CK Hutchison internal document.
[2007] CK Hutchison response to the CMA's RFI.
[2008] Vodafone internal document. Specifically, Vodafone considers [✂]. These are [✂]. Vodafone [✂]. We note that [✂].
[2009] Annex 3 to the Parties' response to the AIS and working papers. VMO2 also submitted that the Beacon 4.1 Agreements will incentivise the Merged Entity to deliver the JBP, reflected in provisions for a joint deployment programme for capacity upgrades alongside the deployment of MOCN: VMO2 response to the Provisional Findings, 4 October 2024, paragraphs 2.5, and 3.6-3.8.

penalties which are consistent with achieving the full JBP.[2010] The provisions in Beacon 4.1 are discussed above at Chapter 10.

14.143 In particular, the Parties submitted that:

(a) VUK and VMO2 have agreed a process to ensure that the MOCN solution can be planned for, tested and activated;[2011]

(b) Through the consolidated work packages, the Merged Entity and VMO2 have committed to integrate 3UK sites into the Beacon network grid, with the Merged Entity intending to integrate c.[✂] 3UK sites into the Beacon network;[2012]

(c) The [✂] incentivise the Merged Entity to ensure integration of the 3UK sites into the Beacon grid in line with the JBP;[2013] and

(d) The spectrum transfer agreement incentivises the delivery of the JBP because certain spectrum will not be capable of transfer until certain consolidated work package milestones, which are based on the JBP, are met.[2014]

14.144 In relation to MOCN, based on our review of the agreements, we consider that Beacon 4.1 does not bind the Merged Entity to implementing the MOCN solution; rather it simply facilitates planning and testing to ensure that it does not adversely affect VMO2's network and customers. The Parties subsequently confirmed that Beacon 4.1 [✂] on the Merged Entity to implement MOCN and that there are [✂] in Beacon 4.1 on how many sites on which the Merged Entity would implement MOCN.[2015]

14.145 Regarding the integration of 3UK sites into the Beacon grid, based on our review of the Beacon 4.1 Agreements, we consider that there is no minimum commitment obligation in relation to the number of 3UK sites to be included in the consolidated work packages in Beacon 4.1. This was subsequently confirmed by the Parties,[2016] who also submitted that the focus of the negotiation was instead to facilitate the integration of 3UK sites [✂].[2017]

14.146 Regarding the spectrum transfer, as noted in the previous paragraph, we consider that there is no minimum commitment obligation in relation to the number of 3UK sites to be included in the consolidated work packages in Beacon 4.1. Hence, the

[2010] Annex 3 to the Parties' response to the AIS and working papers.
[2011] Annex 3 to the Parties' response to the AIS and working papers.
[2012] Annex 3 to the Parties' response to the AIS and working papers.
[2013] Annex 3 to the Parties' response to the AIS and working papers.
[2014] Annex 3 to the Parties' response to the AIS and working papers.
[2015] Parties' response to the CMA's RFI.
[2016] Parties' response to the CMA's RFI.
[2017] Parties' response to the CMA's RFI.

existence of consolidated work package milestones in relation to spectrum transfer does not in itself incentivise the JBP over alternative strategies including those with fewer integration sites but which nevertheless provide at least as much capacity as the standalone networks. In this context, we consider it is the timing of the integration rather than the number of sites that is relevant to VUK being able to release its spectrum, including that in the 2100MHz band.

14.147 Accordingly, we find that the Beacon 4.1 provisions, whilst consistent with enabling the delivery of the JBP, are also consistent with facilitating and incentivising a level of integration and delivery that could be less than the full JBP. We have assessed these provisions in the round with other evidence on the Parties' incentives.

Comparison of the JBP and the SBS

14.148 As noted above, the Parties submitted that the JBP was commercially more attractive than any alternatives.[2018] They based this primarily on a comparison between the JBP and the SBS.

14.149 Under the SBS, the Merged Entity would retain the short-term gains from MOCN and spectrum sharing, reflecting that these are relatively easy to achieve. We agree that the Merged Entity would have the incentive to implement these short-term gains (see below). We note, however, that these short-term effects would likely decline in importance over time as the legacy VUK and 3UK networks decline in size due to their sites being integrated into the Merged Entity's network or shut down.

14.150 Otherwise, the Parties specified the SBS as follows:

(a) The total number of sites in the grid is reduced from [✂] to [✂]: [✂] high-traffic sites, which are densification sites in the JBP but which the Parties identified as not contributing 'unique' outdoor coverage, are removed versus the JBP. This results in a minimal 'base' grid of [✂].

(b) The number of high-traffic sites is reduced to align C-band coverage with the standalone plans. Out of the remaining [✂] sites, around [✂] high-traffic sites under the JBP become mid-traffic in the scaled-back plan, such that total C-band coverage [✂] than under the standalone counterfactual, at the end of the Merged Entity's network upgrade programme in 2032. In combination with the cutting of site numbers described above, this results in a network with around [✂] high-traffic sites (vs [✂] under the JBP), [✂] mid-traffic sites and [✂] low-traffic sites.

[2018] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.

(c) The amount of C-band deployed is reduced. Under the scaled-back plan, the amount of C-band spectrum deployed on the remaining high-traffic area sites is reduced to [✂] MHz in Unwind and [✂] MHz in Beacon areas (compared to [✂] MHz at all high-traffic sites under the JBP).[2019]

14.151 The Parties compared the OFCF under the JBP with the OFCF under the SBS. [✂], calculated the NPV for the JBP compared to the SBS. They included a terminal value at end FY34 [✂]. The Parties calculated that the NPV of the JBP exceeded that of the SBS by about £[✂] billion, as shown at Table 14.1, which also shows a breakdown of cash flows into three periods (FY25-FY29, FY30-FY34, and terminal value). This reflects the greater revenue synergies in the JBP exceeding the greater cost savings in the SBS. On this basis, the Parties submitted that they have a strong incentive to pursue their 'best-in-class' network strategy, which they submitted is significantly more commercially attractive than an alternative scaled-back network strategy which maximises cost savings at the expense of foregone revenues.[2020]

Table 14.2: Comparison of undiscounted and discounted OFCF for JBP and SBS

£m

Undiscounted	*FY25-FY29*	*FY30-FY34*	*Total (FY25-FY34)*	*Terminal Value (TV)*	*Total + TV*
Revenue synergies					
JBP	[✂]	[✂]	[✂]	[✂]	[✂]
SBS	[✂]	[✂]	[✂]	[✂]	[✂]
Delta (JBP less SBS)	[✂]	[✂]	[✂]	[✂]	[✂]
Cost savings					
JBP	[✂]	[✂]	[✂]	[✂]	[✂]
SBS	[✂]	[✂]	[✂]	[✂]	[✂]
Delta (JBP less SBS)	[✂]	[✂]	[✂]	[✂]	[✂]
Total delta (JBP less SBS)	[✂]	[✂]	[✂]	[✂]	[✂]
Discounted	*FY25-FY29*	*FY30-FY34*	*Total (FY25-FY34)*	*Terminal Value (TV)*	*NPV (Total + TV)*
Revenue synergies					
MergeCo JBP	[✂]	[✂]	[✂]	[✂]	[✂]
MergeCo scaled-back	[✂]	[✂]	[✂]	[✂]	[✂]
Delta (JBP less SBS)	[✂]	[✂]	[✂]	[✂]	[✂]
Cost savings					
MergeCo JBP	[✂]	[✂]	[✂]	[✂]	[✂]
MergeCo scaled-back	[✂]	[✂]	[✂]	[✂]	[✂]
Delta (JBP less SBS)	[✂]	[✂]	[✂]	[✂]	[✂]
Total delta	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CMA calculations based on Parties' modelling
Note: Revenue synergies and cost savings are compared to the adjusted baseline. The discount rate is [✂]%.

14.152 As a general point, we note that both the JBP and the SBS were prepared in anticipation of the Merger and in the knowledge of our inquiry. Additionally, the Parties developed and analysed the SBS specifically as an input to our inquiry, ie to support their submission that it is inferior to the JBP, rather than as part of the evaluation of strategic network options for the Merged Entity. We have assessed the SBS versus the JBP based on the analysis presented to us, but we have also

[2019] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2020] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.

taken account of this wider context in reaching our view on the Parties' submissions and the weight we can attach to them.

14.153 The remainder of this section sets out the further analysis we have carried out in relation to the comparison between the JBP and the SBS, which is relevant to the Parties' incentive to deliver the JBP.

Timing of cash flows

14.154 The Parties' calculations show that the NPV of cash flows is about £[✂] billion higher for the JBP than for the SBS (comprising revenue synergies being greater by about £[✂] billion partially offset by cost savings being £[✂] billion lower, see discounted OFCF in Table 14.1, 'total + TV' column). However, this is entirely as a result of the terminal value (ie assumed cash flow beyond the end of the projection period, FY25 to FY34). If the analysis is limited to the projection period, FY25 to FY34, the NPV is slightly lower for the JBP than the SBS.

14.155 The Parties submitted that the mobile industry is highly capital intensive, requiring substantial upfront investments, and the profitability of these investments requires a long-term perspective, beyond just the years 2025 to 2034 that are explicitly modelled in the JBP.[2021] Even so, cash flows more than ten years away may be considered highly uncertain, given – for example – the potential for changes in technology or customer demand which might make forecasting far into the future an inherently difficult exercise. In our view, while we note that a perpetuity discount formula allows to some extent for uncertainty beyond the forecast plan, it is challenging to assume that the higher FY34 revenue in the JBP continues in perpetuity, especially as revenue synergies depend on competitors' and customers' responses, and the Merged Entity's competitive position in the JBP as best network may weaken without higher costs than projected for 2034 and beyond.

14.156 We asked each of the Parties about their capital allocation and investment decisions, and their responses did not suggest looking beyond a ten-year horizon.

(a) Vodafone told us that, [✂]. [✂].[2022]

(b) CK Hutchison told us that [✂]. [✂].[2023]

14.157 The Parties submitted that it was important to distinguish their approach to routine capital allocation decisions within their respective businesses, from how their shareholders approach major long term strategic investment decisions.[2024] The

2021 Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
2022 Parties' response to the CMA's RFI.
2023 Parties' response to the CMA's RFI.
2024 Annex 3 to the Parties' response to the AIS and working papers.

Parties said that, in their current weak financial circumstances, they are often forced to think in the 'short term' and give particular weight to the cashflow implications and sustainability of their investment decisions in the short run. They said such routine financial decisions must clearly be distinguished from the JBP, which is a long-term strategic plan aiming to place the two businesses on a sustainable footing for the future.[2025] In that context, the Merged Entity will be afforded much greater discretion and flexibility by its shareholders, including the ability to make long term investment decisions, because the investment is funded by the cost synergies created by the Merger.[2026] In this context, Vodafone said it had relied on long term business cases for a number of investments, including [✂].[2027] CK Hutchison said that 3UK produced long term business cases in its investment decisions where [✂].[2028]

14.158 We do not consider this evidence necessarily indicates we should consider only NPV calculations including a perpetuity calculation. This is because not all the examples, eg [✂], included a perpetuity; and because a decision to scale back investment may be taken after the Merger on an evolving basis and in changing circumstances faced by the Merged Entity, and therefore may be more of a 'routine' and ongoing, rather than a strategic, investment decision. Additionally, Ofcom noted that, in its experience, plans with such a large proportion of value in the terminal value are fairly unusual.[2029] We have therefore considered NPVs on a range of assumptions about the period over which cash flows are considered, ie 10 years, 15 years, 20 years and perpetuity (see section on sensitivities below).

14.159 In response to our Provisional Findings, the Parties again stated that the JBP was a long term plan, and far from a routine financial decision; that similar types of investment had included a terminal value calculation; and that therefore it was not appropriate to assess the returns from their plans using anything other than an approach that included a perpetuity calculation.[2030] For the reasons set out in the previous paragraph, we have continued to use a range of assumptions about the period over which cash flows are considered.

Spectrum sale in the SBS

14.160 We have noted that, in the SBS, the Merged Entity does not use all of its C-band spectrum (see paragraph 14.109(c)). The Merged Entity could therefore sell [✂] of unused spectrum to other MNOs. However, as Ofcom has noted mobile spectrum

[2025] Annex 3 to the Parties' response to the AIS and working papers.
[2026] Annex 3 to the Parties' response to the AIS and working papers.
[2027] Vodafone said the approach taken in these business cases was consistent with the approach in VUK's own 'Financial Reporting and Governance' manual, which recommended that the 'FCF should be modelled for ten years' and that 'at the end of ten years of the FCF plan, a terminal present value should be calculated'. Annex 3 to the Parties' response to the AIS and working papers. [✂].
[2028] Annex 3 to the Parties' response to the AIS and working papers.
[2029] Ofcom call note.
[2030] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 3.15.

trading in the UK has been limited, for reasons including the option value of retaining spectrum licences, and the fact that in a mobile spectrum licence trade the licensee would typically be unwilling to sell to a direct competitor, which could put that competitor at a competitive advantage relative to the licensee.[2031]

14.161 The Parties considered that such a spectrum sale could yield a nominal value of £[✂] million in [✂] of the JBP roll-out. This was on the basis that the spectrum could not be sold until [✂].[2032]

14.162 We consider that the Parties assumed an unduly low value of the spectrum and have altered this sensitivity to reflect this (see **Spectrum trade (2)** at Table 14.2). Prices at the 2021 auction were low, for example Geoffrey Myers, who was the lead Ofcom Economic Director on the auction referred to 'the low prices paid by EE, Telefonica (O2) and Vodafone'.[2033] In this context, a private company, such as the Merged Entity, has more freedom than Ofcom to play off buyers against each other; we therefore consider it is reasonable to assume the Merged Entity obtains the average of the prices in the 2018 and 2021 auctions (around £300 million), and have altered assumptions at **Spectrum trade (2)** at Table 14.2 to reflect this.

14.163 In their response to our Provisional Findings, the Parties submitted that we had not proved that there was tacit collusion in the 2021 auction; that past-auction values would be an upper bound on the value of additional spectrum due to spectrum generally having diminishing marginal value (and all operators already holding at least 80 MHz of spectrum); and that we had assumed the Merged Entity, as seller, would be able to extract the entirety of the buyers' private valuation.[2034] We do not agree that these points indicate our approach was wrong. We simply assumed the Merged Entity (as seller) would be able to obtain the average of the prices in the 2018 and 2021 auctions, which we consider is reasonable. Given that spectrum prices are affected by a number of different factors, this does not mean we assumed that there was tacit collusion in the 2021 auction or that we made any particular assumptions about the marginal value of spectrum. Nor did we assume that the Merged Entity, as seller, would be able to extract the entirety of the winning bidder's private valuation, though it may be expected to be close to the valuation of the under-bidder (ie the losing bidder if the bidders are the two other MNOs).

14.164 In our Provisional Findings, we also assumed that the spectrum could be sold earlier than in the Parties' modelling. In their response to our Provisional Findings,

[2031] Review of Ofcom's market-based approach to mobile spectrum management, 11 January 2024, paragraph 3.6.
[2032] Parties' submission, Incentive modelling: Sensitivity analysis. The Parties' assumption that a sale would yield half of the value at the 2021 auction appears to derive from their assumption there is a single buyer with an equal split of value created between buyer and seller. The Parties submitted this was likely to represent [✂] since spectrum tended to have diminishing marginal value for an operator (so operators would pay less for additional spectrum) and Ofcom was likely to make additional spectrum available.
[2033] Myers, Geoffrey (2023) Auction bidding and outcomes.
[2034] Parties' response to the Provisional Findings, 4 October 2024 Annex 3, paragraphs 3.18-3.21.

the Parties stated that such early sale would undermine MOCN congestion/performance benefits, since it would require reconfiguring the Parties' legacy networks, in many cases reducing the available combined capacity, resulting in higher load at these sites compared to the counterfactual, let alone the JBP.[2035] We accept this and have therefore reverted to the Parties' assumption that the spectrum could not be sold until [✂] ([✂] of the JBP roll-out).

Discount rate for calculating NPV

14.165 The Parties used a nominal discount rate of [✂].[2036,2037]

14.166 We noted that the WACC was likely to have changed since [✂]. We therefore considered a sensitivity with a WACC of 9.6%. This was based on Vodafone's current estimated WACC for the UK ([✂]%) plus the risk premium used in Vodafone's Merger-specific WACC ([✂]%).[2038] Vodafone told us that this risk premium reflected [✂].

Revenue assumptions

14.167 The Parties consider that the JBP will give rise to volume and revenue synergies (ie increased revenue compared to the counterfactual) as a result of network quality improvements for three reasons:

(a) The Merged Entity's 'best network' strategy will make its offer more competitive, resulting in a larger subscriber base in the consumer mobile market as network improvements will mean that customers are more likely to stay with the network (lower churn) and new customers are more likely to join the network (more gross adds).[2039] These assumptions result in the Merged Entity's market share of subscribers reaching [✂]% by FY34 under the JBP, compared to [20-30]% in the standalone baseline with no change in ARPU compared to the counterfactual;[2040]

(b) The Merged Entity will be able to expand FWA cross-sell opportunities to VUK customers, and provide the excess capacity necessary to support FWA services;[2041] and

[2035] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 3.22.
[2036] The 'other UK telecoms' part of BT represents about 60% of BT and excludes the lowest risk (eg access to copper and FTTC lines) and highest risk (eg professional services and IT consulting) parts of BT's business. Promoting investment and competition in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Annex 21.
[2037] Parties' submission, The pro-competitive effects of the Vodafone/Three merger; and Wholesale Voice Markets Review 2021-26, 18 March 2021, Annex 2.
[2038] Parties' response to the CMA's RFI; and Parties' response to the CMA's RFI.
[2039] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2040] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2041] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.

(c) The Merged Entity's superior network and accelerated investment in 5G (in particular, its rapid widespread deployment of high-capacity 5G C-band spectrum) will be able to support new use cases that require C-band spectrum with its very low latencies, and high speeds.[2042]

14.168 The Parties' JBP modelling also shows that the total NPV of these revenue synergies is £[✂] million over ten years. The bulk (£[✂] million) of this is due to increased revenue from achieving 'best network' strategy, with the NPV of FWA revenue synergies being £[✂] million and the NPV of new 5G use case revenue being £[✂] million.[2043] The impact of the revenue synergies, and in particular the new 5G use cases, is larger if the terminal value is included: the total NPV of the revenue synergies increases to £[✂] billion (£[✂] billion more than in the SBS) of which £[✂] billion is accounted for by new 5G use cases.

14.169 We note that revenue from new 5G use cases largely does not exist at present for either Party and therefore presents particular challenges in forecasting. Ofcom said that, given the paucity of evidence of demand for services that will rely upon 5G SA, and in particular that the demand would depend upon the difference in quality and extent of the 5G SA provided in the JBP relative to that in the counterfactual, it would be reasonable to assume that the revenue synergy (and associated public value) resulting from unlocking demand for such services would be limited.[2044]

14.170 In regard to FWA, we note that this is currently relatively little used in the UK, though there is evidence of its use elsewhere, for example in the USA where Ofcom noted that T-Mobile USA has about five million FWA subscribers on a network that is similarly dense to that envisaged for the Merged Entity albeit covering a larger country.[2045] Given that FWA is relatively little used in the UK, we consider that it is also subject to some uncertainty.

14.171 We have therefore considered a sensitivity without revenue from new 5G use cases and a further sensitivity which also assumes a lower level of additional revenue from FWA (50% reduction). These sensitivities affect the NPV of the JBP relative to the SBS as the Merged Entity gains no additional revenue from new 5G use cases or FWA in the SBS.

14.172 In their response to our Provisional Findings, the Parties said that the revenue benefits in the JBP had been estimated conservatively and we had therefore applied downside adjustments to an already conservative forecast.[2046] As set out

[2042] FMN.
[2043] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2044] Ofcom, response to the CMA's 23 July 2024 letter.
[2045] Ofcom, response to the CMA's 19 April 2024 letter.
[2046] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 3.23-3.27.

above, we consider that the revenue assumptions in the JBP are subject to particular uncertainty and that our sensitivities are reasonable.

Return on capital

14.173 The Parties' projections show that [✂]. [✂].[2047] The terminal value calculation in effect builds in this level of return on capital employed (**ROCE**) into the NPV calculation in perpetuity.

14.174 We consider it more plausible that, post 2034, the Merged Entity's ROCE declines to the WACC, reflecting that the other MNOs may be expected to respond at least over time. We note that AS told us that [✂].[2048] Hence, while we expect the Merged Entity to achieve profitability which enables it to earn above its WACC for a period, we expect this to reduce over time and therefore that the Merged Entity would not earn returns so significantly above its WACC in perpetuity.

14.175 We therefore considered two sensitivities: one where ROCE declines to the WACC after 2034; and one where ROCE declines gradually to the WACC over the ten years, 2034-2044, for both the JBP and the SBS. For both of these, we made an approximate estimate of the impact of declining ROCE on cash flow based on simple assumptions about the change in capital employed and the effect of this on a proxy for cash flow.[2049]

14.176 In response to our Provisional Findings, the Parties told us that their best network plan was explicitly designed to result in an outcome where, whatever the response, rivals could not meet or exceed the JBP's quality through a short-term response; that competitive responses from rivals were already taken into account in the JBP; and that there was no theoretical reason why returns on a sunk investment creating competitive advantage should converge to WACC after a certain period of time (with empirical evidence from the UK market (such as the example of BTEE or VMO2 following iPhone exclusivity) showing that returns from such an investment can be long-lasting).[2050] We have not altered our sensitivities in the light of these points because they only assume convergence to the WACC after the end of the JBP period and one of our two sensitivities assumed that convergence occurred gradually over 10 years, and thus was consistent with returns above WACC being long-lasting.

[2047] Vodafone response to the CMA's RFI.
[2048] [✂] call note.
[2049] We projected forward capital employed for JNP and SBS beyond FY34 on the following assumptions: that capex for FY35 to FY44 is the same as for FY34; that total depreciation and amortisation converges to capex after eight years ie by 2042; and that there is no other change in capital employed. We then estimated cash flows post-FY34 for the JNP and the SBS by assuming that the change in change in cash flow is the same as the change in adjusted EBIT.
[2050] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 3.30-3.32.

Sensitivity analysis results

14.177 Table 14.3 summarises the results of the sensitivities set out above. As illustrated in the Table, the results are dependent on the time period over which NPV is calculated. The longer the time period over which NPV is calculated, the more attractive is the JBP relative to the SBS:

(a) If the time period is limited to the 10 years over which cash flows have been appraised (ie without any terminal value at the end of 2034), the NPV of the JBP is less than that of the SBS in all scenarios.

(b) At the other end of the spectrum, if cash flows are expected to continue in perpetuity, the base case shows that the NPV of the JBP is higher (around £1.5 billion) than that of the SBS. However, relatively small changes in assumptions reduce the difference in NPVs to a small number.

(c) Calculating cash flows over 15 or 20 years gives intermediate results.

Table 14.3: NPV Results of Sensitivity Analyses: NPV of JBP less NPV of SBS

£m

Period	*Perpetuity*		*20-year DCF*		*15-year DCF*		*10-year DCF*	
Discount rate	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Parties' Base Case & spectrum sensitivity								
Parties' Base Case	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Spectrum trade (1)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
New sensitivities (CMA calculations)								
Spectrum trade (2)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
No new 5G use cases	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
No new 5G use cases &1/2 FWA	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Post-FY34 ROCE reverts to WACC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Post-FY34 ROCE glide path to WACC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
No new 5G use cases & post-FY34 ROCE glide path to WACC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CMA calculations based on information provided by the Parties and assumptions as set out in the text above.

14.178 Additionally, cost synergies [✂].[2051] Such savings may be fairly small in the short term but could be expected to increase over time. Since the SBS has fewer sites than the JBP, [✂] the SBS relative to the JBP.[2052] In response to this suggestion, the Parties submitted that any such increase would not be material given that (a) [✂] and (b) [✂].[2053] These points notwithstanding, the fact that site rental savings have not been included in the financial analysis means that the NPV of the JBP relative to the SBS is likely to have been understated at least to some extent.

[2051] [✂] call note.
[2052] The Parties' calculations for the JNP do take account of higher passive rental costs associated with accommodating new equipment of the Merged Entity, some of which would be avoided in the SBS but do not take into account that site rental costs may be avoided altogether in the longer term. Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2053] Annex 3 to the Parties' response to the AIS and working papers.

14.179 In response to our Provisional Findings, the Parties told us that we had taken an already conservative plan (ie the JBP) and applied a series of downward adjustments to the expected increase in profits from delivering the JBP compared to the SBS; and that this was an asymmetric approach, which did not take account of potential 'upsides' and provided no information on the Parties' expectations of their profits from rolling out the JBP, and hence the incentive to deliver the JBP.[2054] We do not accept that the JBP is an already conservative plan and we consider our sensitivities to be reasonable and therefore to provide information on the Parties' incentive to deliver the JBP. Furthermore, there are other factors that have not been taken into account in the Parties' modelling and which could also reduce the profits from the JBP compared to the SBS, for example that the SBS has tighter capacity relative to demand, potentially leading to higher prices, and profits, than assumed in the Parties' modelling of the SBS.

14.180 We concluded that the NPV of the JBP relative to that of the SBS is sensitive to the assumptions made. This is because, even when taking into account cash flows into perpetuity, sensitivities with assumptions that we consider reasonable reduce the difference between the JBP and SBS NPVs to a small number (and additionally, as noted above, the calculations do not take account of longer term rental savings on closed sites which are lower in the JBP than the SBS).

Specification of the SBS

14.181 The specification of the SBS includes fewer sites, a smaller proportion of high-traffic sites where C-band spectrum is deployed, and less C-band spectrum being deployed even at the remaining high-traffic sites (see paragraph 14.109 above) with 50MHz of C-band spectrum not being deployed at any site.

14.182 This is just one specification of an alternative to the JBP. The Parties submitted that, while there are a multitude of alternative strategies that the Merged Entity could hypothetically implement and within each of these broad strategies key parameters that could be varied, it was not possible to model every possible strategy in order to test whether the JBP is the profit-maximising strategy.[2055]

14.183 We accept this point, but we note that broad categories of alternative specifications would include:

(a) Specifications with more spectrum deployed at sites in high traffic areas (or more sites) than in the SBS, though less than in the JBP. Such specifications would deliver higher quality in high traffic areas than the SBS but lower quality than the JBP.

[2054] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraph 3.7(ii).
[2055] Parties' submission, Incentive Modelling: Sensitivity analysis.

(b) Specifications with fewer sites in low and mid-traffic areas than the JBP. Such specifications would deliver lower quality (in particular as regards coverage) than the JBP, and potentially the SBS (to the extent that there are also fewer sites in low and mid-traffic areas than in the SBS).

14.184 With regard to the first of these possibilities, the Parties submitted that under such specifications the Merged Entity would not clearly achieve 'best network' status and hence would not achieve the full revenue synergies in the JBP (though it would achieve some cost savings over the JBP, albeit less than in the SBS).[2056] We noted, however, that in such specifications the Merged Entity may nevertheless be expected to gain some revenue synergies due to higher quality, for example due to reduced churn.

14.185 With regard to the second of these possibilities, we noted that Ofcom expressed concern that there was a material risk that the Parties had a commercial incentive to retain fewer sites in mid and low traffic areas than set out in the JBP.[2057] Ofcom noted the Parties' arguments as to why the Merged Entity would retain sites in low and mid traffic areas[2058] but considered that they had to be balanced against the relatively low usage on sites in these areas, which indicated that relatively few customers would face detriment should those sites be removed, and that, in the long run, the Parties could potentially have an incentive at some point to achieve considerable cost savings by decommissioning more of the sites in these areas while still meeting any coverage obligations.[2059] We took this point into consideration in our assessment of whether, and how far, rivalry-enhancing efficiencies would be likely to be realised.

Impact on VMO2

14.186 The Parties' projections, and our analysis above, assume the implementation of Beacon 4.1 (including the reduction in the Merged Entity's spectrum due to the transfer to VMO2 if the Merger goes ahead and Ofcom consent to the spectrum transfer is obtained).[2060] The Parties submitted that the implementation of Beacon 4.1 will lead to an increase in the quality of VMO2's mobile network if the Merger goes ahead compared to the counterfactual.[2061]

14.187 The Parties stated this increase in VMO2's quality had three elements:

[2056] Annex 3 to the Parties' response to the AIS and working papers.
[2057] Ofcom, response to the CMA's 19 April 2024 letter.
[2058] The Parties' arguments were broadly that customers valued coverage in these areas; that BTEE had better network coverage in these areas; that incentives were asymmetric in favour of retaining coverage where customers currently used it because removing sites which provided coverage to existing customers would have a strong negative reputational effect; and that the densification would deliver new/better coverage in areas where people lived and went.
[2059] Ofcom, response to the CMA's 23 July 2024 letter.
[2060] Vodafone internal document.
[2061] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.

(a) A sale of spectrum licences from the Merged Entity to VMO2, enabling VMO2 to increase capacity and performance throughout the UK;

(b) The ability to [✂] in MORAN areas with VMO2 being able to access [✂] as sites are upgraded by the Merged Entity in the West and by VMO2 in the East; and

(c) Subject to the ability of the Merged Entity to gain consent from third party multi-site providers, the ability to use 3UK sites in the MORAN areas to densify VMO2's network. [2062]

14.188 VMO2 agreed with this. In its response to our Provisional Findings, VMO2 said that the Beacon 4.1 Agreements, together with the Merger, provided a credible path forward for the Parties and VMO2 to meet the significant investment challenges faced by telecoms operators in relation to 5G and beyond.[2063] VMO2 added that the Merger would transform VMO2's network capacity and quality, making it a stronger rival.[2064] In particular, VMO2 submitted that:

(a) In relation to the spectrum transfer, it had concrete plans to make use of the newly acquired spectrum, [✂], and had agreed provisions to incentivise the Merged Entity to release the spectrum as quickly and efficiently as possible. Its additional [✂] of spectrum represented an increase of [✂]% in its spectrum assets; and with such a substantial increase in its spectrum and a committed plan to deploy this spectrum, its customers would benefit from a major upgrade in network capacity, with over [✂]% more network capacity by 2029.[2065]

(b) The Merger and Beacon 4.1 Agreements would bring forward the rollout of 5G SA and associated economic benefits. The consolidated work packages created efficiencies for VMO2 in network deployment and operations, requiring both it and the Merged Entity to significantly [✂] delivery volumes, with [✂]. The net effect of having a consolidated program of works was to bring forward site upgrades, delivering additional capacity significantly in advance of when it would otherwise have been rolled out absent the Merger.[2066]

(c) The Beacon 4.1 Agreements also provided a process for VMO2 to commit to join additional 3UK sites. This would give VMO2 the opportunity to access around [✂]% more sites in MORAN areas, compared to the current Beacon site grid. There were strong financial incentives on the Merged Entity to ensure that such sites could be accessed by VMO2, together with obligations

[2062] Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
[2063] VMO2 response to the Provisional Findings, 4 October 2024, paragraph 1.2.
[2064] VMO2 response to the Provisional Findings, 4 October 2024, paragraph 3.10.
[2065] VMO2 response to the Provisional Findings, 4 October 2024, paragraph 3.10-3.11.
[2066] VMO2 response to the Provisional Findings, 4 October 2024, paragraph 3.13.

on the Merged Entity. Based on the [✂] expected to access at least [✂] of these sites, though this could increase over time.[2067]

14.189 VMO2 added that the efficiencies from the consolidated work packages were accentuated by the spectrum transfer, as VMO2 and the Merged Entity would have many common bands and would thus be able to benefit from similar network equipment deployment. The Merged Entity had strong incentives to achieve its own synergies from integrating the VUK and 3UK networks, and VMO2 would be able to benefit from this and thus achieve greater certainty of its ability to add capacity quickly to the existing Beacon grid. By unlocking cost-efficient roll-out, the Beacon 4.1 Agreements were a key enabler of 5G SA rollout. One of the key features of 5G SA was that it would enable VMO2 to use its spectrum more efficiently. This meant that for each MHz of spectrum deployed on a site, VMO2 would be able to support more customers and traffic, thereby further increasing the amount of capacity available on the market.[2068]

14.190 VMO2 also submitted that its most recent three-year mobile network investment plan, presented to its shareholders on 1 November 2024, compared investment with and without the Merger and spectrum transfer. Its plans, if the Merger and spectrum transfer went ahead, involved [✂].[2069]

14.191 Ofcom told us that the Merger (assuming Beacon 4.1 and delivery of the full JNP) would, in the mid-term, result in a notable improvement in VMO2's network quality, likely similar to that which is expected to result for the Merged Entity and, in the long term, competitive pressures would be expected to incentivise VMO2 to invest in its network quality. Ofcom said that this was for a number of reasons. Firstly, [✂]. Secondly, [✂]. Finally, [✂].[2070]

14.192 We note that on a number of measures and according to competitor views, VMO2 has the lowest network quality of the UK MNOs. VMO2's internal documents suggest that [✂].[2071]

14.193 We consider that the spectrum transfer to VMO2 pursuant to Beacon 4.1 is likely to occur within the short- to medium-term and is likely to lead to rivalry-enhancing network quality improvements. We also consider that the Beacon 4.1 Agreements facilitate VMO2's expansion of its number of sites, which will also contribute to its network improvement. The extent of this improvement will, however, depend on the extent of VMO2's network densification, which in turn depends to some extent on the extent of the Merged Entity's network densification, ie on whether the full JBP is implemented.

[2067] VMO2 response to the Provisional Findings, 4 October 2024, paragraphs 1.2 and 3.10 to 3.13.
[2068] VMO2 response to the Provisional Findings, 4 October 2024, paragraphs 3.14 to 3.15.
[2069] VMO2 response to the CMA's RFI.
[2070] Ofcom, response to the CMA's 1 October 2024 letter.
[2071] For instance, VMO2 internal documents.

Merger specificity

14.194 In line with CMA guidance (CMA129), we considered whether the claimed efficiencies are reliant on the Merger or whether they would be brought about by other means.[2072]

14.195 We considered the following alternative means of achieving the potential merger efficiencies:

(a) Sale of VUK's 1800MHz spectrum to 3UK.

(b) A further network sharing agreement or network-only merger.

14.196 For the reasons set out below, we do not consider the efficiencies in the JBP would be likely to be brought about by other means.

Sale of VUK's 1800MHz spectrum to 3UK

14.197 As noted above (see paragraph 14.25(b)), the Parties submitted that they intend to use spectrum sharing, ie deploying VUK's 1800MHz block on 3UK's network rather than VUK's network, to reduce congestion on 3UK's network in the short term (ie prior to network integration). They stated that this would increase the 4G capacity available to subscribers with 3UK SIMs, reducing congestion on those sites.[2073]

14.198 We considered whether, absent the Merger, the benefits of transferring the 1800MHz spectrum on to 3UK's network would likely be achieved via a sale of the relevant spectrum to 3UK (with Ofcom's approval).

14.199 However, Vodafone told us [✂].[2074] Moreover, as noted above in relation to trading of C-band spectrum (see paragraph 14.118), spectrum trading generally has been limited, possibly because of its strategic value to holders.

14.200 In any event, even if there was a sale of the 1800MHz spectrum band, it would only bring about a small part of the potential merger efficiencies (because it would not bring about any efficiencies associated with MOCN or full network integration).

A further network sharing agreement or network-only merger

14.201 We also considered whether a further network sharing agreement or network-only merger would be an alternative means of achieving the potential merger efficiencies.

[2072] CMA129, paragraph 8.16.
[2073] Parties' response to the CMA's s109 notice.
[2074] Annex 3 to the Parties' response to the AIS and working papers.

14.202 The Parties are currently members of different network sharing agreements, so they could not just join the same network sharing agreement. Ofcom said that, generally, active network sharing enabled MNOs to make savings, compared to passive sharing only, but tended to compromise MNOs' flexibility and that this had led to some reduction in active network sharing (especially via MBNL).[2075] Taking these points into consideration, we find that a further network sharing arrangement would not be likely to arise.

14.203 We next considered the possibility of an additional agreement involving a joint venture between VUK and 3UK at network level (**NetCo**) that would participate in Beacon in a similar way to the Merged Entity and generate similar efficiencies to the Merged Entity while preserving some, but not all, of the rivalry existing in the counterfactual.

14.204 In relation to a NetCo, Ofcom told us that it had not come across a model that was successful (across a large number of countries) and, in light of this, did not consider NetCo to be a solution that worked.[2076]

14.205 The Parties similarly said that they were only aware of a very small number of NetCos currently operating anywhere in the world and none following the model we had posited.[2077]

14.206 The Parties further submitted that a NetCo scenario was neither realistic nor a viable alternative to the Merger. This was for the following reasons:

(a) A NetCo would incur higher network costs and therefore generate lower network efficiencies than the JBP. This was because VUK's and 3UK's independent retail businesses would need to retain ownership and control of separate core networks to maintain separate management of their respective customer bases' traffic;[2078] this would additionally mean they would need to maintain other elements of their networks associated with the core (including the IP transport network that transports data between the core and the internet, and the data centres that host the core network) as well as to employ the technical staff that are responsible for that maintenance; and this would create additional overheads.[2079]

(b) Under Beacon, certain costs are shared equally between VUK and VMO2, and would be shared equally between the Merged Entity and VMO2 post-Merger. However, under a NetCo scenario, there would effectively be three parties to the Beacon arrangement (3UK, VUK and VMO2). To maintain the current arrangement of equal cost-sharing among all operators (which is

[2075] Ofcom email.
[2076] Ofcom email.
[2077] Annex 3 to the Parties' response to the AIS and working papers.
[2078] Annex 3 to the Parties' response to the AIS and working papers.
[2079] Annex 3 to the Parties' response to the AIS and working papers.

likely to be the only commercially acceptable model for VMO2), the Parties would need to agree to meet two-thirds of the Beacon costs, a significant increase relative to the Beacon-related costs that would be incurred by the Merged Entity.[2080]

(c) NetCo's use of MBNL sites [✂]. [✂].[2081]

(d) As independent competitors at a retail level, neither VUK nor 3UK would want to allow the other Party to use their network assets to gain a competitive advantage ahead of the jointly-funded deployment. This would reduce the incentive to deliver the Day 1 benefits associated with MOCN and spectrum sharing in a NetCo.[2082]

(e) Under a NetCo scenario, neither VUK nor 3UK could lay claim to having the 'best network' since the other Party's network would be just as good. This parity between VUK and 3UK would dilute the value of the 'best network' message and make it harder for either Party to 'leapfrog' BTEE in network perception or market share. This would reduce the revenue synergies associated with the 'best network' claim, which under the JBP is predicated on the Merged Entity exceeding BTEE as the single 'best network'.[2083]

(f) Differences in the Parties' retail strategies would undermine their ability to agree to new investments which would further reduce the availability of revenue synergy benefits compared to the Merged Entity. In particular, 3UK's FWA offering requires significant amounts of network capacity. In a hypothetical NetCo scenario, VUK would be highly unlikely to agree to allow 3UK to use a substantial proportion of the joint network's capacity for FWA unless 3UK also assumed a corresponding share of the network costs because the FWA revenues would exclusively accrue to 3UK. It would therefore be challenging to reach any agreement on this and there would be a high likelihood that any forecast revenue benefits from FWA would fail to materialise.[2084]

(g) The existence of separate and wholly-owned retail businesses would mean that it would not be possible to determine *ex ante* how future revenue synergy benefits of the JBP would flow through to VUK and 3UK shareholders. In other words, the Parties would not be able to contract *ex ante* over the future distribution of NetCo benefits which would be uncertain.[2085]

[2080] Annex 3 to the Parties' response to the AIS and working papers.
[2081] Annex 3 to the Parties' response to the AIS and working papers.
[2082] Annex 3 to the Parties' response to the AIS and working papers.
[2083] Annex 3 to the Parties' response to the AIS and working papers.
[2084] Annex 3 to the Parties' response to the AIS and working papers.
[2085] Annex 3 to the Parties' response to the AIS and working papers.

14.207 We also considered an alternative involving deeper integration at network level whereby one Party (Vodafone) would own the network but both Parties would continue to operate separately and compete at retail level. This would mean 3UK's retail business would essentially become an MVNO. CK Hutchison said [✂]. [✂]:

(a) [✂];

(b) [✂];

(c) [✂]; and

(d) [✂].[2086]

14.208 While we do not necessarily agree with all the points made by the Parties, taking all the considerations set out above in the round, our view is that we do not consider it likely that absent the Merger the Parties would establish a NetCo.

Our overall assessment

14.209 As set out in the earlier chapters of this report, before consideration of any potential countervailing factors, we have found that there is scope for an SLC as a result of the Merger in two markets: the retail market and the wholesale market.

14.210 In particular, we have concluded that the loss of rivalry resulting from the Merger at the retail level is likely to lead to price increases, or see customers get a reduced service such as smaller data packages in their contracts. We have also concluded that the loss of rivalry resulting from the Merger at the wholesale level is likely to have a negative impact on the ability of MVNOs that buy services from MNOs such as VUK and 3UK to compete in the retail market. The Merger would reduce the number of MNOs from four to three likely making it more difficult for MVNOs to secure attractive competitive terms, which would reduce their ability to compete strongly for retail customers.

14.211 In order for the CMA to find there are rivalry-enhancing efficiencies which prevent SLCs, the CMA must be satisfied that the cumulative criteria set out under the headings below are met. Below we set out our overall assessment of the rivalry-enhancing efficiency claims and give our conclusion.

Criteria 1: Rivalry-enhancing in the relevant markets

14.212 As noted earlier in this chapter, rivalry-enhancing efficiencies must enhance rivalry in the supply of those products where an SLC may otherwise arise: any merger efficiencies must be expected to increase competition to offset any lessening of competition that would otherwise arise from a merger. To do this, they must be

[2086] Annex 3 to the Parties' response to the AIS and working papers.

likely to strengthen the ability and incentive of the merged entity to act pro-competitively for the benefit of consumers.

14.213 We accept that in principle the claimed rivalry-enhancing efficiencies could be rivalry enhancing, for the reasons set out earlier in this chapter.

14.214 First, the Merged Entity may have more sites and more spectrum than the networks of each Party individually. Because network capacity is a function of the amount of spectrum deployed multiplied by the number of sites, increasing both the number of sites and the amount of spectrum deployed on them will have a 'multiplicative' effect on the Merged Entity's network capacity compared to the sum of two standalone networks, potentially increasing the Merged Entity's capacity compared to the standalone networks.[2087] Similarly, the transfer of spectrum to VMO2 and any increase in VMO2's sites due to Beacon 4.1 increases VMO2's capacity.[2088] Such increases in capacity give the Merged Entity and VMO2 an incentive to provide a better quality of service, and/or to fill that capacity by making more attractive offers to customers,[2089] and therefore in principle enhance rivalry.

14.215 Second, in the longer term, this 'multiplicative effect' may also mean there is a reduction in the unit cost of expanding capacity in response to increased demand as the Merged Entity and VMO2 can deploy more spectrum on their networks (for example through adding more sites or new technology), and therefore achieve a larger capacity uplift for a given spend, than in the counterfactual. Such reductions in the unit cost of capacity potentially give the Merged Entity and VMO2 an incentive to provide a better quality of service and/or lower prices, and therefore in principle also enhance rivalry.

14.216 In its response to our Provisional Findings, BTEE disagreed that the claimed efficiencies would enhance rivalry in relation to the core parameters of competition impacted by the Merger. This was for two reasons. First, BTEE submitted that we had found that price is the most important parameter of competition and that many consumers would not be willing to pay more for higher network quality. BTEE submitted that we had also confirmed that the claimed efficiencies will have no impact on pricing and that, as a result, the efficiencies in question cannot offset effectively the scale of harms we had identified.[2090] BTEE also submitted that given that the Merged Entity will hold substantially greater capacity than its rivals, the Merged Entity's strategic incentives were likely to be best served by restricting, not expanding, capacity in order strategically to maintain higher prices post-Merger. Second, BTEE did not consider that the Merger would lead to a

2087 The extent of the increase in capacity compared to the sum of the standalone networks will depend on the extent of the Merged Entity's site rationalisation and any spectrum transfer; and also the extent to which the Merged Entity deploys its spectrum across its sites and its spectral efficiency compared to the standalone networks in the counterfactual.
2088 See paragraph 14.197
2089 See paragraphs 14.111 and 14.116.
2090 BTEE response to the provisional findings, 4 October 2024, paragraphs 5.6.

competitive response from BTEE in the form of greater investment in its own network.[2091]

14.217 Because quality remains, along with price, an important parameter of competition, we consider that these points (even if correct) do not prevent the claimed efficiencies from being rivalry enhancing in principle but instead relate to the likelihood and sufficiency of the claimed rivalry-enhancing efficiencies as against the SLCs identified. We therefore consider them under those headings below.

14.218 We therefore consider that the rivalry-enhancing efficiencies claimed by the Parties could in principle increase rivalry (compared to the situation in the absence of such rivalry-enhancing efficiencies) in each of the Markets.

Criteria 2: Likelihood

14.219 We have considered whether the rivalry-enhancing efficiencies claimed by the Parties are likely to be realised post-Merger. This means that the evidence supporting the rivalry-enhancing efficiencies needs to be verifiable.[2092] We have considered both the ability and the incentive of the Merged Entity to implement the JBP.

14.220 As noted above, assessing the Parties' rivalry-enhancing efficiency claims requires us to deal with a considerable amount of uncertainty, given the long time period over which it is claimed some will be realised (ten years or more), the scale of each Party's current operations (which would need to be integrated), the extent of the claimed additional investment and the potential uncertainty as to how competitors and customers would respond.[2093] We note that, as set out in the CMA's guidance (CMA129), usually the longer the time period necessary for efficiencies to be realised, the greater the level of doubt that efficiencies will be realised at all.[2094]

Ability to deliver the full JBP

14.221 As outlined earlier in this chapter, we consider that technical and practical considerations are unlikely to materially impact the ability of the Merged Entity to implement the JBP.

14.222 We recognise that the network improvement plans in the JBP involve the consolidation and upgrading of existing mobile sites, to rationalise down rather than scale up the total number of sites held by the Merged Entity. This process contrasts with the identification of locations for and subsequent construction of

[2091] BTEE response to the provisional findings, 4 October 2024, paragraphs 5.1-5.20.
[2092] CMA129, paragraph 8.13.
[2093] CMA, Issues Statement, 2 May 2024, paragraph 48.
[2094] CMA129, paragraph 8.12.

new sites, which would be required for site footprint expansion by each of the Parties absent the Merger, and which is likely to be significantly more practically challenging.

14.223 On this basis, while recognising there are some delivery risks to the JBP, overall, we consider that the Parties are likely to have the ability to deliver the JBP (or a plan that is broadly comparable).

Incentive to deliver the full JBP

14.224 As noted above, the Parties can agree to amend the JBP both before and after closing.[2095] Accordingly, we have focused our assessment on the Parties' commercial incentives post-Merger to implement the full JBP.

14.225 We consider that the commercial strategies of the Merged Entity would respond dynamically to future market circumstances (including the reductions in competition we have identified) and, as noted above, that there is a high level of uncertainty inherent in an investment plan involving a time horizon beyond ten years. In particular, we consider that the Merged Entity would in reality re-assess the pace and prioritisation of the integration and upgrade programme in light of future market circumstances, which may differ from what they project currently in the JBP.

14.226 This uncertainty, and the ability of the Parties to re-assess (and potentially reduce) the scale of network investment is compounded by the fact that the Parties may have the commercial incentive to retain a lower number of sites than claimed in the JBP given the cost savings that can be realised through site decommissioning, even taking into account that the Parties will not want to decommission sites in the short term only to have to build them back up a few years later. This commercial incentive may be particularly strong in low and mid traffic areas, where the relatively low usage on sites indicates that relatively few customers would face detriment should these sites be decommissioned (and relatedly there may be less impact on the Parties' ability to claim 'best network' status), and Ofcom has raised concerns with us in this respect.[2096]

14.227 We also consider that the Parties may have a similar incentive to reduce the extent of spectrum deployed (compared to the JBP) to realise further cost savings, potentially across all types of sites but particularly in low and mid traffic areas. This is supported by evidence of their current standalone network investment strategies, whereby the full extent of their spectrum holdings are not deployed, even in congested areas.[2097]

[2095] Annex 3 to the Parties' response to the AIS and working papers.
[2096] See above.
[2097] Ofcom response to the CMA's 19 April 2024 letter.

14.228 The Parties have provided financial modelling which they claim demonstrates that the JBP is the most commercially rational and profit-maximising network plan for them to adopt post-closing. Specifically, as noted above, the Parties' modelling suggests that delivery of the JBP has a higher commercial return (in terms of NPV) than a so-called hypothetical 'scaled-back scenario' (as specified by the Parties and prepared for the purposes of the CMA's merger inquiry) involving the retention of fewer sites and reduced spectrum deployment (and therefore lower costs). Conceptually, we consider that the binary comparison of a single 'scaled back scenario' and the JBP fails to capture the myriad commercial strategies which the Merged Entity may be incentivised to pursue (even if they were to pursue a 'best network' marketing strategy), particularly given the dynamism and uncertainty of future market conditions over the time period envisaged by the JBP.

14.229 In any case, we also do not consider this modelling to be conclusive, and therefore have given it relatively little weight in assessing the Parties' post-Merger incentives. In particular, sensitivities with alternative assumptions that we consider reasonable reduce the difference between the JBP and SBS NPVs such that the full implementation of the JBP becomes substantially less commercially compelling.

14.230 Even in the Parties' own comparison of the JBP and the 'scaled-back scenario', the incentive to implement the JBP arises from the terminal value of the model (ie the value to the Merged Entity of the JBP post 2034). We consider that this reduces the model's probative value given the inherent uncertainty in predictions more than a decade out, the sensitivity of this conclusion to altered assumptions and the likely commercial desire to realise financial performance objectives in a timelier manner.

14.231 In their response to our Provisional Findings, the Parties submitted that we had not taken into account that the objectives of the Merger (involving a strategic repositioning of the Merged Entity as the best network nationwide) meant that the JBP was more than the sum of its parts; ie downgrading the JBP in one area would have a disproportionate impact on the expected returns because it meant that the Parties would lose the benefits of the best network claim, as rivals would be able to exceed the Merged Entity's network performance for some parameters.[2098] As set out above, we consider that there is a high level of uncertainty inherent in an investment plan involving a time horizon beyond ten years and that the JBP may consequently be altered. The issue of whether changing one element of the JBP (eg a less dense rural network) would be profitable depends on the network benefits and costs of that element, which are hard to know in advance. Additionally, for the reasons noted above in this section, it is not clear that changing one element of the JBP would necessarily prevent the

[2098] Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 3.8-3.11.

Merged Entity from claiming it has the 'best network' as a commercial and marketing strategy.

14.232 We therefore consider, on the basis of the available evidence, that the Parties are not likely to have the incentive to deliver the full JBP, and therefore the quantum of any rivalry-enhancing efficiencies is likely to be less than claimed by the Parties.

14.233 In its response to our Provisional Findings, BTEE agreed with our view that the Parties were not likely to have the incentive to deliver the full JBP, but for different reasons that we do not accept. As noted above, BTEE also submitted that the Merged Entity would likely control a large amount of capacity and hold a very substantial capacity advantage over its rivals; and that it would be likely to strategically hold back, ie 'hoard', some of that capacity, in particular spectrum, to undermine rivals' incentives to invest.[2099] We have considered the issue of spectrum and capacity asymmetry in Chapter 8.[2100] We note that BTEE's concerns about the Merged Entity strategically withholding spectrum were not shared by the Merged Entity's other rival (VMO2); and that we have not seen evidence of spectrum being strategically withheld despite the existence of substantial spectrum and capacity asymmetry in the past.

14.234 BTEE also submitted that the Merged Entity would be able, for example for technology deployed in the 3.5 GHz range, to turn on its combined capacity at existing sites remotely in a very short space of time (potentially overnight).[2101] However, our understanding is that the Merged Entity would make savings from not deploying all its C-band spectrum by re-using more existing equipment and reducing the cost of upgrades,[2102] and, if this was the case, the spectrum could not then be turned on rapidly. Moreover, if the Merged Entity forewent such savings, we consider its incentive would be to turn on the spectrum as soon as possible in order to improve its quality and gain additional customers.

Rivalry-enhancing efficiencies which we do consider are likely

14.235 Although we consider that the Parties are not likely to have the incentive to deliver the full JBP, we do consider that the Parties do have the incentive to deliver some of the claimed rivalry-enhancing efficiencies as a result of the Merger.

14.236 While the CMA must consider the scale of any rivalry-enhancing efficiencies in order to weigh them against the anti-competitive effects of the Merger, it is not possible in this case (and it is not required) to quantify precisely the extent of the anti-competitive effects and any rivalry-enhancing efficiencies.[2103] In particular, the

2099 BTEE response to the provisional findings, 4 October 2024, paragraphs 3.15-3.16, 5.8 and 5.25.
2100 See Chapter 8.
2101 BTEE response to the provisional findings, 4 October 2024, paragraph 3.16.
2102 Parties' submission, The pro-competitive effects of the Vodafone/Three merger.
2103 CMA129, paragraphs 2.7, 2.21 and 2.22 and *Tobii v CMA* [2020] CAT 1, paragraph 393.

case law and the CMA's guidance are clear that in assessing the evidence, the CMA is not required to make precise predictions about the future.[2104] The CMA is therefore not required to, and we have not sought to, precisely quantify the extent of the likely rivalry-enhancing efficiencies (for example in terms of the Merged Entity's site numbers or the level of spectrum deployed).

14.237 However, we consider that based on the available evidence, the Merged Entity would have the incentive (and ability) to deliver the so-called 'Day 1' benefits of a combination of MOCN and deployment of additional spectrum through sharing of the Parties' combined holdings (for example in relation to 1800MHz spectrum). In addition, we also consider that some degree of site densification relative to either Party's standalone networks is likely, particularly given the inevitability of network integration, although it is not possible to quantify precisely the likely extent.

14.238 We also consider that the spectrum transfer agreed through Beacon 4.1 is likely to be realised[2105] for several reasons. Firstly, Beacon 4.1 has already been executed; secondly the spectrum divestment, [✂];[2106] thirdly, the spectrum trade is in effect a structural divestment rather than an ongoing obligation; and finally, the spectrum divestment is part of a wider package of contractual measures intended to re-align the Merged Entity's and VMO2's long-term incentives to cooperate in relation to Beacon so as to facilitate network integration of the Merged Entity.

Criteria 3: Timeliness

14.239 The CMA assesses whether claimed efficiencies are to be realised (and the resultant rivalry-enhancing effects felt) within the same timeframe as the CMA has adopted in the rest of its analysis.[2107]

14.240 As noted above, usually the longer the time period necessary for efficiencies to be realised, the greater the level of doubt that efficiencies will be realised at all.[2108] At the same time, we recognise that investment in mobile networks requires a long-term perspective, particularly with regard to the proposed integration of two of the four mobile networks in the UK, as is the case here.

14.241 We consider that the claimed MOCN and spectrum transfer benefits are likely to occur shortly after closing given that they will generate benefits for the Merged Entity and are relatively easy to implement. We consider that at least some degree of network integration (which will take place over time but start once the Merger completes) would also be timely, particularly given the inevitability of network

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[2104] CMA129, paragraph 2.21 and *Intercontinental Exchange, Inc. v CMA and Nasdaq Stockholm AB* [2017] CAT 6, paragraph 246.
[2105] See above, and also the summary in relation to Beacon in Chapter 10.
[2106] This would involve a competition assessment by Ofcom.
[2107] CMA129, paragraph 8.12.
[2108] CMA129, paragraph 8.12.

integration, although as noted above it is not possible to quantify precisely the likely extent.

14.242 We also consider that the likely rivalry-enhancing network quality improvements of the spectrum transfer to VMO2 pursuant to Beacon 4.1 are likely to occur within the short- to medium-term. We note the [✂] and consider that VMO2 has strong financial and strategic incentives to [✂].

14.243 We therefore consider, on the basis of the available evidence, that the rivalry-enhancing efficiencies that are likely to be realised as a result of the Merger would be sufficiently timely.

Criteria 4: Sufficiency

14.244 As set out above, we consider that the Parties are not likely to realise the full extent of the rivalry-enhancing efficiencies claimed. This is because we consider they are not likely to be commercially incentivised to deliver the full JBP.

14.245 However, we have concluded that the Merger would be likely to give rise to some rivalry-enhancing network quality improvements by the Merged Entity and VMO2 which do represent rivalry-enhancing efficiencies. We have assessed whether the rivalry-enhancing efficiencies which we have found are likely to result from the Merger would be sufficient to countervail the adverse competitive effects we have identified. In doing so, we have had regard to all the available evidence (both quantitative and qualitative) in order to form an informed view on whether the likely scale of efficiencies is sufficient to prevent any SLC. We consider the scope and extent of the key quality improvements resulting from the technical changes outlined above in more detail below. This should be read in conjunction with Appendix G, which provides a more detailed assessment of the likely standalone capacity and congestion position of the Merger Parties.

14.246 We also consider that the spectrum transfer agreed through Beacon 4.1 would result in material network quality improvements and an increase in capacity (and lower future costs of capacity) for VMO2, making it a stronger competitor for wholesale and retail customers, which would further increase rivalry.

14.247 We consider that these improvements by the Merged Entity and VMO2 would in turn likely elicit a competitive response from BTEE, and there would then likely be further responses by each of the MNOs to the actions of the others. In particular, we have identified evidence that suggests [✂] believes that if the Merged Entity were to challenge [✂]. Based on the evidence that we reviewed, [✂] would consider [✂].[2109]

[2109] See Appendix C.

14.248 In its response to our Provisional Findings, BTEE agreed with our view that the claimed efficiencies would not be sufficient to offset the identified provisional SLCs. BTEE also said it would not make commercial sense for it to increase its investments post-Merger. BTEE said that given the spectrum asymmetry post-Merger its only route to add capacity would be to build new sites, which was expensive and time-consuming, and therefore exposed BTEE to the risk of strategic use of excess capacity by the Merged Entity, [✂]. BTEE added that, without this, the Parties' claimed efficiencies simply could not be rivalry-enhancing in the way they suggested, such that customers would benefit from lower incremental costs and/or improved network quality vis-à-vis the counterfactual.[2110]

14.249 We do not agree with BTEEs specific reasons for concluding that the claimed efficiencies would not be sufficient to offset the identified provisional SLCs. In particular, we note that:

(a) Increased investment is not the only response available to BTEE to the Merged Entity providing higher network quality than the Parties' standalone networks. The responses available to BTEE also include reducing its prices relative to the Merged Entity and VMO2 to offset the improvement in the quality of their networks. Other responses available include product development and marketing initiatives; for example, a BTEE Board update on the Merger [✂].[2111] Therefore, even if it would not be profitable for BTEE to increase its investments, it does not follow that there would be no pro-competitive response.

(b) We do not consider that BTEE's only route to adding capacity would be to build expensive new macro sites. At many sites, BTEE has the option of deploying C-band spectrum if it has not done so already, or of deploying additional spectrum in other bands (particularly mid-band spectrum). It may also have the potential to upgrade equipment at sites with new equipment, achieving more capacity for the spectrum deployed. It may also be able to increase capacity in high-traffic areas, where it has already deployed all its spectrum, by adding micro sites which are less expensive than macro sites;[2112] or by acquiring additional spectrum at future auctions. For example, we note that Ofcom is preparing for an auction of an additional 25 MHz of SDL spectrum at 1.4 GHz, see Chapter 8, and considering how best to make upper 6GHz spectrum available for mobile use alongside Wi-Fi use.[2113]

[2110] BTEE response to the provisional findings, 4 October 2024, paragraphs 5.9-5.20 and 5.23.
[2111] See Appendix C.
[2112] Ofcom is currently making plans to auction mmWave spectrum which will enable licensees to carry very large amounts of traffic at micro sites (see Ofcom, mmWave spectrum auction moves a step closer, accessed by the CMA on 28 November 2024). BTEE has noted small cells (micro sites) as an alternative to increasing capacity on macro sites, although its view is that this is a less efficient alternative – see BTEE, Response to the CMA's RFI.
[2113] See Ofcom https://www.ofcom.org.uk/spectrum/innovative-use-of-spectrum/vision-for-sharing-upper-6-ghz-spectrum-between-wi-fi-and-mobile/ accessed by the CMA on 28 November 2024.

(c) In any case, we do not accept that it would be necessarily be unprofitable for BTEE to deploy additional macro sites compared to the counterfactual, for example in high-traffic areas where it has already deployed all its spectrum. We consider that the profitability to BTEE of adding macro sites depends on the number of additional BTEE customers it can acquire and retain and the impact on its prices. In the counterfactual, we would expect BTEE to continue to have the highest quality network for at least some period of time (and potentially on an ongoing basis) and the impact of BTEE making further quality improvements as a result of adding macro sites may be relatively limited. By contrast, if the Merger goes ahead and the network quality of the Merged Entity and VMO2 improve, the return to BTEE of adding macro sites may be greater as it would limit the loss of customers to the Merged Entity and VMO2 and reduce the need for BTEE to reduce its prices.

14.250 We also do not accept that the Merger would put BTEE at such a disadvantage to the Merged Entity and VMO2 in regard to capacity and spectrum as BTEE suggests. For example, in relation to VMO2, BTEE currently has 44% more spectrum; after the Merger and completion of the spectrum transfer from the Merged Entity, it will still have more spectrum than VMO2, albeit only [✂]% more.[2114] BTEE also currently has about [✂]% more macro sites than VMO2 and, while Beacon 4.1 enables VMO2 to add macro sites, [✂].[2115]

14.251 Therefore, taking account of the range of possible responses in the round, including price reductions, product development and marketing initiatives and new investment, we believe that BTEE would likely respond pro-competitively to the efficiencies we have found likely to arise.

14.252 Overall, we have concluded that the Merger would be likely to give rise to some rivalry-enhancing network quality improvements by the Merged Entity and VMO2 which do represent rivalry-enhancing efficiencies. However, the greater the expected adverse effect of a merger, the greater the expected efficiencies must be to offset the adverse effect. For the reasons set out below, we do not consider that, by themselves, these (more limited) rivalry-enhancing efficiencies that are likely to result from the Merger would be sufficient to countervail the adverse competitive effects identified. Our analysis is set out under the sub-headings below.

[2114] See Figures 5.4 and 5.6.
[2115] Based on current data, BTEE has [✂]% more macro sites than VMO2 (BTEE response to the CMA's RFI; VMO2 response to the CMA's RFI 6. VMO2's 3 year plan envisages about [✂] additional sites as a result of Beacon 4.1 (VMO2's response to the CMA's RFI [✂]. [✂].

Retail market

Key competitive parameters

14.253 In carrying out our sufficiency assessment, we have had regard to our findings as to the factors that matter to UK customers when purchasing mobile telecommunications services. As noted already, we found that price and quality are the most important competitive parameters, with price the more important parameter of the two. Customers require a minimum level of quality, and network quality related parameters play an important role in customer decisions, but we found they are less important than price.[2116]

14.254 However, at the same time, customers also told us that they would react strongly to a deterioration in network quality: 60% of 3UK customers and 65% of VUK customers were quality-marginal (ie they would switch if the network they were using was 'a bit less reliable').[2117] We also found in our econometric analysis some willingness to pay for aspects of network quality.[2118]

14.255 Finally, we recognise the possibility that customer attitudes may evolve as the mobile industry develops;[2119] ie it is possible that a different valuation of price and quality parameters may result over time. We noted that Ofcom had concluded that it expects the quality of mobile services to become 'more important as customers' dependence on mobile services grows and their needs evolve'.[2120] In particular, Ofcom (and third parties) expect demand for mobile data to grow to meet changing customer needs, as greater use is made of data-hungry services (eg streaming, video calling, virtual and augmented reality) meaning that significant investments in mobile networks will be required to increase capacity and provide the network quality needed to meet customers' future connectivity needs.[2121]

Price

14.256 Our conclusion on the anti-competitive effects of the Merger in the retail market (see Chapter 8), as set out in more detail in the chapter above, is that the Merged Entity – and its competitors – are likely to have incentives to raise prices or degrade non-price aspects of their offerings (including by reducing network investment). We have sought to estimate the likely impact of this on pricing using different economic techniques and carefully considered the robustness of our results. However, it is difficult to estimate the impact of a merger in this industry on

[2116] See Summary.
[2117] See Chapter 8.
[2118] See Chapter 8.
[2119] See Summary.
[2120] See Chapter 8.
[2121] See Chapter 5.

retail pricing with precision. We have therefore considered our economic estimates in the round to inform our view about the likely impact of the Merger.

14.257 Our quantitative economic analyses consistently show that the Merger is likely to have a material upwards impact on retail prices. Our analysis of the GUPPI, presented in Appendices D and E suggests significant pricing pressure of between [5-10]% and [10-20]% for 3UK and between [0-5]% and [5-10]% for VUK. Our merger simulation predicts that the Merged Entity's prices would rise by 5.5% for 3UK and 2.6% for VUK on average. This, along with predicted price rises from the other operators, would lead to a harm to UK consumers which is equivalent to at least £216 million per year.[2122]

14.258 This analysis does not account for the loss of competition arising from the Merger on the wholesale market. Faced with less competitive wholesale terms, MVNOs would be less able to compete in the retail market, particularly in the low-cost segment where they tend to operate. This would lead to greater price increases than already outlined from the direct loss of retail competition resulting from the Merger.

14.259 We consider these findings to be particularly significant given that, as outlined in our industry background (Chapter 5), the Parties collectively have over 27 million subscriptions in the UK that would be directly affected by any price rises, magnifying the consumer welfare impact. More broadly, for the reasons outlined above, we also predict some level of price increase likely to affect the retail market as a whole, which in 2023 comprised almost 90 million mobile phone subscriptions. Our analysis also suggests that the consumers that will see a particularly large fall in consumer welfare from higher prices have the lowest disposable incomes. We have particular concerns about the impact of the Merger on those customers least able to afford mobile services.

14.260 We note that the Parties argue that an increase in network capacity will result in a reduction in the incremental cost of capacity that will result in downwards pricing pressure. We have considered these arguments closely. At the outset, it is important to note that the increases in incremental capacity the Parties rely on for the basis of their claimed reductions in incremental cost of capacity assume the implementation of the full JBP which, as we outline above, we do not consider is likely. Any likely reduction in incremental costs of capacity is therefore necessarily less than the Parties claim.

[2122] In our Provisional Findings the CMA completed a sensitivity analysis to understand the impact of different assumptions on the estimated harm resulting from the Merger. We have updated this analysis. Results suggest that if the market power pre-merger is higher than in the CMA's econometric model (eg more in line with the market power implied by contribution margins) the harm would be over 80% higher than the £216 million estimate, even without accounting for the effect of the Merger on the wholesale market.

14.261 However, we do consider some increase in the network capacity of the Merged Entity is likely to result in the early years post-Merger (absent any potential remedy), and have in any case considered the evidence as to whether any reduction in incremental cost of capacity which is likely to result from the Merger is likely to be passed through to consumers in the form of lower prices, see above.

14.262 In relation to the retail market, we saw some evidence of 3UK and VUK taking account of traffic growth and capacity in pricing, for example in data allowances and the pricing of unlimited tariffs. This evidence was quite limited and, in light of this (and also because they assume full implementation of the JBP) we do not consider that we can use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which possible rivalry-enhancing efficiencies may reduce retail prices that could be set against any estimates of any adverse effects due to a loss of competition. More generally, we agree with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle give them an incentive to fill that capacity by making more attractive offers to customers. However, as already stated, we do not consider the full implementation of the JBP is likely; therefore, the increase in capacity would be less than the Parties have assumed.

14.263 In light of these points, we do not consider that the rivalry-enhancing efficiencies which are likely would lead to reductions in price that materially offset the price increases we have identified due to a loss of competition.

Network quality

14.264 We have also considered the likely overall impact of the Merger (absent any potential remedy) on network quality for UK consumers relative to the counterfactual.

14.265 As set out above, we consider that the Merger is likely to result in some level of network quality improvements. For example, we consider that MOCN and network integration is likely to potentially improve reliability, through a significantly less 'patchy' service for customers and provide some reduction in congestion. Similarly, spectrum sharing is likely to play a significant role in alleviating 4G congestion for 3UK. However, we also consider that the network quality improvements which would result relative to the counterfactual would be less than the Parties have claimed because we consider that the Parties' likely future standalone capacity and congestion position is not as severe as claimed.

14.266 In particular, as discussed in more detail in Appendix G, we consider that absent the Merger, both of the Parties' standalone networks are likely to deliver improvements in network quality (and customer experience) as compared to current performance, based on our review of the current business plans of both of

VUK and 3UK.[2123] Overall, we consider that – absent the Merger – both Parties would likely continue competing in broadly the same way they do now, including on network quality.

14.267 In this context we note that, for the reasons set out in detail in Appendix F, we have a number of serious concerns with the quality focused model prepared by Compass Lexecon (3UK's advisers) for the purposes of the Merger, which the Parties claim shows that the Merger will lead to a market-wide welfare gain of £1.8 billion per year (in 2030). We have placed no weight on this model and do not consider its results to be credible, including the £1.8 billion claim. See Appendix F for our critique of that model.

Extent of claimed capacity and congestion improvements

14.268 One of the Parties' core efficiency claims relates to the increase in network capacity which they claim would result from the Merger. As noted above, an increase in capacity can facilitate other quality improvements such as reducing congestion and increasing download and upload speeds.

14.269 However, for the reasons outlined already in this chapter, we also consider that the Parties overstate the likely future congestion on their standalone networks (and therefore to some extent the likely improvement flowing from the Merger). We consider that, on balance, the full extent of the Parties' claims of current high congestion on 3UK's network and forecast of future congestion on VUK's network are not supported by their internal documents, which in each case suggest they anticipate less congestion (and/or a more limited commercial impact from congestion) than they have claimed. We have not seen any evidence in the Parties' internal documents that VUK is [✂] congestion, as indicated in the Parties' modelling, or that 3UK is [✂] congestion levels that would materially weaken its competitive position.

14.270 We consider that 3UK has made progress in addressing congestion and network performance generally and is performing well relative to the other MNOs across a range of different metrics on third party network quality metrics (which reflect congestion along with other aspects of network quality). VUK also appears to have recently improved its congestion levels, and in internal documents it sees its [✂].

14.271 That said, we do consider that early MOCN and 1800 MHz spectrum sharing will have some impact on congestion. Specifically, MOCN will help address congestion in some areas where VUK is congested and 3UK is not and vice versa, and deployment of VUK's 1800 MHz spectrum on 3UK sites will help alleviate

[2123] See Chapter 8.

congestion on 3UK's 4G network in areas where 3UK is currently experiencing mid-band congestion.

14.272 We also consider that, to the extent it occurs, over time integration of the networks and deployment of spectrum through that process will increase network capacity, further reducing congestion. However, because we consider that the Parties will not be incentivised to deliver the full site investment and integration programme set out in the JBP, the full claimed benefits of the increases in capacity and reduction in congestion will necessarily not be realised, even if the Parties' own estimates of these were accepted. We also consider that – without the Merger – both of 3UK and VUK, on a standalone basis, are incentivised to continue to manage congestion at least as effectively as they do at the moment.

Extent of other claimed network quality improvements

14.273 In addition to the network capacity improvement claims, the Parties also claim that the Merger will result in rivalry-enhancing efficiencies from improvements in other aspects of network quality. We have considered the extent of these improvements in the round and set out our key findings relevant to the sufficiency assessment below.

14.274 First, the Parties claim that the Merger will lead to more reliable and consistent coverage through greater densification. We consider that the Merger is likely to potentially improve reliability, particularly in rural (but populated) areas and in buildings as a result of the greater number of combined sites. Even in areas where there is technically coverage, the distance from the site and obstacles such as buildings, trees and hills can affect the quality of the signal that the customer gets. The benefits of MOCN on reliability will reduce over time as the combined grid is rationalised. The impact of densification (ie the number of sites) in the longer term will depend on how many sites the Merged Entity retains, and we consider that the Merged Entity may have incentives to reduce the number of planned sites post-Merger, particularly in low to mid traffic areas.

14.275 Secondly, the Parties claim the Merger will lead to a significant increase in network coverage, reducing not-spots by 25%. As noted above, we recognise that an improvement in coverage represents a potentially rivalry-enhancing quality improvement. However, the Parties' standalone networks currently cover 81% (3UK) and 84% (VUK) of the UK's geography and their coverage of premises is considerably higher ([✂]% each for outdoor premises[2124]). We also note, like in relation to network capacity, that some improvement in the network coverage of both Parties in the counterfactual would be likely, particularly given that under the terms of the SRN, each of the four MNOs has committed to provide good quality

[2124] Which can be seen as a proxy for outdoor coverage of populated areas.

data and voice coverage to 88% of the UK landmass by 30 June 2024, and 90% by 31 January 2027. We note the Parties' KPI assumptions for their merger simulation analysis assume that the Parties' standalone 4G geographic coverage would be [✂]% (3UK) and [✂]% (VUK) in 2030, compared to [✂]% for the Merged Entity (if the JBP was fully implemented).

14.276 While we therefore understand that MOCN (and subsequently network integration – depending on the number of sites retained) would lead to some increase in geographic coverage, given the existing and future projected coverage of the Parties' standalone networks, this is likely to be in areas where there is limited use of mobile connectivity.

14.277 Thirdly, the Parties claim that the Merger will lead to a significant improvement in network latency and average speeds relative to the standalone scenarios. They submitted that the Merged Entity would be able to offer [✂]% of the UK population (in high traffic areas) the highest-quality 5G SA coverage by 2032 through its extensive C-band deployment. We note that these KPIs are based on the full implementation of the JBP and as set out above, we do not consider that the Merged Entity would be likely to deliver the full JBP.

14.278 The Parties submitted when the day 1 quality benefits of the Merger are incorporated into CMA's demand estimation (as modelled by average 4G download speed and coverage improvements) this would offset the retail SLC. Specifically, they model speed improvements by taking the mid-point of the observed pre-Merger 4G download speed values for VUK and 3UK from the OpenSignal data in a given TTWA and then assuming this mid-point increases by [✂]% post-Transaction.[2125] However, we note that:

(a) The [✂]% speed increase is an output of modelling by Compass Lexecon, which measures average 'maximum available' speed on the network and finds that this increases from around [✂] Mbps to around [✂] Mbps.[2126] This measure is described as 'the speed that would be achieved by a subscriber using a modern handset to perform a data-intensive application (equivalent to a customer performing an OOKLA speed test or downloading a very large file).'[2127] This is therefore a different measure to the average 4G download speeds experienced by 3UK and VUK customers in the CMA's demand estimation, which we consider more reliable.

(b) In addition, it is not clear how this very large (c.[✂] Mbps) increase in speed relates to the 'early years' actions set out by the Parties (see paragraph

[2125] Parties' response to the Provisional Findings, 4 October 2024 Annex 4, paragraph 3.41 and footnote 51.
[2126] Parties' submission, Further evidence on network efficiencies and associated customer benefits enabled by the Transaction.
[2127] Parties' submission, Further evidence on network efficiencies and associated customer benefits enabled by the Transaction.

14.27 above). The increase in 5G deployment described in the early years benefits applies to a relatively limited number of sites in Year 1 (through 5G MOCN sharing and site integration), and we understand that 4G MOCN and 1800 MHz sharing would not support speeds of this magnitude.

(c) We also note that the first year benefits described by the Parties in the FMN consist of: elimination of 25% of not-spots and reduced congestion from MOCN; improved performance on 3UK's 4G network benefitting at least 7 million customers from 1800 MHz sharing, and integration on around [✂] sites.[2128] While these are material benefits, we do not consider that they would deliver customer benefits of the magnitude implied by the Parties' modelling.

14.279 In view of these uncertainties, we consider it is appropriate to consider the early years benefits presented by the Parties in the round as part of our rivalry-enhancing efficiency assessment, rather than seeking to incorporate them into our demand estimation.

Conclusion

14.280 We therefore consider that the Merger is likely to result in some efficiencies which are rivalry-enhancing. However, on the basis of the evidence set out above, the increased rivalry from those efficiencies which are likely to be realised is not sufficient to offset the adverse impacts identified in relation to the Retail Market.

Wholesale market

14.281 A number of the same considerations outlined above in relation to the sufficiency of the likely rivalry-enhancing efficiencies relative to the retail market are relevant to our weighing of the sufficiency of the claimed rivalry-enhancing efficiencies against the anti-competitive effects we have identified in the wholesale market, particularly with regard to the extent of the likely price[2129] and network quality changes. In particular, we consider that, in light of our conclusions about the overall reduction of rivalry in the wholesale market from the Merger, pricing terms offered to MVNOs are likely to be less competitive in the short term, and that while some network quality improvements will result these are more limited than claimed by the Parties.

14.282 We also consider it appropriate to place weight on the views of MVNOs on the overall impact of the Merger (which we were able to directly obtain) not only in relation to the question of the anti-competitive effects in the wholesale market, but also the weighing of any relevant efficiencies. This is because, firstly, we consider

[2128] FMN.
[2129] However, we note that the GUPPI price index seeks to predict price changes at the retail level only.

that MVNOs have a strong technical and commercial understanding of the likely impact of the Merger given the business-to-business nature of their relationship with MNOs. Secondly, we received submissions from 9 of the 10 largest MVNOs, which collectively accounted for [90-100]% of all MVNOs' subscribers in 2023, ie a high proportion of retail customers supplied by MVNOs. Thirdly, we expressly sought MVNOs' views in relation to whether the Beacon 4.1 Agreements altered their view of the likely impact of the Merger, which the Parties claim to be a particularly important rivalry-enhancing efficiency in relation to the wholesale market.

14.283 Overall, eleven of the sixteen MVNOs we spoke to considered that the Merger would worsen competition. With regard to the impact of Beacon 4.1 specifically, out of seven MVNOs who had concerns before the agreements were entered into, six remained concerned despite the existence of the agreement. One large MVNO (Tesco Mobile, which is a joint venture with VMO2) told us that the agreement was a positive development, which it considered would result in the rebalancing of MNOs' spectrum holdings and an improvement of VMO2's network in terms of capacity and network quality.

14.284 We note again that the Parties submit that an increase in capacity will result in a reduction in the incremental cost of capacity, which will result in downwards pricing pressure, and we have carefully considered these arguments in the context of the wholesale market.

14.285 At the outset, it is important to again note that the increases in incremental capacity the Parties rely on for the basis of their claimed reductions in incremental cost of capacity assume the implementation of the full JBP, which as we outline above, we do not consider is likely. Any likely reduction in incremental costs of capacity is therefore necessarily less than the Parties claim and we make the below observations in that context. However, some reduction in the incremental cost of capacity is likely from the deployment of more spectrum even if, as we currently expect, the network capacity of the Merged Entity is less than under the full JBP; therefore, we have considered whether any such reduction is likely to be passed through to the benefit of wholesale customers.

14.286 We have considered the impact of incremental cost of capacity on bidding for wholesale contracts to supply MVNOs above, see above. We recognise that there is more evidence than for retail that any additional cost of capacity is taken into account in bidding based on the approach to pricing evident in the Parties' internal documents. However, while this evidence indicates that additional costs of capacity are taken into account, it does not establish that these costs are similar to the incremental costs of capacity estimated by the Parties; and nor does it indicate the effect on the price ultimately agreed with MVNO customers.

14.287 Therefore, we do not consider that we can use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which possible rivalry-enhancing efficiencies may reduce wholesale prices that could be set against any estimates of any adverse effects due to a loss of competition, particularly because these estimates assume the full implementation of the JBP. However, as in regard to retail, we agree with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle, and over time, give them an incentive to fill that capacity by making more attractive offers to customers. However, as already stated, we do not consider the full implementation of the JBP is likely; therefore, the increase in capacity would be less than the Parties have assumed.

14.288 We therefore consider that the Merger is likely to result in some efficiencies which are rivalry-enhancing. However, on the basis of the evidence set out above, the increased rivalry from those efficiencies which are likely to be realised is not sufficient to offset the adverse impacts identified in relation to the Wholesale Market.

Criteria 5: Merger-Specificity

14.289 For the reasons outlined earlier in this chapter, we do not believe the efficiencies in the JBP would be likely to be brought about by other means.

Criteria 6: Benefit to UK customers

14.290 When considering rivalry-enhancing efficiencies, the CMA must consider whether, even if the Merger does give rise to efficiencies, the Merged Entity would have the incentive to allow customers in the UK to benefit from the efficiencies.[2130] For the reasons set out above in relation to rivalry enhancement, we consider that those rivalry-enhancing efficiencies which would be likely to be delivered would benefit customers in the UK (insofar as they would (partially) offset the anti-competitive effects of the Merger).

Conclusion

14.291 As set out above, based on the available evidence and analysis, we consider that the rivalry-enhancing efficiencies that are likely to result from the Merger would not be sufficient to countervail the anti-competitive effects arising from the Merger. We have found that, even taking into account the rivalry-enhancing efficiencies that are likely to arise, the Merger may be expected to result in an SLC in both the retail and wholesale markets.

[2130] CMA129, paragraph 8.20.

15. CONCLUSIONS

15.1 As a result of our assessment set out in the preceding chapters, we have concluded that the anticipated joint venture between Vodafone and CK Hutchison concerning VUK and 3UK constitutes arrangements in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

15.2 We have concluded that there is scope for an SLC as a result of the creation of that situation in each of:

(a) the national (UK) market for the supply of retail mobile telecommunications services; and

(b) the national (UK) market for the supply of wholesale mobile telecommunication services.

15.3 We have also concluded that the Merger does not result in REEs that would offset the anticompetitive effects in either of these markets and that the Merger may therefore be expected to result in an SLC in each of these markets.

16. REMEDIES

Introduction

16.1 Having found that the Merger may be expected to give rise to SLCs in two markets (ie in the retail market and wholesale market in the UK), we are required to decide whether, and if so what, action should be taken to remedy, mitigate or prevent those SLCs or any adverse effects resulting from them.[2131]

16.2 This chapter sets out our assessment of, and decision on, the appropriate remedy to address the SLCs and the resulting adverse effects we have found.

16.3 The rest of the chapter is structured as follows:

(a) Nature of the SLCs and their adverse effects

(b) The CMA's remedies assessment framework

(c) Overview of remedy options considered

(d) Assessment of the effectiveness of remedy options

(i) Prohibition of the Merger

(ii) Network Commitment

(1) Time limited retail market protections

(2) Time limited wholesale market protections

(e) Conclusion on effective remedies

(f) Assessment of proportionality

(i) Relevant customer benefits

(g) Conclusion on proportionality

(h) Decision on remedies

(i) Implementation considerations

[2131] Section 36(2) of the Act.

Nature of the SLCs

16.4 We have found that the Merger may be expected to give rise to an SLC in two markets:

(a) An SLC as a result of horizontal unilateral effects in the retail market. In particular, we have found in relation to this theory of harm that the Merger would lead to price increases for mobile customers (or to equivalent reductions in data packages or service features). Any price increases would potentially affect tens of millions of mobile customers, and we have particular concerns about the impact of the Merger on those customers least able to afford mobile services.

(b) An SLC as a result of horizontal unilateral effects in the wholesale market. In particular, we have found in relation to this theory of harm that the Merged Entity – and its competitors – may have less of an incentive to bid for wholesale business and/or may offer less competitive prices/terms to MVNOs. In particular, the Merger would reduce the number of MNOs from four to three, making it more difficult for independent MVNOs to secure attractive competitive terms which would reduce their ability to compete strongly in the retail market. We consider that this is important because many MVNOs price aggressively, often focusing on value segments of the retail market.

16.5 As considered in detail in Chapter 14, the Parties made a number of claims about pro-competitive efficiencies and consumer benefits which they said would result from the Merger and offset any anticompetitive effects and therefore prevent any SLC identified. The Parties' rivalry enhancing efficiencies claims rely in part on their JBP, which incorporates the JNP for the Merged Entity. These set out the network integration and investment planned over the period up to FY34. We therefore carefully considered whether the Parties were able, and likely, to deliver this plan.

16.6 As set out in Chapter 14, we consider that the Merger is likely to result in some level of network quality improvements which are rivalry enhancing. However, we also consider that the Parties – given their ability to pursue a range of commercial strategies, which may evolve over time in response to changing market circumstances – are not likely to deliver the full JBP. We consider that the increased rivalry from those efficiencies which we find are likely to be realised are not sufficient to outweigh the adverse impacts on competition identified in relation to the retail and wholesale markets.[2132]

[2132] See Summary, paragraphs 63 to 81.

CMA remedies assessment framework

16.7 Pursuant to section 36(2) of the Act, where the CMA decides that an anticipated merger may be expected to result in an SLC, the CMA must decide the following:

(a) whether the CMA should itself take action under section 41(2) of the Act for the purpose of remedying, mitigating or preventing the SLC concerned or any adverse effect which may be expected to result from the SLC;

(b) whether the CMA should recommend the taking of action by others for the purpose of remedying, mitigating or preventing the SLC concerned or any adverse effect which may be expected to result from the SLC; and

(c) in either case, if action should be taken, what action should be taken and what is to be remedied, mitigated or prevented.

16.8 The Act requires that the CMA, when considering remedies, shall 'in particular, have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the SLC and any adverse effects resulting from it'.[2133] To fulfil this requirement, the CMA will seek remedies that are effective in addressing the SLC and any resulting adverse effects. The CMA considers that a remedy will only be effective (ie a comprehensive solution) if it fully remedies or prevents the SLC and its adverse effects (not just mitigates them).

16.9 This approach, and the high duty imposed on the CMA by the statute, has been endorsed by the courts. In particular, the Court of Appeal has explained that, once the CMA has reached a conclusion on the SLC question, 'then the action which it has to take must be such as to remedy or prevent the SLC concerned. It is not at that stage in the exercise concerned with weighing up probabilities against possibilities but rather with deciding what will ensure that no SLC either continues or occurs'. [2134] The Competition Appeal Tribunal has also found that it is reasonable for the CMA to not favour a remedy in which it could not 'feel a high degree of confidence of success'.[2135]

16.10 Assessing the effectiveness of a remedy involves several distinct dimensions, including:[2136]

(a) **The impact on the SLC and its resulting adverse effects**: remedies need to address the SLC and its adverse effects.

[2133] Section 36(3) of the Act.
[2134] *Ryanair Holdings PLC v CMA* [2015] EWCA Civ 83, at [57]. See also *Ecolab Inc. v CMA* [2020] CAT 12, at [74-75].
[2135] *Ecolab Inc. v CMA* [2020] CAT 12, at [83].
[2136] CMA87, paragraph 3.5.

(b) **Appropriate duration and timing:** remedies need to address the SLC effectively throughout its expected duration.

(c) **Practicality:** a practical remedy should be capable of effective implementation, monitoring and enforcement.

(d) **Acceptable risk profile:** the effect of any remedy is always likely to be uncertain to some degree. In evaluating the effectiveness of remedies, the CMA will seek remedies that have a high degree of certainty of achieving their intended effect. Customers or suppliers of merger parties should not bear significant risks that remedies will not have the requisite impact on the SLC or its adverse effects.

16.11 Once the CMA has determined the remedies that are effective in addressing the SLC and its resulting adverse effects, the CMA will then consider the costs of those remedies. The CMA may have regard, in accordance with the Act, to the effect of any remedial action on any relevant customer benefits (**RCBs**) arising from the merger.[2137,2138] RCBs that will be forgone due to the implementation of a particular remedy may be considered as costs of that remedy by the CMA.[2139] In order to ensure that any remedy is proportionate (ie reasonable), it will then select the least costly and intrusive remedy, or package of remedies, that it considers to be effective. The CMA will also seek to ensure that no remedy is disproportionate in relation to the SLC and its adverse effects.[2140] In the event that the CMA considers fully remedying or preventing an SLC and any adverse effects is not possible, or where no effective remedy would be proportionate, the CMA will consider whether it is nonetheless possible and proportionate to mitigate the SLC and its adverse effects.[2141]

Overview of possible remedies

16.12 Remedies are conventionally classified by the CMA as either structural or behavioural:[2142]

(a) Structural remedies, such as prohibition and divestiture, are generally one-off measures that seek to restore or maintain the competitive structure of the market by addressing the market participants and/or their shares of the market.

2137 Section 36(4) of the Act.
2138 CMA87, paragraph 3.4.
2139 CMA87, paragraph 3.16.
2140 CMA87, paragraph 3.6.
2141 CMA87, paragraphs 3.11 and 3.12.
2142 CMA87, paragraph 3.34.

(b) Behavioural remedies are normally ongoing measures that are designed to regulate or constrain the behaviour of merger parties.

16.13 The choice of remedy will reflect the particular circumstances of each case. The CMA will seek to select remedies that will effectively address the SLC and its resulting adverse effects in the least costly way.[2143]

16.14 The CMA generally prefers structural remedies, such as divestiture or prohibition, over behavioural remedies, because:[2144]

(a) structural remedies are more likely to deal with an SLC and its resulting adverse effects directly and comprehensively at source by restoring rivalry;

(b) behavioural remedies are less likely to have an effective impact on the SLC and its resulting adverse effects, and are more likely to create significant costly distortions in market outcomes; and

(c) structural remedies rarely require monitoring and enforcement once implemented.

16.15 The CMA's guidance does however note that behavioural remedies can operate satisfactorily in limited circumstances, especially where the company operates in a regulated environment and where there are expert monitors. In general, one or more of the following conditions will normally apply in the limited circumstances where the CMA selects behavioural remedies as the primary source of remedial action in a merger investigation:[2145]

(a) Structural remedies are not feasible, or the relevant costs of any feasible structural remedy far exceed the scale of the adverse effects of the SLC(s).

(b) The SLC(s) are expected to have a relatively short duration (eg due to IP expiring).

(c) RCBs are likely to be substantial compared with the adverse effects of the merger, and these benefits would be largely preserved by behavioural remedies but not by structural remedies.

16.16 In general, in the above circumstances, the CMA will prefer to use enabling measures that 'work with the grain of competition' and address an SLC by seeking to remove obstacles to competition or stimulating competition, rather than measures that control market outcomes, which restrict the adverse effects of an SLC rather than address the SLC itself.[2146] However, effective behavioural remedy

[2143] CMA87, paragraph 3.45.
[2144] CMA87, paragraph 3.46.
[2145] CMA87, paragraph 3.48.
[2146] CMA87, paragraphs 3.49 and 7.12.

packages may require both enabling measures and measures that control outcomes.[2147]

16.17 For behavioural remedies to have the desired impact, it is essential that there are effective and adequately resourced arrangements in place for monitoring and enforcement.[2148] The likelihood of effective monitoring of a remedy will be significantly increased if it is possible to involve a sectoral regulator in the monitoring regime.[2149]

16.18 As noted above, when assessing remedies, the CMA will also consider whether a combination of measures would be required to be as comprehensive a solution as is reasonable and practicable to the SLC and any adverse effects resulting from it. The CMA will evaluate the impact of any such combination of measures on the SLC or any resulting adverse effects.

Possible remedy options set out in the Remedies Notice

16.19 In our notice of possible remedies (**Remedies Notice**), we identified – and invited views on – the following possible remedies:[2150]

(a) Prohibition of the Merger;

(b) A partial divestiture remedy requiring the divestiture of, or access to, certain mobile network assets and spectrum to enhance the competitive capability of an existing MVNO or to facilitate a new provider to enter the market as an MNO and compete across all parameters of competition including network quality;

(c) An investment commitment to roll out the Parties' JNP;

(d) Potential protections for retail and wholesale customers that are time limited; and

(e) Behavioural measures aimed at the wholesale market.

16.20 We also invited submissions on any other practicable remedy that could be effective in comprehensively addressing the (then) provisional SLCs.

16.21 In the Remedies Notice, we set out our initial view that prohibition of the anticipated Merger would prevent the (then) provisional SLCs from arising in any relevant market. Our initial view was that prohibition would represent a comprehensive solution to all aspects of the SLCs we had provisionally found (and

2147 CMA87, paragraphs 7.12.
2148 CMA87, paragraph 3.49.
2149 CMA87, paragraph 7.6.
2150 CMA, Remedies Notice, 13 September 2024.

consequently any resulting adverse effects) and that the risks in terms of its effectiveness are very low.[2151]

16.22 Our initial view on a partial divestiture remedy, as set out in the Remedies Notice, was that whilst this could enable a fourth MNO to enter the UK, as evidenced by other telecommunications industry mergers in other jurisdictions, it may not be effective as it is not clear that a remedy-taker would be able to compete effectively to compensate for the loss of competition. In addition, the remedy presents a number of UK specific practical challenges given that the Parties do not own all the assets that make up their networks.[2152]

16.23 Our initial view on the Network Commitment, as set out in the Remedies Notice, was that it may have the potential to enhance competition in the relevant markets in a way that counteracts the anti-competitive effects we had provisionally found, making it an effective remedy in the longer term.[2153] However, we noted that we had expressed some doubts in the Provisional Findings as to whether the implementation of the JBP in full would be sufficient to offset the anti-competitive effects we had provisionally identified in the retail and wholesale markets.[2154]

16.24 In addition, given our initial view that the rivalry enhancing effects of a Network Commitment will grow over time as the investment and integration plan is implemented, resulting in progressive increases in network capacity and quality, we noted that there may be a need to supplement a Network Commitment with some time-limited protections in relation to price and related terms, including data packages.[2155]

16.25 We did not express any views on the potential effectiveness or otherwise of time limited protections for retail customers or wholesale behavioural remedies.

Remedy proposals put to the CMA

16.26 In this section we outline the remedy proposals put to us by the Parties and any third party proposals not set out in the Remedies Notice. Non-confidential versions of these responses have been published on the CMA case page.[2156]

The Parties' proposals

16.27 The Parties have, without prejudice to their position that no SLC will arise as a result of the Merger in any case, proposed a behavioural remedy package that they consider will ensure the creation of significant rivalry enhancing efficiencies

[2151] CMA, Remedies Notice, 13 September 2024, paragraph 22.
[2152] CMA, Remedies Notice, 13 September 2024, paragraph 23.
[2153] CMA, Remedies Notice, 13 September 2024, paragraph 32.
[2154] CMA, Remedies Notice, 13 September 2024, paragraph 33.
[2155] CMA, Remedies Notice, 13 September 2024, paragraph 36.
[2156] Vodafone / CK Hutchison JV Merger inquiry.

that prevent any SLC identified in the retail and wholesale markets.[2157] The package proposed by the Parties consists of:

(a) a commitment that would deliver the key elements of the Merged Entity's JNP (the **Network Commitment**);[2158,2159]

(b) a short-term pricing commitment that would guarantee the availability of, maintain the terms and conditions of, and cap the prices of a range of the Parties' existing tariffs for three years;[2160,2161] and

(c) a Wholesale Reference Offer, to provide MVNOs competitive access terms (protecting wholesale customers and their price sensitive end users).[2162,2163]

16.28 Under the Network Commitment, the Parties offered to commit:[2164]

(a) to fully integrate the Parties' joint networks into a combined site grid of no fewer than [25,000-30,000] sites in the UK over an 8 year period;

(b) to integrate a minimum number of sites in:

(i) rural areas, including a specified number of high-, mid-, and low-configuration sites; and

(ii) urban areas, including a specified number of high-, mid-, and low-configuration sites.

(c) to fully deploy a prescribed amount of spectrum across specified frequency bands in high-, medium- and low-traffic areas, (each individually) in the UK;

(d) to report to Ofcom and a monitoring trustee; and

(e) to measurement points in years 3, 5 and 8.

2157 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.34.
2158 Parties' network commitment proposal.
2159 The Parties further developed this proposal in their response to the Remedies Notice on 27 September and in a letter to the CMA on [✂] (Parties, Remedies letter to the inquiry group).
2160 Parties follow-up remedies submission.
2161 The Parties submitted that they disagree with the Provisional Findings that the Merger gives rise to an SLC in the retail market (or any part of it). To the extent the CMA has any concerns regarding the retail market, the Parties' proposed Network Commitment (supported by the pro-competitive effects of the Beacon 4.1 agreements) presents a comprehensive solution. They strongly disagree with the notion that retail customers are not already adequately protected from price increases and service degradations during the initial years of network integration and roll-out under the Proposed Network Commitment. Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.3-5.8.
2162 Parties' follow-up remedies submission.
2163 The Parties submitted that they disagree with the provisional conclusion in the Provisional Findings that the Merger gives rise to an SLC in the wholesale market. To the extent the CMA has any concerns regarding the wholesale market, the Parties' proposed Network Commitment (supported by the pro-competitive effects of the Beacon 4.1 agreements) presents a comprehensive solution. Parties' response to the Remedies Notice, 27 September 2024, paragraphs 6.5-6.10.
2164 Parties' network commitment proposal; and Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.5. If the CMA were to accept the Network Commitment as Undertakings from the Parties, the precise number of sites and spectrum configuration would be set out in that Undertakings.

16.29 The Parties proposed that the Network Commitment would be implemented by way of Undertakings to the CMA under the Act and by inserting the obligations as conditions in the Merged Entity's spectrum licence(s).

16.30 The Parties submitted that the proposed Network Commitment would ensure the creation of significant rivalry enhancing efficiencies that prevent any SLC provisionally identified in the retail and wholesale markets.[2165]

16.31 As retail customer protections, the Parties offered:

(a) a pricing cap commitment across a number of tariffs;

(b) to maintain social tariffs;

(c) to exclude vulnerable customers in financial difficulty from mid-contract price rises;[2166] and

(d) to maintain terms and conditions of all existing customers.[2167]

16.32 As part of the Wholesale Reference Offer the Parties proposed to:[2168]

(a) commit to provide access to MVNOs on the basis of pre-defined terms (subject to onboarding and capacity limits);

(b) agree for disputes to be resolved by an independent adjudicator (commercial arbitrator); and

(c) make the offer available to MVNOs for three years.

16.33 We describe in more detail below the Parties' proposals in the sections 'Overview of the Network Commitment remedy', 'The Parties' proposed ' and 'Overview of the Parties' Wholesale Reference Offer'.

Third party proposal: *Sky Mobile*

16.34 Sky Mobile submitted that a fixed capacity deal where a single large MVNO is given access to a share of the Parties' network on a fixed fee basis for a lengthy period of time would enable that MVNO to become a stronger retail competitor and credible wholesale host.[2169]

16.35 The proposal would see a remedy-taker taking a fixed share of the Parties' network throughput.[2170] Sky Mobile submitted that a remedy-taker would be

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[2165] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.34.
[2166] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.9 (i)-(iii).
[2167] Parties Remedies letter to the inquiry group.
[2168] Parties' follow-up remedies submission.
[2169] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraphs 47 and 48.
[2170] Sky Mobile response to the Remedies Notice, 27 September 2024, Figure 4.1.

strongly incentivised to become a wholesale supplier as it would have committed itself to significant and growing network capacity, ie it would have zero marginal cost on that excess capacity so would be highly incentivised to bid for other MVNOs with any spare capacity.[2171]

16.36 Sky Mobile submitted that it strongly believes that it is the strongest and most credible market participant able to take a structural capacity remedy and is well positioned to act as a remedy taker.[2172] [✂].[2173,2174]

16.37 Sky Mobile submitted that we could deploy its proposed capacity remedy alongside other wholesale remedies, if we had concerns about protecting other MVNOs. For example, Sky Mobile submitted that a capacity remedy with an upfront remedy-taker could be combined with some form of strengthened wholesale reference offer, whereby the wholesale reference offer would safeguard the position for smaller MVNOs.[2175]

16.38 In response to the Remedies Working Paper, Sky Mobile submitted that the CMA has failed to consider the feasibility of alternative remedies such as the pooled capacity remedy proposed by Sky Mobile.[2176]

[✂]

16.39 [✂] submitted that we should consider a remedy that allows a new MVNO to enter the market. To ensure the effectiveness of an MVNO remedy, [✂] suggested the following measures:[2177]

(a) We should mandate network access under transparent, fair, and non-discriminatory terms including wholesale pricing, service quality, and technical support comparable to those offered to other MNOs and MVNOs.

(b) A defined commitment period during which the Merged Entity must maintain the agreed terms of access to its network for the MVNO. This period should be long enough to allow the MVNO to establish a stable market presence and customer base.

16.40 [✂] submitted that its ambition is to enter the telecommunications market as a UK wide MVNO.[2178]

2171 Sky Mobile response to the Remedies Notice, 27 September 2024, paragraphs 49.
2172 Sky Mobile response to the Remedies Notice, 27 September 2024, paragraphs 55.
2173 Sky Mobile supplementary response to the remedies working paper.
2174 Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 56 and Sky supplementary response to the Remedies Notice, 10 October 2024, paragraph 99.
2175 Sky Mobile supplementary response to the Remedies Notice, 10 October 2024, paragraph 94.
2176 Sky Mobile response to the Remedies Working Paper, paragraph 67.
2177 [✂] email.
2178 [✂] experience to date is that market entry as an MVNO is significantly challenging, due to the barriers to entry arising from the refusal of access by existing market players.

16.41 Other remedy options put to us were set out in the Remedies Notice or are considered by us to be variants of remedies set out in the Remedies Notice.[2179]

The Parties' position on remedies

16.42 The Parties do not consider that the Merger may result in SLCs in the retail and wholesale mobile markets.[2180] It is without prejudice to this position that the Parties proposed potential remedies.

The Parties' proposed remedies

16.43 As outlined in paragraph 16.27 above, the Parties proposed a Network Commitment that would require the Merged Entity to deliver the JNP. The Parties submitted this would address the competition concerns outlined in the Provisional Findings in the retail and wholesale markets.

16.44 The Parties also submitted that the Merger will result in significant RCBs.[2181] The Parties submitted that any remedies must be designed in such a way to preserve these RCBs.[2182] The Parties submitted that a remedy that would undermine these significant benefits would be disproportionate in these circumstances.[2183]

16.45 The Parties submitted that the Merger is pro-competitive and that the Network Commitment addresses any concerns with regards to the likelihood of the Parties delivering the JNP. The Parties submitted that the Network Commitment can be characterised as 'quasi-structural' in effect.[2184] The Parties further submitted that this structural effect on capacity is amplified by the Beacon 4.1 agreements and VMO2's own increase in capacity.[2185] The Parties consider that the Merger will:

(a) Generate a significant uplift in the Merged Entity's coverage and capacity, with the largest uplift realised in Year 1;

(b) Lower the Merged Entity's incremental costs of expanding capacity, incentivising the Merged Entity to provide lower prices and/or a better quality of service to retail and wholesale customers;

(c) Substantially improve the Merged Entity's network quality, which will benefit the Merged Entity's retail and wholesale customers;

[2179] For example, [✄], approached the CMA with an interest in being a remedy taker. We considered the proposal to be a partial divestitures remedy ([✄] response to the Remedies Notice).
[2180] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.1.
[2181] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.5.
[2182] Parties' response to the Remedies Notice, 27 September 2024, paragraph 2.1
[2183] Parties' network commitment proposal.
[2184] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.42
[2185] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.44

(d) Increase the competitive pressure on VMO2 and BTEE to make better offers to wholesale and retail customers, in terms of prices and quality, and to invest in their networks, to stem the loss of customers to the Merged Entity; and

(e) Increase VMO2's strength as a competitor by improving its network quality and reducing its cost of increasing capacity through Beacon 4.1, which will only be implemented if the CMA approves the Merger.[2186]

16.46 The Parties submitted that no other remedies are required in addition to the Network Commitment. The Parties also submitted that our position on time-limited protections is inconsistent with our provisional finding that the bulk of the rivalry enhancing efficiencies would be realised in the early years.[2187] However, without prejudice to their position, the Parties consider that the time-limited Wholesale Reference Offer and retail customer protections offered would address any residual time-limited concerns the CMA may have (see paragraphs 16.31 and 16.32 above).[2188]

Parties' position on other remedies set out in the Remedies Notice

16.47 As outlined above, in the Remedies Notice we set out some concerns with regards to a partial divestiture remedy (see paragraph 16.22). The Parties told us that they agreed with these concerns and considered that a partial divestment cannot be an effective remedy in addressing any residual SLC found by us in the retail or wholesale markets.

16.48 The Parties also stated that such a remedy is commercially unacceptable and would not be accepted under any circumstances, as it would undo the commercial logic of the Merger and undermine the Parties' ability to deliver the JNP and therefore the rivalry enhancing efficiencies and RCBs.[2189]

16.49 In the Remedies Notice, we invited views on whether it was possible to ring-fence capacity for MVNOs to encourage the Merged Entity's continued participation in the wholesale market. The Parties submitted that a ring-fencing remedy would lead to significant inefficiencies and eliminate or reduce the rivalry enhancing efficiencies and RCBs flowing from the Merger.[2190]

[2186] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.34 (i) – (v).
[2187] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.9.
[2188] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.33, 5.43, 6.10
[2189] Parties' response to the Remedies Notice, 27 September 2024, paragraph 3.2.
[2190] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.14

Remedy options rejected

16.50 A number of third parties – in response to the Remedies Notice – submitted that outcomes in other countries suggest behavioural remedies are ineffective and should not be considered further. Other third parties and the Parties also submitted comparative assessments of the potential remedies considered in this case with previous remedies accepted in other countries in the mobile telecommunications industry, in particular in the context of four-to-three MNO mergers.

16.51 As set out earlier in this Report, the CMA's Merger Assessment Guidelines, reflecting the relevant case law, note that the CMA's task in analysing mergers is context specific, and in particular: (i) each case turns on its own facts; and (ii) the characteristics of one market may be very different from those of another.[2191] We believe that differences in the characteristics of mobile markets (such as the conditions of competition, geography, demographic and regulatory environment) across countries limit the probative value of any analysis of the effects of remedies accepted in other countries.

16.52 We have therefore considered all submissions made to us concerning international comparisons, but overall have only placed limited evidential weight on such comparisons and have not ruled out any potential remedies solely based on international comparisons.

16.53 After due consideration of the range of remedies identified in the Remedies Notice, the Parties' response and third party submissions on remedies, we do not consider the following remedies would effectively address the SLCs and resulting adverse effects identified in this case:

(a) Partial divestiture remedies;

(b) MVNO entrant or expansion remedies; and

(c) Ring-fencing capacity remedies.

Partial divestiture remedies

16.54 We noted our concerns in the Remedies Notice regarding whether an MNO entrant remedy would lead to lasting, sustainable competition.[2192] In our view, it is theoretically possible to enable another MNO to enter the UK through a partial

[2191] *Ecolab Inc. v CMA* [2020] CAT 12, quoted at CMA129, footnote 13.
[2192] CMA, Remedies Notice, 13 September 2024, paragraph 23.

divestiture remedy. Whilst there are country specific challenges, this remedy has been pursued in other jurisdictions.[2193]

16.55 To be comprehensive, the divestiture package would need to enable a suitable purchaser to compete effectively under separate ownership. However, a purchaser would likely only acquire a sub-set of the assets currently used by the Parties to compete in the relevant markets. This may lead to an MNO that is smaller than either of the Parties today. It is not clear that such an entity would be able to compete effectively in both the retail and wholesale markets where we have identified SLCs.

16.56 It would also be difficult for us to assess the financial resilience or expected performance of the new MNO with any degree of accuracy given the new MNO would obtain access to a package of assets that have never before operated as a stand-alone business.

16.57 A partial divesture remedy would unwind economies of scale, potentially undermining the remedy's effectiveness. As a result, the remedy would likely be reliant on the purchaser's attributes to address shortcomings of its design, increasing the purchaser risk.

16.58 The complexities of such a proposal are numerous and the outcomes in other jurisdictions are not clear.[2194] Ofcom also noted that divestiture remedies in the mobile sector have been relatively unsuccessful in restoring a fourth operator and noted that regardless how much spectrum is divested, it remains difficult for the remedy taker to gain market share.[2195]

16.59 We therefore consider that due to the above risks and practical difficulties, an MNO entrant remedy would be high risk in the UK and would not present a sufficient degree of certainty of achieving its intended effect, ie the entry of a new MNO that compensates for the loss of competition resulting from the Merger. We note that some respondents to the Remedies Notice support these concerns.[2196] Furthermore, the Parties have expressly stated that they would not consider a partial divestiture remedy, stating that it is commercially unacceptable and would not be accepted under any circumstances.[2197]

[2193] Most recently the European Commission approved the joint venture between Orange and MásMóvil in Spain subject to a package of remedies aimed at enabling the remedy taker, Digi, to build its own mobile network. M.10896 - Orange/ MásMóvil / JV.
[2194] In Sky Mobile's supplementary response to the remedies notice, 10 October 2024, footnote 66, Sky Mobile has for instance noted various public criticisms of the effectiveness of the divestment of various assets to Dish Network as part of the remedy package put in place in the context of the T-Mobile / Sprint transaction in the United States.
[2195] Ofcom call note.
[2196] BTEE response to the Remedies Notice, 27 September 2024, paragraphs 2.8 - 2.14; Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 27.
[2197] Parties' response to the Remedies Notice, 27 September 2024, paragraph 3.2.

16.60 For the reasons set out above, we do not consider this remedy would be effective and so did not consider it further.

16.61 Separately, [✂] submitted that previous mergers involving MNOs in the UK have led to the shutting down of well-known brands such as Plusnet, BT Mobile and Virgin mobile and that there is a risk that the Parties' sub-brands may be discontinued if the Merger is implemented. [✂] therefore considers that any remedies package should include a requirement on the Parties to divest their retail 'fighting brands' to help restore competition in the retail market.[2198] Whilst a divestiture, we consider that this would amount to a remedy that supports the expansion of an MVNO which is considered below (see paragraph 16.62).

MVNO entry and expansion remedies

16.62 Aside from a remedy involving an MVNO becoming an MNO through a partial divestiture,[2199] in the Remedies Notice we did not propose any remedies that were aimed specifically at encouraging MVNO entry or expansion into the retail market. While MVNO entry or expansion would potentially be a desirable outcome at the retail level, we do not believe that it would comprehensively address the SLC in the retail market and it would have no impact on our competition concerns in the wholesale market as these concerns relate to MVNOs' ability to secure competitive terms from MNOs.

16.63 In relation to the retail market, although we consider that the entry of further MVNOs and/or expansion of existing MVNOs might increase competition in the retail market, we consider it unlikely that this type of remedy would comprehensively address our retail concerns, as it would not compensate for the loss of an independent MNO. MVNOs cannot, to a large extent, compete on network quality. Overall, we consider that MVNOs do not offer the same competitive constraint as MNOs in the retail market.[2200]

16.64 As noted above, Sky Mobile has suggested an upfront network capacity deal where a single large MVNO is given access to a share of the Parties' network on a fixed fee basis.[2201] Sky Mobile expressed interest in being the upfront remedy-taker.[2202] We have considered this remedy proposal in detail but consider that while in principle it may partially address some of our competition concerns, it is unlikely to address them comprehensively. It also presents a number of practical implementation challenges which mean that it would not be sufficiently certain that the remedy would achieve its intended effects.

[2198] [✂] response to the Remedies Notice, paragraph 1.6.
[2199] CMA, Remedies Notice, 13 September 2024, paragraph 21 (b).
[2200] See Chapter 8, Conclusions on closeness of competition and current competitive constraints.
[2201] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 47.
[2202] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 3.

16.65 Sky Mobile stated that this remedy would help address the wholesale SLC by creating a fourth potential wholesale competitor.[2203] Sky Mobile noted in its submission that Sky Mobile's ability to enter the wholesale market would depend on various factors: 'While it is clearly the case that Sky would use much of its additional capacity to grow its own retail business (…), depending on how successful that is and how much capacity it is granted, Sky would offer any excess capacity to other MVNOs'.[2204]

16.66 We consider that Sky Mobile's proposal would not address the wholesale SLC as we do not consider it likely that Sky Mobile would exert a material constraint in the wholesale market as a fourth competitor if it entered. In particular, Sky Mobile suggested that if it was the remedy-taker it would enter new segments more aggressively, particularly large and unlimited data packs.[2205] We note that these segments are particularly capacity intensive and may limit Sky Mobile's incentive to enter and compete materially in the wholesale market. Further we consider that Sky Mobile's proposal could have material distortive effects on the wholesale market as the Merged Entity may have less incentive to compete for wholesale customers having sold a large volume of capacity to a single MVNO.

16.67 We acknowledge that Sky Mobile's proposal could in principle increase the remedy taker's competitiveness in the retail market. By requiring the Merged Entity to sell capacity to the MVNO remedy-taker, we consider that the effect would be to give the MVNO a cost structure more aligned to that of the MNOs, as the MVNO would now have a higher fixed cost base but lower incremental cost base and would have the opportunity to optimise the use of that capacity from a commercial perspective. If Sky Mobile was the remedy taker, we therefore agree with Sky Mobile that the remedy would help improve Sky Mobile's competitiveness in the retail market. However, improving the competitiveness of a single MVNO, even a large one like Sky Mobile, would not replace the constraint lost as a result of the Merger. The individual impact on the market of a single MVNO is limited and is not comparable to the loss of competition from an MNO, in particular given that to a large extent MVNOs do not compete on network quality.

16.68 Further, Ofcom noted that by its very nature an upfront network capacity deal (as suggested by Sky Mobile) could distort the retail market. This is because the remedy taker would have access to capacity at a fixed price that represents a potentially growing proportion of the retail market, distorting retail prices downwards. Any distortion of the retail market could then fundamentally undermine MNOs' incentives to invest in network quality.[2206]

[2203] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 44.
[2204] Sky Mobile supplementary response to the Remedies Notice, 10 October 2024, paragraph 92.
[2205] Sky Mobile supplementary response to the Remedies Notice, 10 October 2024, paragraph 8.
[2206] Ofcom, submission.

16.69 Furthermore, even if Sky Mobile's proposal were capable of addressing our competition concerns (which, for the reasons given above, we do not consider to be the case), it would also need to address the SLC effectively throughout its expected duration, be sufficiently practicable and present an acceptable risk profile.[2207] We also note that Sky Mobile does not appear to be a suitable remedy taker for several reasons related to these considerations:

(a) The existing agreement between Sky Mobile and VMO2 is [✂].[2208,2209] [✂].

(b) Sky Mobile has suggested that [✂].[2210] [✂].[2211]

16.70 As such, for these reasons, we do not consider that Sky Mobile's proposed remedy would comprehensively address our competition concerns in the wholesale market or in the retail market which mean that we do not have sufficient confidence that the remedy would achieve its intended effects.

16.71 For the above reasons, we do not believe that this type of remedy would be effective so did not explore further any MVNO entry and/or expansion remedies.

Ring-fenced capacity remedies

16.72 In the Remedies Notice we invited views on a remedy that seeks to ring-fence a proportion of the Parties' network capacity exclusively for wholesale customers.[2212] We considered that at the conceptual level, reserving a defined proportion of the Merged Entity's capacity exclusively for MVNOs could add to the incentive of the Merged Entity to compete for MVNO customers.[2213]

16.73 We also set out our initial view that there are likely to be a number of challenges and risks linked with capacity ring-fencing remedies that are associated with behavioural remedies including specification, distortion, circumvention as well as monitoring and enforcement risks that would need to be evaluated further.[2214]

16.74 By design, a capacity ring-fencing remedy is an enabling behavioural remedy, as it seeks to create an incentive for the Parties to continue to compete in the wholesale market. As outlined above (paragraph 16.16), where we are considering behavioural remedies, we typically have a preference for enabling measures that 'go with the grain of competition'.[2215]

[2207] CMA87, paragraph 3.5.
[2208] Sky Mobile submission. [✂].
[2209] [✂] and [✂] meeting note.
[2210] [✂]. [✂] meeting note.
[2211] [✂] meeting note.
[2212] CMA, Remedies Notice, 13 September 2024, paragraphs 41-42.
[2213] CMA, Remedies Notice, 13 September 2024, paragraph 40.
[2214] CMA, Remedies Notice, 13 September 2024, paragraph 43.
[2215] CMA87, paragraph 3.49.

16.75 Based on the representations received, we understand that this type of ring-fencing remedy could either be delivered through a contractual arrangement (ie a commercial reservation remedy) or through a technical segregation of capacity.

16.76 In response to the Remedies Notice, [✂] submitted that it supported a ring-fencing remedy with suitable incentivisation to address the then provisional SLC in the wholesale market.[2216] [✂] submitted that a capacity ring-fencing remedy could be implemented in the form of a commercial reservation combined with a penalty to incentivise the Merged Entity to enter into MVNO agreements.[2217] [✂] submitted that if the level of capacity reserved is determined appropriately, and penalty mechanisms are put in place to incentivise the Merged Entity to sell the capacity, it is unlikely the ring-fence capacity would lead to material volumes of capacity being unused.[2218]

16.77 [✂] submitted that 'under a commercial reservation remedy, the Proposed JV's network can still be run as a single unit protecting any efficiency benefit'. As such we understand that under [✂] proposal the Merged Entity's capacity would still be 'pooled', ie it would not be exclusively reserved for MVNOs.[2219] [✂] submitted that 'the Parties can still pool their capacity and the Proposed JV's network can be run as a single unit'[2220] and that the Merged Entity would still be able to 'utilis[e] spare capacity from one part of its network in order to alleviate congestion on another part'.[2221]

16.78 In response to the Remedies Working Paper, [✂] submitted that the CMA had rejected a capacity ring-fencing remedy, either structural or commercial, without a detailed assessment or justification for doing so.[2222] [✂] submitted that it is difficult to reconcile the CMA's position that concerns around planning difficulties and capacity congestion would arise from a straightforward commercial ring-fencing arrangement but not from a pre-agreed wholesale reference offer that would require the Merged Entity to offer access for up to 10 MVNOs at the same time.[2223]

16.79 Ofcom told us that it should in principle be possible to contractually ring fence capacity whilst allowing MVNOs and the relevant MNO access to the same speeds. For instance, the contract could specify that the MVNOs could access 'X' gigabytes (**GB**) and adjust 'X' as the total network capacity grows.[2224] However, Ofcom has raised concerns that contractual capacity ring-fencing could lead to

[2216] [✂] response to the Remedies Notice, paragraph 1.8.
[2217] [✂] supplementary response to the Remedies Notice.
[2218] [✂] supplementary response to the Remedies Notice.
[2219] [✂] submission.
[2220] [✂] supplementary response to the Remedies Notice.
[2221] [✂] supplementary response to the Remedies Notice.
[2222] [✂] response to the Remedies Working Paper, paragraph 2.3.1.
[2223] [✂] response to the Remedies Working Paper, paragraph 2.3.1.
[2224] Ofcom, submission.

inefficiencies linked with the difficulties of planning how much capacity would need to be ringfenced.[2225]

16.80 Ofcom told us that pursuant to a contractual ring fence, it would be difficult for the MNO to specify when and where that capacity can be used in a way that affords the MNO control over demand and congestion. Provided MVNO traffic remains only a small proportion of traffic, this does not materially reduce the MNO's control, but if MVNOs carry a significant proportion of overall traffic on the network, where and when that traffic is becomes more important to managing overall network quality. By contrast, with its own retail customers, an MNO can set prices and other product characteristics in response to congestion.[2226] Ofcom also raised a risk of market distortions by artificially pushing retail prices down during the remedy period which could then affect MNOs' incentives to invest in their network.[2227]

16.81 We consider that there are several potential risks associated with a ring-fencing arrangement (whether contractually or technically implemented). In summary, we consider these risks are:

(a) inefficient use of the Merged Entity's network capacity;

(b) likelihood of material distortions; and

(c) difficulty in specification and therefore impracticality of monitoring.

16.82 Starting with a technical ring-fenced remedy, the Parties submitted that this would be an inefficient use of capacity which would eliminate, or at the very least materially reduce, the efficiencies and benefits that the Parties claim will be realised as a result of the Merger.[2228]

16.83 We note that MNOs invest significant sums of money in developing their networks. Much of this investment goes to improving network capacity, a key driver of end user experience. If capacity is ring-fenced for MVNOs, to the extent this ring-fenced capacity is not taken by MVNOs, this would be an inefficient use of network capacity and could have a direct and negative effect on UK consumer experience.[2229]

16.84 Ofcom also told us that technical ring-fencing would be inefficient, as it reduces the speeds available to both sets of customers (the MVNOs' and the MNO's) and

[2225] Ofcom call note
[2226] Ofcom, submission.
[2227] Ofcom call note and Ofcom submission.
[2228] Parties' response to the Remedies Notice, 27 September 2024, paragraph 7.10.
[2229] We note that this would also be true of a contractual ring-fencing remedy that requires capacity to be reserved for the exclusive use of MVNOs (ie that cannot be used by the Merged Entity's retail customers).

overall reduces the capacity available (or more precisely, results in more congestion for any given level of total traffic).[2230]

16.85 The Parties also estimated that such a technical implementation of a ring-fencing remedy (which would require the Merged Entity to have a 5G SA core to enable a network 'slice' to be ring-fenced) would not be technically feasible until at least three years after completion of the Merger.[2231]

16.86 Based on the above evidence, we therefore have concerns about the effectiveness and distortion risks of a technical ring-fencing remedy and have not considered this remedy further.

16.87 Alternatively, as [✂] note, it may be possible to design a contractual ring-fencing remedy where the Parties network capacity is 'pooled' so as not to impact consumer experience. Under such a scenario it is not clear the Merged Entity would have sufficient incentive to contract with MVNOs. For this reason, [✂] submitted that a ring-fencing remedy would only work if accompanied by a 'material penalty' for not utilising the ring-fenced capacity.[2232] We consider that designing a penalty regime which incentivises the Merged Entity appropriately and which is not unduly complex, would be very challenging and, if not properly calibrated, would either have insufficient impact or be distortive of market outcomes. If the penalty level was set too high, it would risk being highly distortive as it could result in the Merged Entity selling capacity to MVNOs below competitive market prices in order to avoid a fine for not having met the target level of capacity to be wholesaled, while if it was set too low, it might fail to incentivise the Merged Entity to supply MVNOs such that the remedy would fail to achieve its intended effect.

16.88 Similar considerations apply to setting the level of capacity that would need to be reserved (and therefore sold to MVNOs to avoid penalties). Network capacity is not an industry defined term with a single ready method of calculation, but the level of reserved capacity would be key to the remedy's effectiveness. We note that the Wholesale Access Terms envisaged below also raise a specification risk with regards to the definition of a capacity limit (ie [15-20]%, as considered further below at paragraph 16.487), however under the Wholesale Access Terms (and contrary to the capacity ring-fencing) the Merged Entity would not be penalised for not wholesaling the defined amount of capacity made available under the Wholesale Access Terms which limits the specification and distortion risks.

16.89 These specification challenges create design, monitoring and enforcement risks. For example, we consider that there is a risk that enforcement may be challenging considering the inherent difficulty in identifying reasons for under-utilisation and

[2230] Ofcom, submission.
[2231] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 7.16 - 7.18.
[2232] [✂] response to the Remedies Notice, paragraph 5.1.2.

establishing why the Merged Entity might not succeed in wholesaling the target level of capacity. Therefore it would be difficult to determine the reasons for underutilisation, bringing into question the effectiveness of a penalty regime.

16.90 We therefore consider that the implementation of a ring-fencing remedy through a contractual arrangement would be challenging to design in the context of a Phase 2 inquiry and carries a number of potential risks that suggest to us it would not be an effective remedy for the purposes of this inquiry. Ringfencing, as a remedy in this context, would not have an acceptable risk profile, because it would not have a high degree of certainty of achieving its intended effect. In the time constraints of the Phase 2 merger review process, the important specification risks associated with capacity ring-fencing and the resulting uncertainty as to the potential outcome of such a remedy (it could either have insufficient impact or be distortive of market outcomes) are such that we cannot be confident that the remedy would be effective in addressing the SLC and its resulting adverse effects.

Remedies considered in this report

16.91 Based on responses from the Parties and third parties to the Remedies Notice and the considerations set out in the preceding paragraphs, we have focused on the following remedy options as the most likely to be effective remedies:

(a) Prohibition of the Merger

(b) The Network Commitment (the Parties' proposed remedy) supported by time limited protections:

   (i) retail market customer protections

   (ii) Wholesale Access Terms

16.92 In reaching a decision on effectiveness, we have taken account of all submissions we have received and the available evidence both in assessing how these remedies might be structured and in assessing their adequacy in addressing the SLCs.

16.93 Below we set out our assessment of, and conclusions on, the effectiveness of each of these remedy options.

Assessment of the effectiveness of prohibition of the Merger

16.94 In this section, we consider the effectiveness of a remedy prohibiting the Merger.

Remedy description

16.95 The Merger currently remains anticipated. Prohibition of the Merger would prevent completion and the SLCs would not arise. VUK and 3UK would continue to operate under separate ownership as independent competitors.

16.96 This remedy would be implemented by either accepting final undertakings under section 82 of the Act or making a final order under section 84 of the Act, prohibiting the Merger from completing and preventing the Parties from attempting to merge without the CMA's prior consent for a further period (normally ten years).

Parties' and third parties' views on effectiveness of Merger prohibition

16.97 The Parties did not submit that prohibition would be ineffective at addressing the SLC. The Parties submitted that prohibition of the Merger would have severe adverse effects on the development of competition in the retail and wholesale markets as the UK's mobile markets would remain trapped in a low investment, low competition equilibrium.[2233] They submitted that prohibition would result in the loss of the rivalry enhancing efficiencies / RCBs generated by Merger, which represent billions of pounds in value to the UK.[2234]

16.98 Whilst a number of third parties expressed a preference for or against prohibition in response to the Remedies Notice, no third party raised concerns that prohibition would not preserve the Parties' pre-Merger competitive position in the retail and wholesale markets and therefore be ineffective.

Assessment of effectiveness of Merger prohibition

16.99 According to the CMA's Merger Remedies Guidance, full prohibition of an anticipated merger is an effective remedy as it necessarily maintains the competitive structure of a market that would have otherwise been changed by the merger.[2235]

16.100 In this case, prohibition would have an immediate effect, preventing completion of the Merger and resulting in VUK and 3UK continuing to operate under separate ownership as independent competitors.

16.101 To the extent that there are any RCBs, their elimination would not undermine the remedy's effectiveness. The proportionality of prohibition and assessment of RCBs is dealt with separately below.

[2233] Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.4.
[2234] Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.8.
[2235] CMA87, paragraph 3.35.

16.102 We therefore consider that prohibition of the Merger would prevent the SLCs from arising in the relevant markets, with no material risks in terms of its effectiveness.

Conclusion on the effectiveness of prohibition

16.103 On the basis set out above, we conclude that prohibition would represent an effective and comprehensive solution to the SLCs and consequently prevent any resulting adverse effects.

16.104 Under a prohibition remedy, our consideration of the appropriate period during which the Parties would be prevented from attempting to merge is set out when we consider remedy implementation issues below.

16.105 The proportionality of prohibition is addressed later in this chapter when we consider the proportionality of effective remedies below.

Assessment of the effectiveness of the Network Commitment and time limited protections

16.106 Prior to the Provisional Findings and in response to the Remedies Notice, the Parties offered a Network Commitment that would deliver the key elements of the Merged Entity's JNP/JBP (ie a behavioural commitment). They submitted this Network Commitment would address our then provisional concerns with regards to the retail and wholesale markets.[2236]

Application of CMA Merger Remedies Guidance

16.107 The CMA's Merger Remedies Guidance sets out that behavioural remedies are, due to their overall risk profile, unlikely to deal with an SLC and its adverse effects as comprehensively as structural remedies.[2237] However, as noted above, the Merger Remedies Guidance also contemplates that '[b]ehavioural remedies can operate satisfactorily in limited circumstances, especially where the company operates in a regulated environment and where there are expert monitors'.[2238]

16.108 As outlined in the Remedies Notice, there are case specific facts that suggest behavioural remedies could be appropriate here. In particular, MNOs in the UK are regulated by Ofcom, which may be able to play a role in the implementation, monitoring and enforcement of remedies, including behavioural remedies. Further, for the reasons set out below, we consider that at least some of the customer benefits claimed by the Parties could qualify as RCBs under the Act and would be preserved through a behavioural remedy (see paragraphs 16.593 to 16.678).

[2236] Parties' network commitment proposal.
[2237] CMA87, paragraph 3.5.
[2238] CMA87, paragraph 3.48.

16.109 As noted above, when behavioural remedies are considered, we generally prefer to use enabling measures that 'work with the grain of competition' and address an SLC by seeking to remove obstacles to competition or stimulating competition, rather than measures that control market outcomes, which restrict the adverse effects of an SLC. The latter measures also tend to be onerous to operate and monitor, may create significant market distortions and do not address the causes of an SLC. Therefore, they are unlikely to be appropriate other than for a limited duration, unless there is no effective or practical alternative remedy.[2239] We consider that the Network Commitment is an enabling measure because it delivers a structural change to the UK's mobile networks, leaving market outcomes to be determined by the competitive process without further intervention.

Network Commitment remedy description

16.110 In this section we provide a description of the Parties' proposed Network Commitment including how this would be implemented before outlining the Parties' position as to how it addresses the SLCs identified.

16.111 The Parties' Network Commitment proposal, as described by the Parties in their response to the Remedies Notice, is publicly available on the CMA's case page.[2240]

Overview of the Network Commitment remedy

16.112 The Parties submit that a Network Commitment remedy would be appropriate, effective and proportionate in accordance with the CMA's Merger Remedies Guidance.[2241] They submit this remedy would entail a legally binding commitment to deliver the key elements of the JBP, enabling the delivery of a national 'best-in-class' network and rivalry enhancing effects. They also submit that this would prevent the SLCs in the retail and wholesale markets.[2242]

16.113 In particular, the Parties claim that the implementation of the JBP would enable both Parties to increase their competitiveness in the market and achieve the necessary scale to provide UK customers with a 'best-in-class' network while realising sustainable returns. Delivery of the JBP would create a challenger for BTEE and VMO2, leading to further investments in the industry to maintain competitiveness. According to the Parties, the Network Commitment is necessary to create a high-investment equilibrium and deliver a better outcome in both the retail and wholesale markets.[2243]

[2239] CMA87, paragraphs 3.49 and 7.12.
[2240] Parties' response to the Remedies Notice, 27 September 2024, section 4.
[2241] Parties' network commitment proposal.
[2242] Parties' network commitment proposal.
[2243] Parties' network commitment proposal.

16.114 The following core aspects of the Network Commitment are described in more detail below:

(a) The key obligations under the Network Commitment; and

(b) The Parties' proposed implementation process.

Obligations under the Network Commitment

16.115 The delivery of the JBP could be measured using either an input or output-based approach. An input-based approach would measure the delivery of the core physical inputs to the Merged Entity's network (eg the sites and spectrum deployed). By contrast, an output-based approach would measure outcomes delivered to customers by way of coverage, speed, latency or other network quality measures. [✂], the Parties have proposed an input-based approach.

16.116 The Parties consider that the measurement of the Network Commitment should be inputs-based, as this means that the metrics are clear and unequivocal. They submitted these inputs are readily measurable, simple and easy to monitor in practice.[2244] The Parties submitted that outputs (such as speeds, coverage and capacity) are in any case a function of two key inputs: the number of sites and the spectrum deployed on them. Vodafone described the relationship between these two inputs and outputs as 'one-to-one'.[2245]

16.117 Under the Network Commitment, the Parties would commit to create a combined network of no fewer than [25,000-30,000] nationwide sites (Figure 16.1). These sites would be divided across urban and rural areas, with a specified number of high-, mid-, and low-configuration sites in each area.[2246] Currently 3UK has [✂] sites[2247] while VUK has [✂]. Therefore, whilst the Network Commitment would result in an overall reduction in aggregate site numbers, the combined site portfolio would be denser than either of the standalone networks, and because spectrum holdings can be deployed at all sites, the Merged Entity's network would deliver greater capacity than the combined capacity of the two individual networks.[2248]

[2244] Parties' network commitment proposal.
[2245] Vodafone response hearing transcript.
[2246] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.5.
[2247] CK Hutchison response to the CMA's s109 notice.
[2248] Vodafone response to the CMA's s109 notice.

Figure 16.1: Annual Cumulative JNP Volume Target

<table>
<tr><th></th><th colspan="8">Annual Cumulative JNP Volume Target (No. of Sites)</th></tr>
<tr><th rowspan="2">FY</th><th colspan="3">Urban areas</th><th colspan="3">Rural areas[1]</th><th>YoY Total</th><th>Total Cumulative</th></tr>
<tr><th>High-config sites</th><th>Mid-config sites</th><th>Low-config sites</th><th>High-config sites</th><th>Mid-config sites</th><th>Low-config sites</th><th></th><th></th></tr>
<tr><td>Y1</td><td colspan="8" rowspan="8">[✂]</td></tr>
<tr><td>Y2</td></tr>
<tr><td>Y3</td></tr>
<tr><td>Y4</td></tr>
<tr><td>Y5</td></tr>
<tr><td>Y6</td></tr>
<tr><td>Y7</td></tr>
<tr><td>**Y8**</td></tr>
</table>

Notes: [1] [✂]

Source: Parties' response to the Remedies Notice, Annex 01, 27 September 2024.

Figure 16.2: Spectrum configuration

RAN Spectrum Configuration post-VMO2 divestment			
Target configuration	**Frequency bands (MHz)**	**Spectrum holding (MHz) (anticipated)**	**Sub-totals (subject to commitment)**
High	[✂]		
Mid			
Low			

Notes: [1] [✂]

[2]

Source: [Parties' response to the Remedies Notice](), Annex 01, 27 September 2024.

16.118 The above tables, which constitute the key inputs for the Network Commitment require the deployment of a prescribed amount of spectrum across a specified number of sites in rural and urban areas. In the Response to Remedies Working Paper, the Parties amended their initial proposal and committed to deploy [✂] 700 MHz, 800 MHz, 900 MHz and 1,400 MHz spectrum bands and noted that the Network Commitment would include this requirement.[2249]

16.119 The Network Commitment would apply for an 8-year period, enabling the Parties to progressively complete the network integration. After this period, the Parties

[2249] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.40.

submitted the positive effects on competition would be sustained in both the retail and wholesale markets benefiting UK consumers.[2250]

16.120 The Parties would report to Ofcom and a monitoring trustee and maintain the Connected Nations reporting which they submit three times a year.[2251]

16.121 The monitoring trustee, fully funded by the Parties, would report to Ofcom and to the CMA under the Act.[2252]

16.122 The Parties originally proposed that the delivery of the Network Commitment would be measured against formal deployment commitments at years 4 and 8.[2253] Following the Response Hearing, the Parties amended the formal commitment dates to three different points in time: the end of years 3, 5 and 8. The Parties submitted that the first milestone at the end of Year 3 would be appropriate as [✂]% of the overall network rollout and [✂]% of C-band site upgrades would have completed by this point.[2254]

16.123 In their response to the Remedies Working Paper, the Parties also proposed that in addition to the formal commitment dates at the end of years 3, 5 and 8, the Parties also proposed to report at Year 1 on the Early Year activities in relation to the Day 1 benefits.[2255] The Parties proposed that this Year 1 reporting commitment would be a transparency objective rather than an implementation commitment, which would address any concerns relating to stakeholders or the market being kept abreast of the progress/any failure in the delivery of the JNP.[2256] The Parties submitted that the precise specification of the Year 1 reporting commitment could be developed further with Ofcom, which would include reference to the implementation of MOCN and activation of VUK's 1800 MHz spectrum on 3UK sites.[2257]

16.124 In their response to the Remedies Working Paper, the Parties also committed to publishing their progress against the Network Commitment annually – as audited by a monitoring trustee.[2258]

The Parties' proposed implementation process

16.125 The Parties proposed that the Network Commitment would be implemented through both Undertakings to the CMA under the Act and the imposition of

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[2250] Parties' network commitment proposal.
[2251] Parties' network commitment proposal.
[2252] Parties' network commitment proposal.
[2253] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.5.
[2254] Parties, Remedies letter to the inquiry group.
[2255] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.33,
[2256] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.32.
[2257] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.32.
[2258] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.34.

amended conditions in the Merged Entity's spectrum licence(s).[2259] Ofcom would be responsible for monitoring the compliance with these conditions.[2260]

16.126 The Parties submitted that the Network Commitment takes into account Ofcom's feedback that the Network Commitment could be formalised as a variation of the Merged Entity's spectrum licence(s).[2261]

16.127 The spectrum licence variation would occur under Section 1 of the Wireless Telegraphy Act 2006 (**WTA06**).[2262] The Parties envisage that the Network Commitment would also be reflected in Final Undertakings to the CMA under section 82 of the Act. As part of the Undertakings, the Parties would commit to request that Ofcom amend the Merged Entity's spectrum licence(s) to incorporate the Network Commitment and to meet specific targets which become enforceable terms of the licence.[2263]

16.128 The Parties support the spectrum licence variation as it would formalise Ofcom's involvement in the monitoring of the Network Commitment, and unlock its statutory powers under the WTA06.[2264] As the Network Commitment would be part of the conditions of the Merged Entity's spectrum licence(s), Ofcom would monitor compliance with these conditions.[2265]

16.129 In our Remedies Working Paper we said that the Merger should not complete until the CMA has accepted appropriate undertakings, and Ofcom has approved the licence variation.[2266] However, the Parties in their response to the Remedies Working Paper proposed that rather than making completion of the Merger conditional on the licence variation being obtained from Ofcom, we could instead make the Merged Entity's request for a licence variation a condition of the Merger completing.[2267] The Parties submitted that this would help [✂].[2268]

16.130 In relation to obtaining the licence variation, the Parties submitted that the Undertakings should be designed in a way that Ofcom would still be able to perform its monitoring role in the extremely unlikely event that the licence variation was not obtained, or was subsequently overturned on appeal.[2269] The Parties also stated that even without Ofcom's additional enforcement powers arising from the

[2259] Parties' network commitment proposal.
[2260] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.16.
[2261] Parties' network commitment proposal.
[2262] Section 9 and 10 of WTA06 provide Ofcom with powers to grant wireless telegraphy licences and to revoke or vary them. Parties' network commitment proposal.
[2263] Parties' network commitment proposal.
[2264] Parties' network commitment proposal.
[2265] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.16.
[2266] CMA, Remedies Working Paper, 5 November 2024, paragraphs 1.274 and 1.574.
[2267] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 2.19.
[2268] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 2.18.
[2269] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 2.15.

breach of any spectrum licence(s), the CMA has a full suite of enforcement powers for final undertakings and orders under the Act.[2270]

16.131 In addition to formally measuring compliance with the Network Commitment (at Years 3, 5 and 8), the Parties proposed they would also regularly report on the progress of the rollout to the monitoring trustee and Ofcom.[2271] Ofcom's Connected Nations reports could be leveraged for this purpose. The frequency and timing would be set out in the Undertakings.[2272] More specifically, reports would include:

(a) location of the site – which could be verified by visiting the site;

(b) physical site characteristics, including its height and orientation – which could be verified by visiting the site;

(c) number of sectors – which could be verified by visiting the site (as this is visible); and

(d) spectrum deployment of each sector – which could be verified by a third party, using a spectrum analyser (for example, Ofcom has a spectrum enforcement team that measures spectrum with a spectrum analyser).[2273]

16.132 The Parties currently have two tools as information sources for the number of sites deployed and live. These are the Site Planning Tool and Inventory Management Tool. An independent auditor would be able to review data from these tools to verify the accuracy of the data.[2274]

16.133 The monitoring trustee, in consultation with Ofcom, would state whether the Merged Entity has met the commitment targets at the end of Years 3, 5 and 8 in its report to the CMA. If the commitments were not met, the Parties initially proposed that the Merged Entity would have a period of time to meet the targets (a cure period). During this time, the Merged Entity would have to submit monthly reports to Ofcom and the monitoring trustee to report on its progress. If, after the cure period, the Merged Entity does not meet its commitment, the monitoring trustee would inform the CMA of Ofcom's further remedial recommendations.[2275]

16.134 Following the Response Hearing, the Parties amended the above proposal to instead propose a cure period of 6 months should they fail to deliver 90% of their rural or urban site targets at the end of Years 3, 5 and 8.[2276]

2270 Parties response to the Remedies Working Paper, 12 November 2024, paragraph 2.17.
2271 Parties, Remedies letter to the inquiry group.
2272 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.17.
2273 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.17.
2274 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.17.
2275 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.26.
2276 Parties, Remedies letter to the inquiry group.

16.135 In addition to the cure period, the Parties proposed a number of guardrails[2277] that would allow for the Parties to fail to meet the Network Commitment due to unforeseen events.[2278] The Parties later revised the list of unforeseen events to mandatory regulatory interventions and what they described as a 'reasonably scoped "force majeure" clause'.[2279]

16.136 In their response to the Remedies Working Paper, the Parties offered to dispense with the cure period and guard rails proposed, provided the Network Commitment acknowledges that unforeseen events outside the Parties' control must be taken into account, when determining whether a breach has occurred.[2280]

16.137 The Parties submitted that action in relation to potential breaches should not rely entirely on general enforcement discretion given:[2281]

(a) The JNP involves investment into a complex infrastructure project over a number of years, with clear scope for significant geopolitical events, pandemics, changes in law, regulatory events, force majeure or 'acts of God' outside the Parties' control but which may have an impact on delivery.

(b) The severity of the potential consequences of a breach, ie loss of licence and steep fines.

(c) The potential exposure extending beyond enforcement action by the CMA or Ofcom, which could include the Parties facing proceedings from third parties.

16.138 The Parties submitted that the Merged Entity would have very strong incentives to comply with the Network Commitment, as failure to do so would result in a breach of the Merged Entity's spectrum licence(s).[2282] Furthermore, a consequence of Ofcom's civil enforcement powers is that the sanctions for breach of a spectrum licence would be very significant and incentivise the entity to ensure compliance with the Network Commitment in full.[2283] The Parties noted in this respect that Ofcom's civil enforcement powers are administrative in nature – it does not need court approval to bring enforcement action.[2284]

16.139 In particular, the Parties noted that if the Merged Entity did not comply with the Network Commitment incorporated in the spectrum licence(s), Ofcom could enforce compliance by:

[2277] eg, acts of God, such as fire, flood, earthquake, pandemics or other natural disasters; terrorist events, riots, insurrections, war, strikes or national emergencies; significant changes in political, legal, fiscal or regulatory conditions and/or significant supply chain disruptions.
[2278] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.19.
[2279] Parties' follow-up remedies submission.
[2280] Parties' response to the Remedies Working Paper,12 November 2024, paragraphs 1.7 and 2.22.
[2281] Parties' response to the Remedies Working Paper,12 November 2024, paragraph 2.23.
[2282] Parties' network commitment proposal.
[2283] Parties' network commitment proposal.
[2284] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.22.

(a) Issuing a contravention notice (at first instance, which allows the contravening party a period of time to comply with the notice) (section 39 of the WTA06);

(b) Opening a regulatory investigation in relation to the contravention of the licence – this can result in Ofcom issuing a financial penalty of up to 10% of relevant annual gross revenue (sections 42 and 43(2A) of the WTA06);

(c) Bringing civil proceedings against the contravening party including seeking injunctions or specific performance (section 108 of the WTA06);

(d) Revoking or varying the Merged Entity's spectrum licence(s) (paragraph 7 of Schedule 1 of the WTA06); and

(e) Criminal prosecution for unauthorised use of wireless telegraphy apparatus under section 35 of the WTA06, which can be punishable by up to two years' imprisonment and a fine.[2285]

16.140 Furthermore, the Parties noted that Ofcom has information gathering powers under the CA03 and the WTA06. Ofcom can impose financial penalties in case of contravention of the requirements of an information request.[2286]

16.141 The Parties also noted that the CMA has enforcement powers for Final Undertakings and Orders.[2287]

16.142 The Parties submitted that Ofcom would need the discretion to make minor updates to the relevant targets if any significant technological changes arise. The Parties submitted that this would ensure the Network Commitment would be specified in a way that could take into account unanticipated circumstances.[2288]

Ofcom's views

16.143 Ofcom has provided views on whether the Network Commitment, if implemented, would result in the improvements in network performance claimed by the Parties. These are considered in more detail below in our assessment of the effectiveness of the Network Commitment in addressing the SLC and its resulting adverse effects. In addition, Ofcom has also commented on the practicalities of the Parties' proposal, which are considered here.

16.144 Ofcom told us that input-based requirements have significant advantages relative to output-based requirements. While the ultimate benefit to customers depends on

2285 Parties' network commitment proposal.
2286 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.23.
2287 Parties' network commitment proposal; and Parties' response to the Remedies Notice, 27 September 2024, paragraph 2.17.
2288 Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.48.

what outputs are achieved, Ofcom told us that there would be considerable difficulty defining the precise outputs that should be achieved, and that this would have implications for the resources required to monitor compliance, and Ofcom's ability to enforce those requirements.[2289]

16.145 Ofcom told us that measuring signal strength (output) at every location would not be practical. Ofcom would be reliant on the predictions from the MNOs, with a limited amount of calibration through drive surveys. Even this limited amount of calibration would have a significant cost of several hundred thousand pounds over the commitment period.[2290]

16.146 Ofcom told us that the high standard deviation of the measurement error (between predicted signal strength and that measured on drive surveys) means that any measurement programme would need to be substantial in order to support enforcement, and even so, still afford a degree of leniency against the intended consumer outcomes for the reasons set out below in relation to unintended consequences.[2291]

16.147 Ofcom told us that the focus on predicted signal strengths may also have unintended consequences.[2292]

(a) First, the MNOs may have an incentive to avoid developing more accurate prediction tools that might otherwise help focus network developments on improving customers' experience. Any more accurate predictions might identify more localised areas of weaker signal and make it more costly to achieve the licence obligation.

(b) Second, the MNOs would have an incentive to develop their prediction tools to focus on meeting the licence obligation within the known calibration parameters, rather than supporting improving customers' experience. Ofcom's calibration focusses on the mean signal strength and median error of differences between predicted and measured signal strength, allowing a certain tolerance. In principle, that provides the MNOs with some leeway to develop their models in a way that, whilst remaining within the calibration limits overall, adds predicted signal strength in areas needed to meet the obligation whilst reducing predicted signal strength in other areas.

(c) Third, setting the power output is an important lever in optimising the performance of the network. Increasing the power output will in general increase coverage at any given signal strength, but it might actually worsen the consumer experience by also increasing signal interference and reducing

2289 Ofcom response to the CMA's request for information.
2290 Ofcom, submission.
2291 Ofcom, submission.
2292 Ofcom, submission.

the ability of the resulting connection to support a good service for the customer.

16.148 Ofcom told us that it does not believe it is practical to measure the outputs of average speeds and latency given the (very large) scale of the measurement programme that would be needed across locations and time of day to provide evidence sufficient to enforce an obligation. Any monitoring would be reliant upon predictions from the Merged Entity, and the likely costs of even limited measurement and the scope for any monitoring programme would distort incentives away from improving the consumer experience to an even greater extent than is the case for coverage monitoring.[2293]

16.149 Ofcom told us that the key inputs that would need to be specified are the number of sites and the spectrum deployed on those sites. It also told us that the specification should consider the risk that the Merged Entity may seek to retain fewer sites in rural areas, and therefore that the specification should separately identify sites and spectrum in areas that broadly map to urban and to rural areas.[2294]

16.150 Overall, Ofcom told us it does not consider output measures to be necessary and that the inputs of sites and spectrum are strongly linked to the outcomes of customer experience in terms of network quality.[2295]

16.151 Ofcom expects the benefits of the Network Commitment to be long-lasting rather than temporary.[2296] Ofcom told us that although consumers' use of mobile services and demand for mobile data have both changed substantially over the past 10 years, the underlying physical infrastructure (mobile sites) has remained far more constant, with many of the sites that were used 10 years ago still in use today, and the number of sites used by each MNO having only increased by a small percentage each year.[2297]

16.152 Ofcom does not consider that it would be appropriate to provide for a cure period and noted that it would simply delay the point at which the obligation becomes binding. Ofcom considers that its current approach to enforcement allows sufficient scope to consider mitigating circumstances that have resulted in a failure to meet an obligation.[2298] Ofcom considers its existing enforcement mechanisms allow it to take account of circumstances in the round, including any action parties have

[2293] Ofcom, submission.
[2294] Ofcom response to the CMA's RFI.
[2295] Ofcom, submission.
[2296] Ofcom call note.
[2297] Ofcom response to the CMA's RFI.
[2298] As set out in Ofcom's approach to enforcement, '[Ofcom] take[s] enforcement action for the benefit of citizens and consumers to: promote and/or protect competition; prevent consumer harm and enforce consumer protection law; and encourage compliance'.

taken to mitigate any failure to meet obligations, in a way that preserves incentives on parties to meet both the letter and intent of obligations.[2299]

16.153 As noted above, the Parties' subsequently proposed to include a provision as part of the Network Commitment that unforeseen events outside the Parties' control are taken into account in determining whether a breach has occurred. Ofcom told us that it is not Ofcom's practice to insert such wording into spectrum licences.[2300] Ofcom noted that when it considers whether to exercise its discretion to take enforcement action, it will take account of the wider context, including events that are unforeseeable or outside the regulated companies' control.[2301]

16.154 Ofcom also noted a number of potential further considerations relevant to circumvention risk of the Network Commitment:[2302]

(a) Whether the Parties be allowed to deploy new spectrum, such as the 26 GHz spectrum, to achieve the spectrum quantity commitments.

(b) Whether all sites should have each of 700 MHz, 800 MHz, 900 MHz and 1,400 MHz spectrum bands deployed.

(c) The risk that the Parties use (cheaper) microcells to achieve the site numbers commitment.

(d) The risk that the Parties meet the commitment through sites and spectrum deployed using state funding such as with the SRN total not spots.

Third Party views

16.155 We received a range of views from third parties on the Network Commitment remedy proposal, which are summarised below.

16.156 BTEE does not believe that the Network Commitment would directly address the SLCs even if it was fully delivered.[2303] BTEE also submitted we should ensure that the Network Commitment should be as limited as possible to minimise its potentially distortive effects.[2304] BTEE considers that either the remedy would be too simple to be effective or, if sufficiently designed, would be too complex to be monitored and enforced.[2305]

[2299] Ofcom response to the CMA's RFI.
[2300] Ofcom email.
[2301] Ofcom submission.
[2302] Ofcom response to the CMA's RFI.
[2303] BTEE response to the Remedies Notice, 27 September 2024, paragraph 1.14 and BTEE response to the remedies working paper, 12 November 2024, paragraph 1.4.
[2304] BTEE response to the remedies working paper, 12 November 2024, paragraph 1.2.
[2305] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.12.

16.157 BTEE submitted it does not consider the relationship between inputs and outputs is 'one-to-one' and therefore that the CMA can rely on input-based monitoring only.[2306] In order to reduce the scope for circumvention, a complete range of input metrics related to network development and detailed output metrics would need to be included in the Network Commitment, but even then BTEE considers scope for circumvention and disputes would remain.[2307] BTEE also considers that the specification and circumvention risks inherent in the Network Commitment would be reinforced by technological changes.[2308] Furthermore, intensive monitoring would require Ofcom and/or the CMA to incur additional material costs and investments.[2309]

16.158 Even if the Network Commitment was implemented (which BTEE considers is highly unlikely), BTEE submitted that the effectiveness of the commitment would be dependent on it leading to a competitive response from BTEE and VMO2.[2310] BTEE's ability and incentives to increase investment would be limited due to the Merged Entity's ability and incentive to use excess capacity to harm BTEE along with the ability and incentive to frustrate BTEE's ability to upgrade MBNL sites.[2311] BTEE submitted that the Merged Entity would have a substantial capacity advantage over its rivals, and therefore the incentive to use capacity to engage in strategic conduct to the detriment of long-term incentives to invest.[2312]

16.159 [✂] said it is entirely unclear how the CMA has been able to conclude (1) that there is a need to impose a binding requirement on the Parties in order to ensure that the full investment plan is actually delivered but (2) that the SLCs will be fully remedied in the long term due to the competitive response on the part of the other MNOs even though those MNOs would not be under any obligation to actually take such actions (eg by reference to a final order or the terms of their spectrum licence(s)). They said it is not clear to [✂] why the Parties must be subject to a requirement in order to ensure delivery, but the CMA is able to accept 'on faith' that the remaining MNOs will deliver a response on their own volition – this is a gamble that cannot on any reasonable grounds be thought more likely than not; and while increased capacity and improved network quality of the Proposed JV, both of which will allegedly be delivered by the investment plans, may give the Proposed JV the ability to participate in more MVNO tender opportunities and enable it to offer better terms, the CMA has failed to demonstrate why the Proposed JV would have any incentive to do so (rather than, for example, expand its own position on the retail market). On the contrary, the risk to the Proposed JV of losing wholesale revenue if it does not participate in MVNO tenders (or does so

2306 BTEE response to the remedies working paper, 12 November 2024, paragraph 3.4.
2307 BTEE response to the Remedies Notice, 27 September 2024 paragraphs 3.29-30.
2308 BTEE response to the Remedies Notice, 27 September 2024 paragraphs 3.20-22.
2309 BTEE response to the Remedies Notice, 27 September 2024 paragraphs 3.21 – 3.34.
2310 BTEE response to the Remedies Notice, 27 September 2024 paragraph 3.15.
2311 BTEE response to the Remedies Notice, 27 September 2024 paragraph 3.16.
2312 BTEE response to the Remedies Notice, 27 September 2024 paragraph 6.2. BTEE response to the remedies working paper, 12 November 2024, page 4-5.

on uncompetitive terms) is reduced by the Proposed JV, simply by virtue of the fact that post-completion there would be fewer alternative MNO providers available to the relevant MVNO. [2313]

16.160 [✂].[2314] Overall, they said it is not appropriate or rational, against this backdrop, to conclude that such SLCs can be fully remedied in the long term simply by reference to a set of highly speculative efficiency claims advanced by the Parties in combination with an entirely unsupported assumption on the part of the CMA that such efficiencies will trigger a response (let alone a sufficiently material response) from the remaining MNOs (which, again, are not subject to any requirement whatsoever to do so).[2315]

16.161 Sky Mobile submitted that the CMA accepts that it is under an obligation to remedy the SLCs it has identified 'to a high degree of certainty'. They submitted this seems entirely inconsistent with the amount of risk the CMA is accepting as to the delivery and outcome of the Network Commitment and the likely rivalry at the wholesale and retail level in a future three-player market. They said the CMA has failed to provide any specific evidence that the proposed remedies would be effective and comprehensive – relying instead on conceptual arguments about likely effects.[2316]

16.162 VMO2 submitted that the Network Commitment would be reinforced by Beacon 4.1.[2317] The Beacon 4.1 Agreements provide a structural measure which will significantly increase VMO2's competitiveness and thereby increase competition in the retail and wholesale markets.[2318] VMO2 submitted that the Network Commitment could be implemented through an Undertaking and an amendment of the spectrum licence terms.[2319] In response to the Remedies Working Paper, VMO2 submitted that it agrees with the CMA's conclusion that the Network Commitment should remain in force for eight years, until full completion of the network integration plan as set out in the JNP.[2320] VMO2 does not envisage any credible risks in terms of specification, circumvention and market distortion.[2321] VMO2 does not consider that the Network Commitment would raise any credible monitoring and enforcement risks.[2322] This is because of the nature of the data

2313 [✂] response to the Remedies Working Paper, paragraph 2.3.9-10.
2314 [✂] response to the Remedies Working Paper, paragraph 2.3.5.
2315 [✂] response to the Remedies Working Paper, paragraph 4.2.
2316 Sky Mobile response to the Remedies Working Paper, paragraph 65-66.
2317 VMO2 response to the Remedies Notice, 27 September 2024. paragraph 2.10. VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.1.
2318 VMO2 response to the Remedies Notice, 27 September 2024. paragraph 1.3. VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.2 and 2.3.
2319 VMO2 response to the Remedies Notice , 27 September 2024. paragraph 3.3.
2320 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.4.
2321 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.6.
2322 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.5.

monitored and the involvement of Ofcom and its enforcement power under the WTA06 would rule out any information asymmetry concerns.[2323]

16.163 [✂] submitted that it is broadly supportive of a commitment that guarantees an enhanced network. However, [✂] believes the Network Commitment should be overseen by an investment committee with appropriate oversight, rather than incorporated into the Merged Entity's spectrum licence, and this would help ensure deployment in a timely manner. [✂] also supports the use of input metrics as performance targets as output metrics would be too complex to collect.[2324]

16.164 Community Fibre submitted that the Network Commitment could be an effective remedy along with capacity-based wholesale protections.[2325] It submitted that the Network Commitment should focus on coverage, elimination and prevention of congestion, availability of capacity for continued usage and growth for both retail and wholesale customers of the Merged Entity and for additional wholesale providers.[2326] Targets should be measured and monitored by experts and qualified monitors.[2327]

16.165 Enders Analysis submitted that it would be important to strike a balance between addressing the concern about fulfilment of the network strategy by the Parties and allowing the Parties to respond to shifting demand, competitive and technological developments.[2328] It submitted that network spend commitments should be expressed in broad terms with specific technical metrics which are deemed instrumental in achieving consumer outcomes and mitigate potential pricing impacts.[2329]

16.166 [✂][2330] and [✂][2331] submitted that a Network Commitment must be supplemented by additional remedies to address the (then) provisional SLCs. Honest Mobile submitted that a Network Commitment should be subject to independent monitoring by Ofcom.[2332] Honest Mobile noted that a three-year initial review would not be adequate for the level and speed of investment that is required to promote the interests of UK consumers and recommended annual targets with ambitious goals in the first year.[2333]

[2323] VMO2 response to the Remedies Notice , 27 September 2024. paragraph 3.5. VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 2.5.
[2324] [✂] response to the Remedies Notice, 26 September 2024, page 1.
[2325] Community Fibre response to the Remedies Notice, 27 September 2024, page 1.
[2326] Community Fibre response to the Remedies Notice, 27 September 2024, page 1.
[2327] Community Fibre response to the Remedies Notice, 27 September 2024, page 1.
[2328] Enders Analysis response to the Remedies Notice, 27 September 2024, page 1.
[2329] Enders Analysis response to the Remedies Notice, 27 September 2024, page 1.
[2330] [✂] response to the Remedies Notice, 26 September 2024, page 3.
[2331] [✂] response to the Remedies Notice, 27 September 2024, page 2.
[2332] Honest Mobile response to the Remedies Notice, 27 September 2024, page 2.
[2333] Honest Mobile response to the remedies working paper, page 2.

16.167 iD Mobile submitted that the Parties should provide a roadmap of their plan for the next eight years.[2334] It submitted the CMA should specify the 'Year 1' Network Commitment to ensure the delivery of day-1 claimed benefits.[2335] It also submitted that the Parties should be required to publish key statistics and KPIs which can be easily understood and monitored for each key deliverable in an annual progress report.[2336] Furthermore, iD Mobile proposed an output-based performance review.[2337]

16.168 Liberty Global (who we note holds a small shareholding in Vodafone Group and a 50% shareholding in VMO2) submitted that a Network Commitment with time limited protections in the retail and wholesale markets, along with the spectrum transfer to VMO2 and amendments to the Beacon network sharing arrangements, could appropriately address the CMA's concerns and (should be) the preferred remedy to clear the Merger.[2338] It submitted that the Network Commitment will complement the Beacon 4.1 Agreements and will ensure the delivery of the benefits associated with the Parties' Joint Business Plan.[2339]

16.169 [✂] submitted that it is sceptical that the preferred remedy provisionally set out in the Remedies Working Paper would effectively address the SLCs given that the transaction would lead to an increase in customer prices.[2340] It submitted the Network Commitment does not constitute an adequate remedy even if combined with the retail and wholesale customer protections. Input-based metrics might not ensure that ultimate results are guaranteed or specified.[2341] [✂] submitted that the remedy was too complex to be effectively monitored and enforced and that there is scope for circumvention and disputes given its complexity and duration.[2342] Furthermore, intensive monitoring would require Ofcom and the CMA to incur additional material costs and investment.[2343]

16.170 The Federation of Communication Services (FCS) submitted that the current proposals do not seem sufficiently stringent and do not provide a 'level playing field'.[2344] The FCS suggested at least six-monthly reporting to both the CMA and Ofcom.[2345]

16.171 [✂] submitted that in the short to medium term the commitments have the potential to enhance investments more than under the current market structure.[2346]

[2334] iD Mobile response to the CMA's RFI.
[2335] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1.
[2336] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1.
[2337] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1
[2338] Liberty Global response to the remedies working paper, 12 November 2024, page 2.
[2339] Liberty Global response to the remedies working paper, 12 November 2024, page 3.
[2340] [✂] response to the remedies working paper, 12 November 2024, page 2.
[2341] [✂] response to the remedies working paper, 12 November 2024, page 8.
[2342] [✂] response to the remedies working paper, 12 November 2024, page 8.
[2343] [✂] response to the remedies working paper, 12 November 2024, page 8.
[2344] FCS response to the remedies working paper, 12 November 2024, page 2.
[2345] FCS response to the remedies working paper, 12 November 2024, page 2.
[2346] [✂] response to the remedies working paper, 12 November 2024, page 1.

It noted it would be useful to compare the Investment Commitment in real terms to the actual investments of the Parties in the last eight years.[2347] [✂].[2348]

16.172 One third party told us that monitoring and enforcing a technology outcome for ten years would be complex, problematic and resource intensive. However, if the commitment was instead based on £11 billion investment over ten years, then monitoring and enforcement would be simple. Moreover, the third party submitted that the Parties would have the incentive to spend their money wisely.[2349]

Our assessment of the Network Commitment (behavioural framework)

Framework for assessing Network Commitment

16.173 Behavioural remedies seek to change aspects of business conduct from what may be expected, based on businesses' incentives and resources. In addition to the framework outlined above at paragraph 16.7 to 16.11 (which includes assessing the extent to which the remedy addresses the SLC, the duration and timing of the remedy, and its practicality), the design of behavioural remedies seeks to avoid four particular forms of risk to enable these measures to be as effective as possible:[2350]

(a) **Specification risks**: these risks arise if the form of conduct required to address the SLC or its adverse effects cannot be specified with sufficient clarity to provide an effective basis for monitoring and compliance.

(b) **Circumvention risk**: as behavioural remedies generally do not deal with the source of an SLC, it is possible that other adverse forms of behaviour may arise if particular forms of behaviour are restricted.

(c) **Distortion risks**: these are risks that behavioural remedies may create market distortions that reduce the effectiveness of these measures and/or increase their effective costs.

(d) **Monitoring and enforcement risks**: for behavioural remedies to have the desired impact, it is essential that there are effective and adequately resourced arrangements in place for monitoring and enforcement, so that there is a powerful threat that non-compliance will be detected, and that action will be taken to enforce compliance where this is necessary.[2351] Even clearly specified remedies may be subject to significant risks of ineffective monitoring and enforcement. This may be due to a variety of causes, such as

[2347] [✂] response to the remedies working paper, 12 November 2024, page 1.
[2348] [✂] response to the remedies working paper, 12 November 2024, page 1.
[2349] Professor Stephen Temple response to the Remedies Notice, 17 September 2024, page 1.
[2350] CMA87, paragraph 7.4.
[2351] CMA87, paragraph 7.5.

the volume and complexity of information required to monitor compliance; limitations in monitoring resources; asymmetry of information between the monitoring agency and the business concerned; and the long timescale of enforcement relative to an evolving market.

16.174 The rest of this section outlines our assessment of the effectiveness of the Network Commitment using the framework outlined above taking the above behavioural risks into consideration.

Impact on the SLC and resulting adverse effects

Introduction

16.175 In Chapter 14, we noted the Parties' claims that the Merger would give rise to rivalry enhancing efficiencies relating to network capacity and quality. We noted that the principal evidential base for the Parties' rivalry enhancing efficiencies claims was the JBP. Part way through the phase 2 investigation, the Parties also entered into Beacon 4.1, which they claim will generate further rivalry enhancing efficiencies, in particular by making VMO2 a more effective competitor in the wholesale and retail markets.

16.176 We then considered in detail whether the Merger gives rise to rivalry enhancing efficiencies which could act as a countervailing factor that may prevent any SLC arising from the Merger, applying our established framework. We first considered the Parties' claims about the rivalry enhancing efficiencies that they said would result from the Merger, through full implementation of the JBP and Beacon 4.1. We concluded that, if fully implemented, increases in capacity by the Merged Entity through the JBP would in principle and over time give it an incentive to fill that capacity by making more attractive offers to customers. We also concluded that, if fully implemented, the JBP would, in time, lead to significant and long-lasting quality improvements in a way that positively affects customer experience. We considered these capacity and quality improvements to be relevant to rivalry in both the retail and wholesale markets.

16.177 However, we concluded that the Parties were not likely to have the commercial incentive to deliver the full JBP, and therefore the quantum of any rivalry enhancing efficiencies would be less than claimed by the Parties. We concluded that the increased rivalry from those efficiencies which were likely to be realised were not sufficient to offset the adverse competitive impacts identified in relation to the retail market and wholesale markets. In light of this finding, we did not need to further consider in that Chapter whether the full JBP, if delivered by the Parties, would be sufficient to offset the adverse effects on competition identified in the retail and wholesale markets.

16.178 We now consider whether the Network Commitment remedy, which is intended to ensure delivery of the full JBP, would be effective in remedying the SLCs identified and their resulting adverse effects. We have considered the impact of the Network Commitment on rivalry.[2352] The objective is to ensure that competition following the implementation of a remedy is at least as effective as pre-merger competition.[2353]

How the Parties consider the Network Commitment addresses the SLCs

16.179 We set out in detail in Chapter 14 the Parties' claims as to the rivalry enhancing effects of the JBP, and so now only briefly restate their core claims in relation to the Network Commitment, which is intended to ensure full delivery of the JBP.

16.180 The Parties consider that the Network Commitment will prevent any SLC in the retail and wholesale markets and incentivise the Merged Entity and its competitors to compete harder.[2354] They submit that this is because the Network Commitment would:

(a) enhance the coverage and capacity of the Merged Entity, incentivising it to make attractive retail and wholesale offers to fill the new available capacity. This would be particularly relevant in the competition for MVNOs;

(b) decrease the Merged Entity's incremental costs of expanding capacity, leading to lower prices and better quality;

(c) improve the Merged Entity's network quality; and

(d) increase competition and competitive pressure on VMO2 and BTEE to provide better wholesale and retail offers.[2355]

16.181 In particular, as noted in Chapter 14, the Parties submit that the JBP leads to a 'transformational' capacity uplift of at least [✂]% compared to the standalone networks by [✂]. They claim this progressive increase in capacity compared to the counterfactual will have beneficial effects for quality parameters such as congestion and speed, and that the Merged Entity 'will face a very low incremental cost of adding additional customers to its base, which in turn will incentivise [it] to compete aggressively to fill that capacity.'[2356] They also claim this will trigger a competitive response from the other two MNOs in terms of both pricing and

[2352] CMA87, paragraph 3.5(a).
[2353] CMA87, paragraph 3.30.
[2354] Parties' network commitment proposal.
[2355] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.34.
[2356] Parties' initial submission, 1 May 2024, paragraph 6.11.

investment, significantly enhancing competition in the retail and wholesale markets compared with the counterfactual.[2357]

16.182 While acknowledging the Network Commitment is a behavioural remedy, the Parties submitted that the CMA's Merger Remedies Guidance notes that behavioural remedies can be effective in regulated environments where there are expert monitors, and the Merged Entity would operate in a regulated environment.[2358] The Parties also submitted that the Network Commitment differs from the 'pure' behavioural remedy discussed in the CMA guidance. They submitted it would guarantee an irreversible structural change in network capacity and quality and a permanent shift in incentives for players in the market.[2359]

16.183 The Parties submitted that the effects of the Network Commitment are further enhanced by Beacon 4.1, which provides VMO2 with additional spectrum and access to sites and facilitates investment in network quality and capacity, leading to increased network competition.[2360]

16.184 Having regard to these claims, we now consider the likely impact of the Network Commitment in more detail, with respect to the key competitive parameters in each of the retail and wholesale markets below.

Impact of the Network Commitment on retail competition

Key competitive parameters for retail customers

16.185 As set out earlier in our Final Report, we have found that price and quality are the most important competitive parameters for retail customers, with price the more important parameter of the two. Customers require a minimum level of quality, and network quality related parameters play an important role in customer decisions, but we found they are less important than price.[2361] For example, we noted that most consumers told us in our survey that they would not be willing to pay more for better quality (with 76% unwilling to pay for faster speed, and 59% unwilling to pay for more reliability).[2362]

16.186 However, at the same time, customers also told us that they would react strongly to a deterioration in network quality: 60% of 3UK customers and 65% of VUK customers were quality-marginal (ie they would switch if the network they were using was 'a bit less reliable').[2363] We also find in our econometric analysis

[2357] Parties' initial submission, 1 May 2024, paragraph 6.11.
[2358] Parties' network commitment proposal.
[2359] Parties' network commitment proposal.
[2360] Parties' network commitment proposal.
[2361] See Summary, paragraph 33.
[2362] See Chapter 8, CMA Surveys.
[2363] See Chapter 8, CMA Surveys.

summarised in Chapter 8 some willingness to pay for aspects of network quality and in particular for faster 4G download speeds.[2364]

16.187 Finally, we recognise the possibility that customer attitudes may evolve as the mobile industry develops;[2365] ie it is possible that a different valuation of price and quality parameters may result over time. We note that Ofcom has concluded that it expects the quality of mobile services to become 'more important as customers' dependence on mobile services grows and their needs evolve'.[2366] In particular, Ofcom expects demand for mobile data to grow to meet changing customer needs, as greater use is made of data-hungry services (eg streaming, video calling, virtual and augmented reality) meaning that significant investments in mobile networks will be required to increase capacity and provide the network quality needed to meet customers' future connectivity needs.[2367]

Likely impact of the Network Commitment on pricing in the retail market

16.188 Given the importance of price to customers, we have sought to quantify the likely impact of the Merger on pricing using a range of economic techniques. However, we also note that it is difficult to estimate the impact of a merger on retail pricing with precision in this industry for a range of reasons. We have therefore considered our economic estimates in the round, rather than as a single definitive source of evidence about the likely impact of the Merger.[2368] This is in line with our guidance, which makes clear that the CMA is not required to make precise predictions about the future.[2369] In addition, we expressly recognise that for methodological reasons, these economic techniques held quality fixed[2370] (ie they, by design, did not seek to assess the impact of any potential network quality improvements on overall consumer welfare, which we considered separately).

16.189 Our analysis predicts (in the absence of rivalry enhancing efficiencies) price rises by the Parties and material harm for UK consumers. In particular, the merger simulation predicts that the Merged Entity would raise the prices of 3UK's tariffs by 5.5% on average and VUK's tariffs by 2.6%.[2371] This would result in a 1.4% decrease in consumer welfare, implying an annual cost of approximately £216 million to UK consumers.[2372] Alternative approaches that more closely reflect the value of acquiring a consumer for the Parties in the long run suggest the harm could be materially greater than £216 million annually.

2364 See Chapter 8, Econometric Analysis.
2365 See Summary, paragraph 34.
2366 See Chapter 8, Third party evidence.
2367 See Chapter 5, Mobile data traffic growth.
2368 See Summary, paragraph 42.
2369 CMA129, paragraph 2.21.
2370 See Chapter 8, CMA analysis on the impact of the Merger on prices.
2371 In our Provisional Findings these figures were 7.0% and 3.8%, respectively.
2372 In our Provisional Findings, consumer welfare was predicted to fall by around 1.5% with the corresponding annual consumer harm figure of £328 million per year.

16.190 We also note that our merger simulation does not account for the impact on the retail market from the loss of competition in the wholesale market. Faced with less competitive wholesale terms, MVNOs would be less able to compete in the retail market, particularly in the low-cost segment where they tend to operate. This would lead to greater price increases than already outlined from the direct loss of retail competition resulting from the Merger.

16.191 However, we note that the Network Commitment would mean that the Merged Entity would have more sites and more spectrum than the networks of each Party individually. Because network capacity is a function of the amount of spectrum deployed multiplied by the number of sites, increasing both the number of sites and the amount of spectrum deployed on them will have a 'multiplicative' effect on the Merged Entity's network capacity compared to the sum of two standalone networks, resulting in a significant increase in the Merged Entity's capacity compared to the standalone networks.[2373]

16.192 In the longer term, this 'multiplicative effect' will also mean there is a reduction in the unit cost of expanding capacity in response to increased demand as the Merged Entity can deploy more spectrum on its network (for example through adding more sites or new technology), and therefore achieve a larger capacity uplift for a given spend, than VUK and 3UK could in the counterfactual.[2374]

16.193 As set out in Chapter 14, we have also engaged with Ofcom to assess the extent of the network capacity improvements likely to result from the full implementation of the JBP in the long-term, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views, we have ultimately reached our own conclusions on each of the relevant questions. Ofcom told us that overall, the densification alongside the deployment of spectrum in line with the JNP will provide a significant increase in capacity.[2375] As already described, Ofcom analysis indicates a relative uplift in capacity in 2032 under the JBP compared to the sum of capacities of both Parties in 2024 of at least [✂] in rural areas and of at least of [✂] in urban areas.[2376]

16.194 In Chapter 14, we also considered the Parties' submissions that this increase in network capacity would result in a reduction in the incremental cost of capacity that will result in downwards pricing pressure. We considered the evidence as to

[2373] The extent of the increase in capacity compared to the sum of the standalone networks will depend on the extent of the Merged Entity's site rationalisation and any spectrum transfer; and also the extent to which the Merged Entity deploys its spectrum across its sites and its spectral efficiency compared to the standalone networks in the counterfactual. See also paragraph 14.24.
[2374] See paragraph 14.26.
[2375] Ofcom, response to the CMA's 1 October 2024 letter.
[2376] Ofcom, response to the CMA's 1 October 2024 letter. The calculation of capacity used here is sites x spectrum, so if 10MHz is deployed on 20 sites and 5MHz is deployed on 30 sites, that total capacity is 350 (across 50 sites). The calculation of capacity is the sum of the spectrum deployed.

whether any reduction in incremental cost of capacity is likely to be passed through to the benefit of retail customers.

16.195 We saw some evidence of 3UK and VUK taking account of traffic growth and capacity in retail pricing, for example in data allowances and the pricing of unlimited tariffs. This evidence was limited and, in light of this, we did not consider that we could use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which possible rivalry enhancing efficiencies from the Merger may reduce retail prices that could be set against any adverse effects due to a loss of competition. However, we agreed with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle (ie if realised) and over time give them an incentive to fill that capacity by making more attractive offers to customers.[2377]

16.196 Under the Network Commitment, the capacity of the Merged Entity will over time increase compared to the counterfactual, and this would be accompanied by Beacon 4.1 increasing VMO2's network capacity both as a result of the additional spectrum VMO2 acquires ([✂]) and the additional sites it would be able to access. We consider that this increase in the capacity of the Merged Entity and VMO2 (compared to the counterfactual) will lead to downward pressure on prices as the Merged Entity and VMO2 would have the incentive to fill that capacity by making more attractive offers to customers. We consider that this in turn would likely lead to a competitive response from BTEE, for instance by increasing the attractiveness of its own offers.

16.197 Therefore, in the short term the effect of the Merger would be to increase prices, but in the longer term the increase in capacity by the Merged Entity (with the Network Commitment) and VMO2 may create an opposing effect, ie downward pressure on prices. Additionally, as we discuss further below, the longer-term increase in capacity and reduction in the incremental cost of capacity arising from the Merger with the Network Commitment gives rise to improvements in quality which are valuable to consumers, and overall we consider the longer term effect of the Merger with the Network Commitment will be to improve consumer welfare, ie reduce quality-adjusted prices.

Likely impact of the Network Commitment on network quality in the retail market

16.198 As noted above, we have found that network quality is one of the two most important competitive parameters for customers and is likely to increase in importance in the future.[2378] The Parties submitted that (if fully implemented) the JBP will create a much higher quality network than either Party's standalone

[2377] See paragraph 14.174.
[2378] See Summary, paragraph 34 and Chapter 8, Parameters of competition, third party evidence.

network that will achieve increased coverage, greater consistency and reliability, lower latency and faster average speeds, making the Merged Entity a stronger rival.

16.199 In order to assess the extent of any network quality improvements likely to result from the full implementation of the JBP, and in line with our guidance in relation to merger investigations involving regulated sectors, we have engaged closely with Ofcom, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views, we have ultimately reached our own conclusions on each of the relevant questions. We first carefully considered what network quality was likely to result without the Merger, and in particular whether there was evidence that supported the Parties' claims that they are currently 'sub-scale' and thus not able to fund the networks and levels of quality that customers will require in the future.

16.200 We have found that absent the Merger, both of the Parties' standalone networks are likely to deliver higher network quality than they have claimed. We have reviewed the current business plans of both of VUK and 3UK, which show that they expect to continue to make network investments to improve customer experience.[2379] In particular, we have found that 3UK – supported by CK Hutchison and the proceeds of the Cellnex Transaction – has made significant efforts to grow its business by way of increased investment in its network, brand [✂] over the course of FY20- FY22.[2380] Following this, it has achieved growth in a number of areas (particularly in its Business and Fixed Wireless Access (**FWA**) offering).[2381]

16.201 However, we have also found evidence from 3UK's internal documents that it [✂], and it has been [✂], partly exacerbated by [✂].[2382] We have found that third party documents also recognise 3UK's challenges of relative size and scale, [2383] and some suggest an expectation that its investment activity and momentum may be limited by this (and therefore its capex constraints).[2384] Ofcom has confirmed its view to us that – in the context of MNOs' current relative financial performance – it considers 3UK to be subject to greater capital constraints than VUK.[2385] Ofcom submitted that while it recognises that 3UK has shown itself to be innovative in finding ways to generate additional revenues, it considers that this may not be long lived (as a result of competitors' response and a continued 'scarcity' of capex).

[2379] See Chapter 8, conclusion on competitive position of the Parties.
[2380] See Chapter 8, 3UK's competitive strategy and Appendix C 3UK's [✂].
[2381] See Chapter 8, 3UK's recent growth and financial performance.
[2382] See Chapter 8, Evidence of the Parties' assessment of their 'scale' and ability to make network investments, and Appendix C 3UK's [✂].
[2383] See Appendix C, Importance of scale, Third parties' documents and Current network investment strategies, Third parties' documents.
[2384] See Appendix C, Current network investment strategies, Third parties' documents.
[2385] Ofcom, response to the CMA's 1 October 2024 letter.

16.202 Similar considerations were raised by a number of third parties, whose views we summarised in Chapter 8, with some emphasising the importance of considering 'infrastructure competition', and that – relative to the situation without the Merger – the Merger is likely to result in an improvement in the level of investment in network infrastructure.[2386] We also note that some third parties expressed alternative perspectives, and some also expressed the view that a reduction in competition (ie by reducing the number of competitors) may dampen incentives to invest in network quality. [2387]

16.203 We believe that – absent the Merger – 3UK would likely continue competing in broadly the same way it does now, including on price and network quality, given that we have also found that its shareholder is likely to be incentivised to continue supporting it. However, we also consider, following consultation with Ofcom, that there is likely to be a marked difference between the scale and network quality performance that 3UK (and VUK) would deliver absent the Merger and that proposed under the JBP and Network Commitment. Ofcom told us that the integration of the standalone networks envisaged in the JBP is a unique opportunity to deliver a significant improvement in the quality of the Parties' networks which is otherwise unlikely to be delivered by the market.[2388]

16.204 We consider overall that by ensuring full implementation of the JBP, the Network Commitment would, for the reasons set out in Chapter 14, in time, lead to significant and long-lasting quality improvements in a way that positively affects customer experience across a range of different parameters of network quality, including coverage, congestion and effective speed. Although certain network quality attributes promised by the JBP may exceed current user requirements in some cases, we agree with Ofcom's view that the JBP represents a unique opportunity to bring forward the delivery of the higher network quality ahead of evidence of demand,[2389] and consider it is reasonable to expect, based on evidence of increasing customer demands over time, that user expectations of network quality are likely to increase over time. We consider that through a remedy which ensures the full JBP is delivered for UK customers, there is potential for a significant increase in mobile network quality over the long term and we would expect this would lead to a competitive response from the two other MNOs which could be through a range of possible strategies (including investment, product development and marketing initiatives and a price response).

16.205 We recognise that the impact of the Network Commitment on network quality will grow over time. However, we consider that there will also be some relatively immediate quality benefits which will materialise for customers in the short term

[2386] See Chapter 8, Third party views on the relevance of scale to the UK telecommunications industry.
[2387] See Chapter 8, Third party views on the relevance of scale to the UK telecommunications industry.
[2388] Ofcom, response to the CMA's 23 July 2024 letter.
[2389] Ofcom, response to the CMA's 23 July 2024 letter.

(albeit not sufficient quality benefits to offset the adverse effects on competition in the relevant markets and prevent an SLC from arising). We consider the implications of this finding for the effectiveness of the Network Commitment remedy in more detail below.

16.206 Although not part of the Network Commitment, we consider that the increase in the Merged Entity's quality would also be accompanied by Beacon 4.1 increasing VMO2's quality. Ofcom told us that the Merger (assuming Beacon 4.1 and delivery of the full JBP) would, in the mid-term, result in a notable improvement in VMO2's network quality, likely similar to that which is expected to result for the Merged Entity and, in the long term, competitive pressures would be expected to incentivise VMO2 to invest in its network quality.

16.207 Ofcom said that this was for a number of reasons. Firstly, densification would improve coverage reliability on VMO2's network through the commercial incentives brought about by [✂], the lower costs of densification alongside the Merged Entity, and competition from the Merged Entity's improved network. Secondly, the additional spectrum from the spectrum trade, the lower incremental cost of additional capacity resulting from the trade and the sharing of costs with the Merged Entity under Beacon and competition from the Merged Entity would also provide VMO2 with the commercial incentive to reduce congestion. Finally, the additional spectrum from the spectrum trade, the lower incremental cost of deploying C-band under Beacon and competition from the Merged Entity would provide VMO2 with the commercial incentive to provide broad C-band coverage (which provides the greatest network capacity) in line with demand.[2390] We agree with Ofcom's views and consider this impact would further enhance rivalry in the retail market.

Conclusion on the impact of the Network Commitment on the Retail SLC

16.208 We consider that the Network Commitment would, in the longer term, address the SLC we have identified in the retail market for two reasons. First, we consider that the Network Commitment will, in time, and in combination with the impact of Beacon 4.1, lead to a lower incremental cost of capacity due to the increase in mobile network capacity compared to the Parties' and VMO2's expected positions in the counterfactual, and to a longer-term reduction in their unit cost of expanding capacity. Second, we consider that the Network Commitment will, in time, lead to significant and long-lasting quality improvements in a way that positively affects customer experience. We consider the longer-term effect of the Merger with the

[2390] Ofcom, response to the CMA's 1 October 2024 letter.

Network Commitment will therefore be to improve consumer welfare, ie reduce quality-adjusted prices.

16.209 We consider that these changes would in turn elicit a competitive response (for example by way of further network investment, lower pricing, more attractive offers and/or improved customer service) from BTEE and VMO2 compared to the counterfactual. As such, we consider that the Network Commitment is an enabling measure that 'work[s] with the grain of competition' to address an SLC.[2391] We consider the Network Commitment does this by stimulating competition through achieving, once fully implemented, the significant and long-lasting capacity and quality improvements we have identified.

16.210 In its response to our Provisional Findings, BTEE submitted that efficiencies would not enhance post-Merger rivalry because the Merged Entity would likely hold a very substantial capacity advantage over its rivals and would be likely to strategically hold back, ie 'hoard', some of that capacity, in particular spectrum, to undermine rivals' incentives to invest; and because BTEE would not respond to the Merger by increasing investment in its own network. We have considered and rejected these submissions in Chapters 8 and 14.[2392] Additionally, we note that, under the Network Commitment, the Merged Entity would not be able to hoard spectrum at high traffic sites as the Network Commitment commits it to deploying all its spectrum at these sites.

16.211 In addition, we consider that Beacon 4.1 (which is conditional upon completion of the Merger) will also lead to further material network quality improvements and an increase in capacity (and lower future costs of capacity) for VMO2. This will make it a stronger competitor and further incentivise BTEE to respond to the increased network quality and capacity of both VMO2 and the Merged Entity compared to the counterfactual.

16.212 However, we recognise that it will take 8 years to implement the Network Commitment in full and the [✂] pursuant to Beacon 4.1 and that the impact on the price and quality parameters of competition over time are complex. For example, as noted above, we consider that there may be different effects on retail prices following the Merger (with the Network Commitment) over the short and long term. We recognise that investment in mobile networks requires a long-term perspective, particularly with regard to the proposed integration of two of the four mobile networks in the UK, as is the case here.[2393] In particular, we consider that the rivalry enhancing effects from the Network Commitment (and Beacon 4.1) will grow over time as the investment and integration plan is implemented, resulting in progressive increases in network capacity and quality.

[2391] CMA87, paragraphs 3.49 and 7.12.
[2392] See Chapter 14, paragraphs 14.216 to 14.217, 14.233 to 14.234 and 14.248 to 14.250.
[2393] See Chapter 14, Criteria 3: Timeliness.

16.213 If the Merger were to proceed only subject to the implementation of the Network Commitment, the retail SLC would therefore not be comprehensively addressed as adverse effects would arise while the rivalry-enhancing effects of Beacon 4.1 and the Network Commitment grow over time. As such, the SLC would not be fully addressed throughout its expected duration solely through the Network Commitment.[2394]

16.214 In these circumstances, our remedies guidance notes that, in addition to so-called 'enabling measures' like the Network Commitment that work relatively slowly in addressing an SLC, measures that control market outcomes (such as price caps) may be needed to supplement enabling measures for a limited period to provide protection to customers from the adverse effects of an SLC.[2395] Consistent with our guidance, we seek remedies that have a high degree of certainty of achieving their intended effect, and in light of the CMA's obligation to achieve a solution to the SLC which is as comprehensive as is reasonably practicable,[2396] we therefore consider that the Network Commitment alone would not be an effective remedy and that supporting measures are required to ensure the overall remedies package is effective.

16.215 In respect of the Network Commitment, whilst we recognise that the MOCN and spectrum sharing benefits would be implemented shortly after closing, the capacity and quality improvements resulting from network integration would grow over time. By Year 3 of the Network Commitment, around [✂]% of the Merged Entity's sites will have been fully integrated with the Merged Entity's spectrum deployed across specified frequency bands. At this stage, significant improvements in the Merged Entity's coverage, reliability and capacity will have been delivered and we would also expect to see competitive responses from BTEE and VMO2. The effects of Beacon 4.1 on VMO2's quality and capacity will also take effect over time as [✂].

16.216 We therefore consider that the supporting measures should apply for a limited period of at least three years to provide protection to retail customers from the adverse effects of the SLCs in the early years of the Network Commitment and Beacon 4.1 implementation, when the rivalry-enhancing effects of both are likely to be less strong. These measures would be released only once agreed progress is made by the Parties towards implementation of the Network Commitment and are discussed in further detail below in subsequent sections of this chapter.

16.217 We also note, as we did in earlier chapters, the link between the retail and wholesale market SLCs. Wholesale competition, which ensures MVNOs can access competitive terms from MNOs, is important in relation to the retail market because many MVNOs price aggressively, often focusing on value segments of

[2394] CMA 87, paragraph 3.5(b).
[2395] CMA 87 paragraph 3.50.
[2396] Section 36(3) of the Act.

the retail market.[2397] We discuss the impact of the Network Commitment on the wholesale SLC in further detail below. An effective remedy in relation to the wholesale SLC would provide a further protection for the competitive rivalry which exists in the retail market, supporting the effectiveness of the overall remedy in relation to the retail market, by ensuring an effective role on an ongoing basis for MVNOs in this market, particularly in relation to price.

16.218 Overall, we consider that, subject to appropriate design and an acceptable risk profile, the Network Commitment would address the SLC we have identified in the retail market in the longer term by delivering a market that is at least as competitive as the current market. We consider, however, that it would need to be accompanied by short term protections during the initial years of network integration to address the SLC in the short term. We discuss these below from paragraph 16.318.

Impact on wholesale competition

Key competitive parameters for wholesale customers

16.219 As we did in considering the retail market, we sought (see Chapter 9) to understand the key factors that matter to MVNO customers when choosing an MNO, to assess how the Merger (through its impact on competition) would affect the commercial terms that they would be able to obtain and, in turn, their offering to retail customers. Both price and network quality are important to MVNOs, although there may be some differences between MVNOs in the relative importance that they attach to each, particularly depending on their own competitive positioning in the retail market.[2398]

Likely impact of the Network Commitment on pricing in the wholesale market

16.220 Having assessed the overall impact of the Merger on competition (absent remedies), we have made a number of findings relevant to pricing in the wholesale market, as set out in more detail in Chapter 8. We have found that the wholesale market would be highly concentrated post-Merger with at most only three options for MVNOs. We have also found that the Merged Entity would have a reduced incentive to compete for MVNO opportunities than the Parties individually because the Merger would lead to the removal of the competitive constraint which the Parties currently exert on each other.[2399]

[2397] See Summary, paragraph 4.
[2398] See Summary, paragraph 70.
[2399] See Summary, paragraph 76-77.

16.221 Finally, we consider that there may be a further indirect adverse effect on competition resulting from the fact that the Merged Entity would have an expanded presence in the supply of retail mobile services, which may mean it has less of an incentive to bid for wholesale business. If the Merged Entity were to act on these incentives by bidding less or offering less competitive terms, its rivals would experience an increase in demand for their services. We concluded this increase in demand may also provide rivals with incentives to compete less aggressively, although we also found while these concerns were a consideration when MNOs assess whether and how to bid for an MVNO, they were often not a determinative factor.[2400]

16.222 However, as noted above, we recognise that pursuant to the Network Commitment, the Merged Entity would have more sites and more spectrum than the networks of each Party individually, which would result in both a significant increase in the Merged Entity's capacity compared to the standalone networks and, in the longer term, a reduction in the unit cost of expanding capacity for example through adding more sites or new technology (see paragraphs 16.188 and 16.189).

16.223 With regards to wholesale pricing, in Chapter 14 we noted that the Parties had submitted that an increase in network capacity would result in a reduction in the incremental cost of capacity that would result in downwards pricing pressure.[2401] We therefore considered the evidence as to whether any reduction in incremental cost of capacity was likely to be passed through to wholesale customers as a rivalry enhancing efficiency.

16.224 We recognised that, as pricing decisions at the wholesale level are longer-term than at the retail level, when an MNO is considering the terms of its bid for an MVNO contract, the MNO's predicted capacity in the future is more likely to affect its decision than when setting retail prices. We found there was some evidence (and more than in relation to retail) that any additional cost of capacity resulting from an MVNO contract was taken into account in bidding, along with a range of other factors. However, we noted that while this evidence indicates that additional costs of capacity are taken into account, it did not establish that these costs are similar to the incremental costs of capacity estimated by the Parties (in their modelling in support of their efficiency claims); and nor did it indicate the extent of the effect on the price ultimately agreed with MVNO customers. Therefore, we concluded that we did not consider that we could use the Parties' estimate of the effect of the Merger on incremental cost of capacity as an estimate of the extent to which possible rivalry enhancing efficiencies would reduce wholesale prices that

[2400] See Summary, paragraph 77.
[2401] See Chapter 14, Criteria 4: Sufficiency, Wholesale Market.

could be set against any estimates of any adverse effects due to a loss of competition.

16.225 As in regard to retail, however, we agreed with the Parties that increases in capacity by the Merged Entity and VMO2 would in principle (ie if they occurred), and over time, give them an incentive to fill that capacity by making more attractive offers to MVNOs. We therefore consider that the capacity increases that would result from the Network Commitment would lead to a lower incremental cost of capacity which would be likely to result in downwards pricing pressure relative to the situation that would result absent this increase in network capacity, particularly in light of the evidence we identified that suggested that the cost of network capacity is already taken into account by the Parties in their standalone MVNO pricing decisions. Overall, we consider that the Network Commitment would, in time, increase network capacity and lead to a lower incremental cost of adding further capacity compared to the Parties' expected positions in the counterfactual. We consider this would be reflected in increased competitiveness of the pricing terms offered to MVNOs.

16.226 Although not part of the Network Commitment, we would again note that these downward pricing pressures on the broader market in the long term from the Merged Entity's lower cost of capacity are likely to be augmented by the increase in network capacity likely to result from the [✂] transfer of spectrum from the Parties to VMO2 ([✂]).

Likely impact of the Network Commitment on network quality in the wholesale market

16.227 We set out in detail in Chapter 14 the likely network quality improvements which we consider are likely to result, in time, from the full implementation of the Network Commitment remedy. As already noted, we have engaged closely with Ofcom, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views as relevant evidence, we have ultimately reached our own conclusions on each of the relevant questions. We consider that through a remedy which seeks to ensure the full JBP is delivered, there is potential for a significant increase in mobile network quality for UK customers over the long term, on the basis of the evidence set out in that Chapter.

16.228 We consider that these network quality improvements are also relevant for MVNO customers and would have a rivalry-enhancing effect on the level of competition that exists between the remaining MNOs on network quality. Overall, we consider that the Network Commitment would lead to significant and long-lasting network quality improvements in a way that improves the competitiveness of the Merged Entity's offer to MVNOs relative to its remaining MNO competitors in the counterfactual.

16.229 Although not part of the Network Commitment, the impact of this would be augmented by the additional spectrum acquired by VMO2 through Beacon 4.1. We note that on a number of measures and according to competitor views, VMO2 has the lowest network quality of the UK MNOs.[2402] We note that VMO2 considers itself weaker in terms of [✂].[2403] This is due to [✂]. VMO2's [✂].[2404]

16.230 We therefore consider that the additional spectrum acquired by VMO2 through Beacon 4.1 would provide a notable increase in network quality for its wholesale customers which would further increase network quality competition.[2405] We remain of that view, particularly in light of the additional evidence from Ofcom in relation to [✂] we set out above in relation to the effectiveness of the Network Commitment against the retail SLC. We consider in particular that VMO2's increased network quality may lead to it being invited to more MVNO opportunities, be more likely to participate and to it being more competitive in those tenders in which it participates.

Conclusion on the impact of the Network Commitment on the Wholesale SLC

16.231 We consider that the Network Commitment will, in time and once fully implemented, address the SLC we have identified in the wholesale market for broadly the same two reasons as outlined in relation to the retail market.

16.232 First, for the reasons set out above and in Chapter 14, we consider that the Network Commitment will, in time, increase the Merged Entity's network capacity and lead to a lower incremental cost of adding further capacity compared to the Parties' expected positions in the counterfactual which may be reflected in increased competitiveness of the pricing terms offered to MVNOs. We note in this regard our conclusion that there was some evidence that any additional cost of capacity resulting from an MVNO contract was already taken into account in bidding decisions,[2406] and the different (ie longer-term) nature of pricing decisions at the wholesale level compared to the retail level.

16.233 Secondly, we also consider that the Network Commitment will lead to significant and long-lasting network quality improvements in a way that improves the competitiveness of the Merged Entity's offer to MVNOs relative to its remaining MNO competitors in the counterfactual.

[2402] See Summary, paragraph 40.
[2403] One VMO2 internal document notes that [✂]. The same document notes that VMO2 has [✂]. It also notes that [✂]. VMO2 internal document.
[2404] VMO2 response to the CMA's RFI.
[2405] See Summary, paragraph 62.
[2406] See Chapter 14, The Parties' estimates of the incremental cost of capacity and Chapter 14, Criteria 4: Sufficiency, Wholesale Market.

16.234 We note [✂] submission described above that the CMA is accept[ing] 'on faith' that the remaining MNOs will deliver a response on their own volition – [and] that this is a gamble that cannot on any reasonable grounds be thought more likely than not, given that unlike the Merged Entity, those MNOs would not be under any obligation to actually take such actions (eg by reference to a Final Order or the terms of their spectrum licence(s)). We also note their submission that it is not appropriate or rational, against this backdrop, to conclude that such SLCs can be fully remedied in the long term simply by reference to a set of highly speculative efficiency claims advanced by the Parties in combination with an entirely unsupported assumption on the part of the CMA that such efficiencies will trigger a response (let alone a sufficiently material response) from the remining MNOs (which, again, are not subject to any requirement whatsoever to do so).[2407]

16.235 We also note Sky Mobile's submissions that the CMA accepts that it is under an obligation to remedy the SLCs it has identified 'to a high degree of certainty', but that this is entirely inconsistent with the amount of risk the CMA is accepting as to the likely rivalry at the wholesale level in a future three-player market. They said the CMA has failed to provide any specific evidence that the proposed remedies would be effective and comprehensive – relying instead on conceptual arguments about likely effects.[2408]

16.236 As set out in our guidelines, we view competition as a process of rivalry between firms seeking to win customers' business over time by offering them a better deal. Rivalry creates incentives for firms to cut price, improve quality, enhance efficiency, or introduce new and better products. This is because rivalry provides the opportunity for successful firms to take business away from competitors (through relative improvements in these competitive parameters) and poses the threat that firms will lose business to others if they do not compete successfully. [2409] We therefore consider that where, as here, we have evidence of likely material improvements in the offering of a provider on important parameters of competition like price and quality, we can validly conclude these are likely to trigger a competitive response and be rivalry enhancing. We therefore reject the submissions of [✂] and Sky Mobile noted above that our conclusions are speculative or without evidence.

16.237 Although not part of the Network Commitment, we also consider that the network quality and capacity improvements that result from Beacon 4.1. (which is conditional on the Merger) will directly strengthen VMO2's ability and incentive to compete effectively in the wholesale market compared to the situation absent the Merger. As set out in detail in Chapter 8, we observe that (currently) VMO2

2407 [✂] response to the Remedies Working Paper, paragraphs 2.3.9-10 and 4.2.
2408 Sky Mobile response to the Remedies Working Paper, paragraphs 65-66.
2409 CMA 129, para 2.2

[✂].[2410] We note in particular that VMO2 participates to a lesser extent than the other MNOs in MVNO opportunities; was aware of [✂] opportunities than all other MNOs; and was selective when participating in MVNO opportunities, [✂].[2411] We noted that VMO2 itself told us that it [✂].[2412] By contrast, we consider that by virtue of its increased spectrum holdings and therefore network capacity, post-Merger VMO2 will have a stronger incentive to both more frequently bid for wholesale contracts and to price competitively when it does so.

16.238 However, as with our conclusions in relation to the retail market, we again recognise the 8-year duration for full implementation of the Network Commitment and the [✂] pursuant to Beacon 4.1. We consider that there may, therefore, again be different impacts on the wholesale market from the Merger (with the Network Commitment as a remedy) over the short and long term. In particular, we consider that the rivalry enhancing effects from the Network Commitment will grow over time as the investment and integration plan is implemented, resulting in progressive increases in network capacity and quality. If the Merger were to proceed only subject to the implementation of the Network Commitment, the SLCs identified would therefore not be comprehensively addressed as adverse effects would remain in the early years of the roll out of the Network Commitment and Beacon 4.1. This would mean that the SLC would not be fully addressed throughout its expected duration.[2413]

16.239 In these circumstances, as noted at paragraph 16.214 above, we therefore consider that the Network Commitment alone would not be an effective remedy and that supporting measures for the wholesale market are required to ensure the overall remedies package is effective.

16.240 Overall, we consider that, subject to appropriate design and an acceptable risk profile, the Network Commitment would address the SLC we found in the wholesale market in the longer term by delivering a market that is at least as competitive as the current market. We consider, however, that it would need to be accompanied by short term protections during the initial years of network integration to address the SLC in the short term. We consider these in more detail below.

[2410] See Chapter 9, Our assessment of competitive dynamics in MVNO opportunities.
[2411] See Chapter 9, MVNO opportunity data.
[2412] VMO2 response to the CMA's RFI.
[2413] CMA 87, paragraph 3.5(b).

Duration and timing

16.241 As behavioural remedies are designed to have ongoing effects on business conduct throughout the period they are in force, the duration of these measures is a material consideration.[2414]

16.242 In this Merger, the SLCs identified are not time limited. This means that to comprehensively address the SLCs, any behavioural remedy would need to have a lasting impact on competition in the relevant markets.

16.243 In the previous section we concluded that the Network Commitment would, in time and once the Parties' JNP is fully implemented, address our SLCs; however, the SLCs would not be fully addressed throughout their expected duration solely through the Network Commitment.[2415]

16.244 First, we consider that 8 years is an appropriate duration for the Network Commitment given it ensures the full implementation of the Parties' JNP which is an eight-years long infrastructure plan. Given the limited changes to the basic components of mobile networks over many years and no evidence to indicate this will change, our decision is that the Network Commitment, which is aligned to the Parties' JNP, should remain appropriate for the 8 years of its duration.

16.245 Ofcom also considers that the 8 year duration of the Network Commitment should be sufficient to sustain improved network quality and Ofcom does not consider that it would be appropriate to seek a longer period of commitment.[2416]

16.246 Whilst the Parties' Network Commitment would fall away after 8 years with a substantial change to the UK's network infrastructure as a result, whether these changes lead to lasting improvements in network quality is a separate question. For example, if the Parties were to rationalise their network in 8 years' time, unwinding the benefits of the remedy, the remedy would not have a lasting effect in the market, potentially undermining its long term effectiveness.

16.247 The Parties submitted that their proposal has some similarities with a structural remedy (see paragraph 16.12(a)) as it comes to an end after 8 years and leaves a lasting impact on the relevant markets. We consider that the Network Commitment will have a lasting impact beyond 8 years for a number of reasons:

(a) Firstly, we observe that it is rare for MNOs to remove or reduce coverage or capacity by decommissioning sites that they have invested in. We recognise that the Parties may decommission some sites post 8 years, but the Parties will have invested significant sums of money deploying technology on these

[2414] CMA87, paragraph 7.10.
[2415] CMA 87, paragraph 3.5(b).
[2416] Ofcom response to the CMA's RFI.

sites which will disincentivise them from decommissioning them. If sites were decommissioned, we would expect this to be in areas where there is limited demand. It is also possible that the Parties would add further sites beyond the Network Commitment. Overall, we do not consider that there would be a material reduction in aggregate site numbers, thus substantially all of the combined network after implementation of the JNP network is likely to endure beyond the 8 years.

(b) In a similar vein, we anticipate the competitive pressure from rival MNOs and the expectations from customers, who will have come to expect a certain level of quality, will reduce the Parties' ability and incentive to scale back the network once the Network Commitment is delivered.

(c) In addition, the network is expected to support future technologies like 6G. Absent the Network Commitment, the footprint of each Party delivering future technologies would be significantly smaller, thus the benefit of the Network Commitment will endure into the future.

16.248 The Network Commitment aligns to the CMA's preference for using enabling measures that 'work with the grain of competition', which address an SLC by seeking to remove obstacles to competition or stimulating competition, rather than measures that control market outcomes, which restrict the adverse effects of an SLC rather than address the SLC itself.[2417] The Network Commitment creates a long-lasting shift in network quality that would drive competition so that ultimately the overall level of competition in the relevant markets is at least as strong as it is now.

16.249 Lastly, we considered whether any future events may undermine the effectiveness of the Network Commitment. In the Provisional Findings, we said we could not be confident that it was likely that the Parties would implement the full JNP because potential market changes may force the Parties to reconsider the plan.

16.250 Our view is that mobile markets are dynamic but they are subject to significant changes in some areas, such as customer usage, and slower change in other areas. For example, the basic components of delivering mobile services (ie the deployment of active radio equipment on passive infrastructure sites) has changed little in the last decade.

16.251 Ofcom identified a number of potential future market developments which could arise over the next 5-10 years in a recent discussion paper.[2418] In particular, Ofcom considered the following:

[2417] CMA87, paragraphs 3.49 and 7.12.
[2418] Conclusions: Ofcom's future approach to mobile markets, Annex A3, accessed by the CMA on 23 October 2024.

(a) the future deployment of private networks;

(b) changes to infrastructure sharing; and

(c) Apple and Google providing a platform on which customers can choose their mobile provider.

16.252 Should these developments materialise, they could have a significant impact on the industry over time. However, at this stage they are quite speculative and what impact they may have on the market and the Network Commitment remains to be seen. The impact may not necessarily be negative for MNOs. They could reduce the commercial returns available to MNOs, but they could also spur new opportunities. The potential for these developments has therefore not affected our view.

Practicality

Monitoring and enforcement risks

16.253 A remedy may be considered ineffective if monitoring and enforcement is not feasible or would be costly and intrusive. This risk is exacerbated where the form of remedy is complex.

16.254 The CMA will retain an ongoing responsibility for the monitoring and enforcement of any behavioural remedies it puts in place.[2419]

16.255 The Parties consider that to monitor the Network Commitment, using data they will hold, they could report on:

(a) the number of sites integrated in the network and site level details; and

(b) the amount of spectrum deployed on those sites at specified frequencies.[2420]

Monitoring

16.256 As noted already, the Parties' proposal is that the Network Commitment be incorporated as conditions in their spectrum licence(s) to be overseen by Ofcom and incorporated into undertakings provided to the CMA.

16.257 The Parties have proposed that Ofcom would be supported by a monitoring trustee, paid for by the Parties, who would confirm the Parties have met the formal commitment targets at the end of Years 3, 5 and 8 in a report to Ofcom and to the CMA. We are satisfied with reporting at Years 3, 5 and 8, as well as the

[2419] CMA87 paragraph 4.71 and Section 92 of the Act.
[2420] Parties' network commitment proposal.

requirement to report against the Parties' Year 1 claims as part of a transparency obligation and that stakeholders are updated on the progress of the Network Commitment at the end of year 1 ahead of the formal licence obligations.

16.258 We consider that it would be appropriate for Ofcom to take on a monitoring role through incorporating the Network Commitment obligations as licence conditions (in addition to the incorporation of the Network Commitment in Final Undertakings to the CMA). Ofcom has confirmed that it is willing to perform this role. We also consider that it is essential the Parties appoint and pay for a monitoring trustee, who will provide significant support to Ofcom and the CMA. We consider that the Parties should not only provide the relevant data to the monitoring trustee, but the monitoring trustee should conduct a review of the systems producing the data to verify its accuracy.

16.259 We consider that the monitoring trustee should also report to Ofcom and to the CMA in the intervening years so that the Parties can put in place recovery plans if, in advance of a formal commitment year, it looks like they may miss their targets. Ofcom, in its role as the sectoral regulator, already works very closely with the MNOs. Ofcom also supports further reporting between Years 3, 5 and 8 and stated that it would expect to be able to monitor the Parties' performance more frequently through reporting similar to that provided by MNOs for the Connected Nations reports.[2421] Our views on reporting frequency are set out in the Implementation considerations section.

16.260 Ofcom has formal information gathering powers and, consistent with its standard approach, would expect that any data provided by the Merged Entity in relation to the Network Commitment would be provided to Ofcom under these formal powers. This would mean that the Parties would have an obligation to provide timely and accurate data to Ofcom. [2422] As part of its Connected Nations Reports,[2423] Ofcom told us that 'each of the four national [MNOs], including the parties, provide mobile coverage data and data on network inputs on a regular basis'.[2424]

16.261 Ofcom has also provided us with preliminary estimates of the costs associated with monitoring the metrics envisaged in the Parties' Network Commitment proposal (ie, number of sites and spectrum deployed).[2425] Ofcom noted that it already undertakes similar monitoring analysis on mobile deployment as part of its existing functions and expects that the additional cost to monitor the Network Commitment metrics would be likely to be marginal. Ofcom expects this additional

[2421] Ofcom response to the CMA's RFI.
[2422] Ofcom response to the CMA's RFI.
[2423] For further details see Connected Nations and infrastructure reports - Ofcom.
[2424] Ofcom response to the CMA's RFI.
[2425] These estimates are based on a conservative, desk-based exercise. The precise quantum of any costs would depend on the actual metrics in any Network Commitment ultimately imposed. Ofcom noted that the more granular and prescriptive the remedy or compliance regime, the greater the time needed to ensure the licensee is compliant, with a greater associated cost.

monitoring to require around 2 FTE for 3 months at a cost of approximately £[✂] for each cycle of review.[2426]

16.262 Based on the above, our view is that the Network Commitment is capable of being monitored appropriately in a sufficiently cost-effective manner if it can be incorporated into the Parties' spectrum licence(s) in addition to Undertakings given to the CMA.

The licence variation process

16.263 Ofcom has the general power to grant wireless telegraphy licences and to revoke or vary such licences.[2427] Ofcom has a number of duties it must have regard to while carrying out its functions. Sections 3,[2428] 4[2429] and 7 of the CA03 set out some of Ofcom's general duties, including under Section 7 of the CA03 the duty to carry out and publish an impact assessment of the likely impact of implementing a proposal which would be likely to have a significant impact on businesses or the general public, or when there is a major change in Ofcom's activities. Ofcom may alternatively decide that it is unnecessary to carry out an impact assessment, in which case it must publish a statement setting out its reasoning for this decision.[2430]

16.264 Ofcom has additional duties that are engaged when Ofcom is carrying out its spectrum functions.[2431] In particular, Schedule 1 to the WTA06 sets out a process

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[2426] Ofcom's response to the CMA's RFI.
[2427] Sections 9 and 10 of the WTA06.
[2428] Section 3 of the CA03 sets out Ofcom's general duties. Under s.3(1) it is the principal duty of Ofcom in carrying out its functions:(1) to further the interests of citizens in relation to communications matters; and (2) to further the interests of consumers in relevant markets, where appropriate by promoting competition. In doing so, Ofcom is required to secure, amongst other things (s.3(2)): (1) the optimal use for wireless telegraphy of the electro-magnetic spectrum; and (2) the availability throughout the UK of a wide range of services. In performing its duties, Ofcom must have regard to, amongst others, the following matters: (1) the desirability of promoting competition: s.3(4)(b)); (2) the desirability of encouraging investment and innovation: s.3(4)(d); (3) the desirability of encouraging availability and use of high-speed data transfer services throughout the UK: s.3(4)(e); (4) the different needs and interests, so far as the use of the electro-magnetic spectrum for wireless telegraphy is concerned, of all persons who may wish to make use of it: s.3(4)(f)); and (5) the different interests of persons in different parts of the UK: s.3(4)(l)). In performing its duties, Ofcom is required under s.3(3) CA03 to have regard in all cases to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed, and to any other principles appearing to Ofcom to represent the best regulatory practice.
[2429] In carrying out Ofcom's spectrum management functions, section 4 CA03 requires Ofcom to act in accordance with the following requirements: a) to promote competition in the provision of electronic communications networks and electronic communications services; b) to promote the interests of all members of the public in the United Kingdom; c) to act in a manner which, so far as practicable, is technology neutral; d) to encourage, to the extent Ofcom considers it appropriate, the provision of network access and service interoperability for the purpose set out in s.4(8); e) to encourage such compliance with certain international standards as is necessary for the purposes set out in s.4(9); and f) to promote connectivity and access to very high capacity networks by members of the public and businesses in the United Kingdom.
[2430] Section 7(3)(b) of the CA03.
[2431] These are set out in section 3 of the WTA06 which explains that Ofcom has a duty to have regard in particular to: (1) the extent to which the spectrum is available for use, or further use, for wireless telegraphy; (2) the demand for use of that spectrum for wireless telegraphy; and (3) the demand that is likely to arise in future for such use. Ofcom also has a duty to have regard, in particular, to the desirability of promoting: (1) the efficient management and use of the spectrum for wireless telegraphy; (2) the economic and other benefits that may arise from the use of wireless telegraphy; (3) the development of innovative services; and (4) competition in the provision of electronic communications services.

for the variation of wireless telegraphy licences.[2432] Where a variation is proposed by the licensee, Ofcom is under no obligation to consult with them on the proposal to vary the licence(s).[2433] There are examples, however, where Ofcom has undertaken a consultation even though the variation was proposed by the licensee.[2434]

16.265 Without prejudice to Ofcom's discretion concerning the necessary procedural steps to fulfil its duties and without prejudice to the ultimate outcome of any request from the Parties for a licence variation, having discussed with Ofcom we understand that Ofcom may not need to undertake a separate consultation to vary the spectrum licence(s), to the extent that Ofcom could rely on the CMA's own consultation and assessment (in particular the information set out in the CMA's Remedies Notice, Remedies Working Paper, Final Report and any further publications concerning potential Undertakings).[2435] Accordingly, it may be possible for Ofcom to take a decision in respect of the licence variation request relatively quickly.

16.266 Focusing on the spectrum licence(s) variation process, we do not consider the variation process in itself materially affects the risk profile associated with this proposed remedy.

16.267 Below, we set out our views on the importance of the licence variation to the overall risk profile and ultimately, the effectiveness of the Network Commitment absent a licence variation (see paragraph 16.269).

The importance of the spectrum licence variation

16.268 We consider that the spectrum licence variation plays an important role in the overall risk profile of the Network Commitment.

16.269 Absent a licence variation, Ofcom would lack the necessary information-gathering and enforcement powers to ensure that the Parties deliver the Network Commitment. The CMA does not have the necessary expertise or resources to effectively oversee compliance with the Network Commitment alone. We therefore consider the licence variation to be an integral part of the remedy, its risk profile and ultimately its effectiveness. We further note that the Parties' submissions on the Network Commitment themselves rely on the licence variation process and the role of Ofcom.

[2432] Generally, Ofcom is required to take the following steps (paras 6 and 7 of Schedule 1): (1) notify the licensee of the reasons for the proposed variation (para 6a); (2) specify a period of at least 30 days in which the licensee may make representations about the proposal (para 7(3)(b)); (3) decide whether or not to vary the licence within one month of the end of that period (para 7(10)); and (4) give the licensee a notification of its decision (para 7(10)).
[2433] Paragraph 7(12) of Schedule 1 to the WTA06 sets out that the formal requirements in Paragraph 7 do not apply when the licensee has requested the proposed variation.
[2434] See eg the recent consultation in relation to the optimal use of 3.9 GHz spectrum.
[2435] Ofcom, email to the CMA.

16.270 Under normal circumstances, where a remedy's success is partly contingent on a future event – in this instance a potential licence variation – the CMA would seek to address the risk of non-occurrence of that future event by incorporating a fall-back remedy.

16.271 As the licence variation is fundamental to the overall risk profile of the remedy, we consider that the Parties would need to provide Undertakings to the CMA that commit the Parties to seek and obtain Ofcom's approval for a licence variation prior to completing the Merger. The Merger would therefore not be able to complete until Ofcom approval has been received. If Ofcom approval of the licence variation were not obtained for any reason, we consider prohibition to be an appropriate fall-back remedy.

16.272 For the reasons set out above, we have a high degree of confidence that a licence variation is a reasonable and practical mechanism for implementing the Network Commitment that could be taken forward by Ofcom.

Enforcement

16.273 Weak enforcement may reduce the incentives on the Parties to comply with the Network Commitment. Weak enforcement can materialise in a number of ways – for example, if the data required to confirm compliance is complex or potentially subjective, it may make taking enforcement action particularly challenging.

16.274 In this case, subject to an appropriate review plan for a monitoring trustee to verify the data in whichever years the Parties commit to deliver against, we consider that the data required to confirm compliance with the remedy is clear and binary, allowing for breaches to be readily identified and consequently supporting clear enforcement action if considered appropriate. Ofcom told us that measuring progress should be straightforward.[2436] MNOs already provide similar data for Ofcom's Connected Nations reports and the Parties could provide data in a similar way.[2437] Ofcom therefore already undertakes similar analysis as part of its broader ongoing programme of work and told us that it would not expect that the additional effort required to monitor the Network Commitment metrics would impose significant costs on Ofcom.[2438]

16.275 Subject to the proposed Network Commitment being incorporated into the Merged Entity's spectrum licence(s), the Parties would be accountable separately to Ofcom through the licencing condition and to the CMA through the Undertakings given under section 82 of the Act. Ofcom noted to us that, subject to the Network Commitment being incorporated into the Merged Entity's spectrum licence(s), it

[2436] Ofcom response to the CMA's RFI.
[2437] Ofcom response to the CMA's RFI.
[2438] Ofcom response to the CMA's RFI.

would not have concerns about enforcing compliance,[2439] and that the CMA's role under the Undertakings would not be expected to have to come into play.[2440]

16.276 Ofcom has an overarching role to manage the use of spectrum by ensuring anyone who uses spectrum complies with rules relating to its use.[2441] These rules include those contained in spectrum licence(s) issued by Ofcom. Ofcom has enforcement powers and could therefore take enforcement action if the Parties did not comply with the terms of their spectrum licence(s). See paragraphs 16.626 to 16.627 for details of Ofcom's enforcement powers.

16.277 The Parties submitted that they would have strong incentives to comply with the Network Commitment as failure to do so would result in a breach of the Merged Entity's spectrum licence(s).[2442] Furthermore, a consequence of Ofcom's civil enforcement powers is that the sanctions for breach of a spectrum licence would be very significant and incentivise the Merged Entity to ensure compliance with the Network Commitment in full.[2443]

16.278 BTEE submitted that it is not aware of any past precedent to rely on in relation to WTA06 licence fines. BTEE submitted that to adequately incentivise compliance, there would need to be a realistic prospect that any breach would be sanctioned by Ofcom withdrawing licences to operate a material proportion of the Merged Entity's total spectrum holdings. However, BTEE submitted it is very unlikely that the possibility of revocation would be seen by the Merged Entity as a realistic prospect and therefore have any incentive effect.[2444]

16.279 We note BTEE's concerns, but we also note that compliance amongst the MNOs with regulatory requirements appears high. For example, recent Shared Rural Network (**SRN**) commitments have seen all four MNOs deliver improvements in mobile coverage and boost connectivity across the UK despite challenges, including a pandemic.[2445] This suggests to the CMA that all MNOs take compliance seriously.[2446]

16.280 Ofcom's approach to regulatory enforcement is set out on its website.[2447] This includes its approach to the enforcement of licences issued under the WTA06. If Ofcom finds against a licence holder after opening a formal investigation, it will

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[2439] Ofcom call note.
[2440] Ofcom call note.
[2441] Ofcom, 'Our approach to spectrum compliance and enforcement', published 27 February 2024.
[2442] Parties' network commitment proposal.
[2443] Parties' network commitment proposal.
[2444] BTEE response to the Remedies Notice, 27 September 2024, paragraphs 3.36 to 3.39.
[2445] Policy paper Shared Rural Network (SRN) progress update - September 2024, 12 September 2024, accessed by the CMA on 23 October 2024.
[2446] Three UK was two months late in meeting its UK-wide 88% geographic obligation and its required threshold for Scotland (72%). See Shared Rural Network Coverage-Assessing the mobile network operators' compliance with their geographic coverage obligations, accessed by the CMA on 25 October 2024.
[2447] Ofcom, Regulatory Enforcement Guidelines for investigations, 12 December 2022, accessed by the CMA on 23 October 2024.

issue a provisional decision under section 42(1)(c) of the WTA06. It will also identify the steps it believes the licensee should take to comply with the relevant term or condition(s) and remedy the consequences of the contravention(s). Ofcom has discretion over whether to include a provisional penalty in the provisional decision but will generally do so where it is minded to impose a financial penalty.

16.281 The factors that Ofcom takes into consideration when setting penalties are set out in its penalty guidelines.[2448] By virtue of section 392(6) of the CA03, Ofcom must have regard to the penalty guidelines in force at the time when setting the amount of any penalty.

16.282 In addition to the incorporation of a Network Commitment in the Merged Entity's spectrum licence(s), the Parties are also proposing that the Network Commitment would be offered as an Undertaking under section 82 of the Act to the CMA.

16.283 Where the CMA decides that a merger has resulted or may be expected to result in an SLC, it has a statutory duty to remedy the anticompetitive effects of that merger by taking such remedial action under section 82 of the Act (power to accept Final Undertakings) or section 84 of the Act (power to impose a Final Order) as it considers to be reasonable and practicable.[2449]

16.284 In such cases, the CMA has a statutory period of 12 weeks to accept Final Undertakings or make a Final Order.[2450] The statutory deadline for the publication of the CMA's final report in this case is 7 December 2024. As a result, the 12-week period for acceptance of Final Undertakings or making of a Final Order by the CMA could run to 1 March 2025.

16.285 Under the Act, compliance with Final Undertakings or Final Order may be enforced by civil proceedings brought by the CMA for an injunction or for an interdict or for any other appropriate relief or remedy.[2451] The Digital Markets Competition and Consumers Act 2024 (**DMCCA 2024**) expands the enforcement powers available to the CMA in relation to Final Undertakings and Final Orders.[2452] This includes the ability to impose financial penalties in respect of a failure to comply with Undertakings or Order without reasonable excuse. The commencement date of these enforcement powers according to the Digital Markets, Competition and Consumers Act 2024 (Commencement No. 1 and Savings and Transitional Provisions) Regulations 2024 (**Commencement Regulations**) as published by the Government is 1 January 2025.

2448 Ofcom Penalty guidelines, 14 September 2017, accessed by the CMA on 23 October 2024.
2449 Section 41 of the Act.
2450 Section 41A of the Act. This period may be extended by no more than 6 weeks where the CMA considers that there are special reasons for doing so.
2451 Section 94 of the Act.
2452 New sections 94AA and 94AB of the Act introduced by section 143 and schedule 11, paragraph 11 of the DMCCA2024.

16.286 If the Undertakings are accepted, or a Final Order is made after 31 December 2024, which the CMA considers to be likely at this stage, the new enforcement powers for breaches will be applicable.

16.287 As noted above (paragraphs 16.335 to 16.338), the Parties in their response to the Remedies Notice proposed a cure period and what they describe as limited 'guard rails'. In the Remedies Working Paper, we provisionally concluded that the Parties' proposal would have softened the Network Commitment – either absolving the Parties from their obligations altogether, or delaying the time by which sites need to be upgraded – which we consider would have been inappropriate.

16.288 Although we understand the Parties' rationale, and also consider that there may be legitimate reasons for failing to comply with a commitment that are outside of the Parties' control, we consider that Ofcom's penalty guidelines and discretion regarding the application of its spectrum licensing enforcement powers should provide sufficient protection if such a scenario occurs. Ofcom told us it does not consider it necessary to include specific guardrails given the broad discretion within Ofcom's enforcement framework.[2453] We also note that the CMA would also have discretion when deciding whether to take any enforcement action in respect to any breaches of the Undertakings with respect to the Network Commitment.[2454]

16.289 In their response to the Remedies Working Paper, the Parties then offered to dispense with the cure period and guard rails proposed, provided the Network Commitment acknowledges that unforeseen events outside the Parties' control must be taken into account, when determining whether a breach has occurred.[2455] The Parties suggested that the final undertakings include the following formulation, which could also be mirrored in the Ofcom licence condition if appropriate – 'In determining whether there has been a breach of these undertakings, the CMA should disregard any shortfall to the Year 3, 5 or 8 milestones that are the result of factors which represent a "reasonable excuse". A reasonable excuse shall include any significant and genuinely unforeseeable or unusual event and/or a significant factor or event beyond the Parties' control has caused the failure to meet the relevant milestone'.[2456]

16.290 Under Sections 94A(1) and 110(1) of the Act, penalties for breaches for Undertakings or Orders can only be imposed if a failure to comply is 'without reasonable excuse'. The CMA's Statement of Policy on the CMA's approach to administrative penalties is clear that 'the circumstances that constitute a reasonable excuse are not fixed and the CMA will consider whether any reasons

[2453] Ofcom, submission.
[2454] Administrative penalties: Statement of Policy on the CMA's approach (CMA4), in particular paragraph 4.4.
[2455] Parties response to the Remedies Working Paper,12 November 2024, paragraphs 1.7 and 2.22.
[2456] Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.24.

for failure to comply amount to a reasonable excuse on a case-by-case basis.'[2457] We therefore consider that the Parties' suggestion is inappropriate as it would fetter the CMA's discretion regarding its enforcement powers.

16.291 Our view is therefore that a combination of the CMA's and Ofcom's enforcement powers under their respective statutory frameworks is sufficient to ensure compliance.[2458] Based on the above, we consider that there are appropriate monitoring and enforcement powers for the Network Commitment to be effective.

Acceptable risk profile

16.292 To be considered an effective remedy, we require a high degree of certainty of it achieving its intended effect. As set out at paragraph 16.106 above, given the behavioural nature of the Network Commitment, we examine the specification, circumvention and distortion risks associated with the Network Commitment.

16.293 Although, as noted above, we consider the probative value of any analysis of the effects of remedies accepted in other countries to be limited and we do not place material weight on international comparisons, we note for completeness that the T-Mobile/Sprint transaction in the United States was approved by the Federal Communications Commission subject to an investment commitment nationwide which shares some similarities with the Network Commitment. The transaction was also conditional on other remedies but concerning the investment commitment part of the remedy package specifically, we note that the Federal Communications Commission published in January 2024 T-Mobile's third annual progress report which stated that T-Mobile met its 3-year targets.[2459]

Specification risks

16.294 Specification risks arise if the form of conduct required to address the SLC or its adverse effects cannot be specified with sufficient clarity to provide an effective basis for monitoring and compliance. The intended operation of the measure needs to be clear to the persons to whom it is directed and other relevant parties, so it is apparent what conduct constitutes compliance and what does not.[2460]

[2457] CMA4, paragraph 4.4. We note that the CMA consulted on draft guidance Administrative Penalties: Statement of Policy on the CMA's Approach (Draft CMA4) from 11 July to 23 August 2024. The Draft CMA4 includes this same statement at paragraph 2.4. When approved by the Secretary of State, the finalised CMA4 will be published and it will replace the current CMA4.
[2458] We consider that the Undertakings could reflect a process for managing concurrent exercise of the CMA and Ofcom's functions in respect of the Network Commitment.
[2459] FCC, Third Annual Progress Report on T-Mobile's 5G Network Deployment, accessed by the CMA on 27 October 2024.
[2460] CMA87, paragraph 7.4.

16.295 Our assessment identified specification risks with respect of the Network Commitment; however, our view is that these specification risks can be overcome as we outline below.

16.296 We consider that the Parties' proposed Network Commitment is simple in its design, there being only two key elements, measured formally at specific years, that go to specificity – these are (see paragraph 16.131 for further details):

(a) The number and location of sites on which spectrum is to be deployed; and

(b) The spectrum to be deployed at each of the sites.

16.297 The Network Commitment specifies a total number of sites to be included in the joint grid, reflecting the JBP. These are divided into urban and rural areas using the definitions used by Ofcom in the preparation of its Connected Nations reports and set out in the Connected Nations Methodology document published on the Ofcom website. Sites within the urban and rural areas are split into high, medium and low configuration (see table below) with specific frequency bands and amounts of spectrum that must be deployed for each configuration.

16.298 The Parties originally proposed to commit to a number of sites within high, medium and low traffic areas. As outlined in the Provisional Findings, we had concerns that the Parties may not be incentivised to deliver the full JNP in rural areas. Ofcom submitted that a commitment based on urban/rural area definitions, with a combination of high-, mid-, and low- spectrum configurations in each area, may better align with the separate concerns we have identified for urban and rural areas.[2461] We are satisfied with this specification.

16.299 The Parties propose that the Network Commitment is measured formally at years 3, 5 and 8 with reports by a monitoring trustee every four months to monitor progress in intervening years. We consider that regular monitoring is required to ensure that the Parties are on track and progressing as anticipated to deliver in full the Network Commitment by Year 8 (as noted above, we have concluded that the Network Commitment would, in time and once fully implemented, address our SLCs but that we have some time limited residual concerns).

16.300 In addition, we are conscious that having only three binding commitment points over 8 years means that stakeholders and the market may not become aware of any failure to deliver the JNP until significantly after the fact. We therefore consider that annual public reporting should be required by the Parties. This will not form part of the licence but a separate commitment by the Parties to publish annually progress against the commitment including key output metrics such as, for example, coverage, capacity and speed. The precise details of what the disclosure

[2461] Ofcom response to the CMA's RFI.

will entail would be set out in the Undertakings that we anticipate a monitoring trustee would have a role in overseeing.

16.301 As the purpose of the remedy is to achieve significant quality improvements, we considered whether a remedy that is based on inputs would deliver the expected quality improvements in all material respects. The network improvements would be very location specific, but most customers can be expected to see improvements. Whilst not supporting the specific KPIs claimed by the Parties, Ofcom told us that 'we consider that appropriately specified inputs would be expected to achieve desired output improvements'.[2462]

16.302 Ofcom told us that for the purposes of a spectrum licence condition 'outputs (coverage; speed/capacity and/or; congestion experienced by the end user) have not been well defined in quantifiable terms and could require a complex compliance measurement'.[2463]

16.303 Some third parties suggested that at the very least we needed to include coverage as part of the Network Commitment.[2464] Ofcom told us that it does not view coverage as a reliable metric to measure output, noting that coverage figures are driven by model statistics, meaning there is a large standard deviation between predicted and measured figures.[2465]

16.304 On the basis of the above, we consider it appropriate that the licence variation includes only input measures. However, we agree with a number of third parties that there is value in the output measures. In particular, the impact of the Network Commitment forms a key part of our assessment of its effectiveness. We therefore consider that the requirement to publish an annual report on progress and network performance - to be appropriately assessed for accuracy by a monitoring trustee - should include output measures, assessed against expectations. The precise details of what this annual disclosure will cover would be set out in the Undertakings and would include the expectations the Merged Entity will be assessed against. This would allow stakeholders, including customers, to understand ahead of formal licence reporting, whether the Parties are delivering against their claims.

16.305 We further considered whether the Network Commitment would need to specify other elements in addition to sites and spectrum to be deployed to achieve the desired outcome in network improvements, for example back-haul technology and infrastructure. All other things being equal, we understand that the key determinants of network quality are the number of sites, the number of

[2462] Ofcom response to the CMA's RFI.
[2463] Ofcom response to the CMA's RFI.
[2464] VMO2 response to Remedies Notice, 27 September 2024, paragraph 3.4 – 3.5; BTEE response to Remedies Notice, 27 September 2024, paragraph 3.30; [✂], call note.
[2465] Ofcom call note.

cells/equipment deployed at the site and the spectrum deployed on them. Ofcom told us that 'the key inputs that would need to be specified are the number of sites and the spectrum deployed on those sites'.[2466]

16.306 On the basis of the above, and subject to appropriate commitments as to the types of technology deployed on each site, we consider that the commitment appropriately focuses on number of sites and spectrum deployment. We also consider that an input-based commitment is the most appropriate and practical specification for the remedy. Given the challenges with the reliability of output metrics, we do not intend to include output metrics within the licence commitments. Nevertheless, we consider output metrics are useful indicators of progress the Merged Entity is making in delivering overall improvements in service and – as a transparency measure – will assist in delivering the rivalry enhancements. The Parties will report annually on output metrics against the claims put to the CMA during this inquiry, including the Parties claimed 'Day 1' benefits. The monitoring trustee will design an appropriate programme of work to assess the claims, including review of underlying models.

16.307 We have, however, identified a number of circumvention risks (see Circumvention risks below) that we consider can be mitigated through specification of the Network Commitment:

(a) The Parties should make a formal rural sites commitment to ensure that rural areas benefit from the Network Commitment (see paragraph 16.311(b)).

(b) The Network Commitment should be met with the current spectrum bands owned by the Parties (see paragraph 16.311(c)).

(c) The spectrum bands to be deployed provide appropriate capacity coverage (this is covered further below).

(d) The site numbers commitment must prevent less superior or cheaper technology being deployed (see paragraph 16.311(d)).

16.308 As outlined above (see paragraph 16.135), the Parties have proposed that the Commitment specification will include 'guardrails' to allow for unanticipated circumstances under which the Parties would not be deemed to have failed to have met the Network Commitment, or alternatively to include some wording in the Network Commitment acknowledging that unforeseen events outside the Parties' control must be taken into account, when determining whether a breach has occurred.[2467] We consider it inappropriate to include such provisions, for the reasons set out at paragraphs 16.287 to 16.291 above. In terms of specification,

[2466] Ofcom response to the CMA's RFI.
[2467] Parties' response to the Remedies Notice, 27 September 2024, paragraph 4.26 and Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.22.

we consider that it is best left to Ofcom's and the CMA's discretion as to when appropriate to take enforcement action against the Parties not meeting a formal commitment in the spectrum licence and the Final Undertakings. This is appropriate as Ofcom and the CMA will be exercising their discretion in a number of areas, such as for example the impact of technology on the licence obligation.

16.309 Our conclusion is that the Network Commitment can be appropriately specified, and we have set out a number of areas above which we would expect to be included in the specification.

Circumvention risks

16.310 Circumvention risks arise as a consequence of behavioural remedies generally not dealing with the source of an SLC.

16.311 In our assessment, we have identified a number of circumvention risks in consultation with Ofcom that could impact the effectiveness and risk profile of the Network Commitment. These are:

(a) **Unforeseen events** – As outlined above, we consider that this would fetter the CMA's discretion when considering whether any reasons for failure to comply amount to a reasonable excuse on a case-by-case basis.[2468] We therefore consider this proposal not to be appropriate.

(b) **A rural commitment** – We consider that there is a greater commercial incentive to retain sites in urban areas than rural areas. There is therefore a risk that the Parties deploy more sites in urban areas (even if not high traffic areas) which could reduce the benefits of the Network Commitment in rural areas. We therefore consider that the Parties' proposal to commit to a rural site roll-out is appropriate.

(c) **Types of bands deployed** – the type of bands deployed will affect the capacity in an area and the coverage. For example, deployment of higher frequency bands could achieve high levels of capacity at a site but over a smaller area. Lower spectrum bands would need to be deployed to provide that coverage. Ofcom told us that it believes that this risk can be mitigated by requiring all sites to have each of 700 MHz, 800 MHz, 900 MHz and 1,400 MHz spectrum bands deployed.[2469] As an exception to this, we consider that some flexibility could be provided to enable the Parties to substitute bands where it is not possible to deploy certain bands on certain sites. We note that

[2468] CMA4, paragraph 4.4.
[2469] Ofcom response to the CMA's RFI.

the Parties, in their response to the Remedies Working Paper, have [✂] the inclusion of this requirement in the Network Commitment.[2470]

(d) **Type of technology** – Ofcom highlighted that the Parties could use cheaper microcells, the performance of which put the benefits of the Network Commitment at risk. Ofcom suggested that this could be mitigated by requiring the site numbers commitment to be met using macrocells meeting the Wide-Area BS class definition in 3GPP TS 38.104 v18.6.0 (2024-06).[2471] The Parties submitted that this would not be feasible or appropriate given the varied location of their sites. The Parties proposed that the definition of sites in the Network Commitment should provide that the radio equipment on a site shall transmit power of a minimum of [✂] per each 5MHz deployed on the site.[2472] In the Remedies Working Paper, we stated that we consider that technology requirements should be specified to ensure that the benefits of the Network Commitment are not undermined.[2473]

(e) In their response to the Remedies Working Paper, [✂].[2474] Ofcom told us that it suggested the alternative qualification and is satisfied with the Parties' proposal, also encompassing 5G and 4G.[2475]

16.312 Whilst we consider that the Network Commitment has a number of circumvention risks, as outlined above, we believe these do not undermine its effectiveness as there are mitigations available through appropriate specification.

Distortion risks

16.313 Market distortions can arise when a behavioural remedy alters normal market signals and changes the incentives of the Parties and/or third parties in a negative way. Such distortions can undermine the effectiveness of the remedy.

16.314 We consider, as set out above, that the delivery of the Parties' JNP (through the implementation of the Network Commitment), alongside Beacon 4.1, is likely to lead to a competitive response from the other two MNOs (for example to invest in their networks), and thus enhance rivalry compared to the counterfactual. Ofcom also noted that the prospect of higher network quality from the Merged Entity and VMO2 may result in BTEE having to invest more in response to increase its network quality.[2476]

2470 Parties response to the Remedies Working Paper,12 November 2024, paragraph 2.40.
2471 Ofcom response to the CMA's RFI.
2472 Parties' response to the CMA's RFI.
2473 Remedies Working Paper, paragraph 1.313(d).
2474 Parties' response to the Remedies Working Paper,12 November 2024, paragraph 2.43.
2475 Ofcom submission.
2476 Ofcom response to the CMA's RFI.

16.315 We do not consider that the Network Commitment is likely to lead to costly market distortions.

Views on the effectiveness of the Network Commitment

16.316 Based on the assessment set out above, we consider that:

(a) The Network Commitment would address the SLCs in the retail market and wholesale market and their resulting adverse effects in the longer term (but would not on its own address the short term adverse effects, which are considered further below).

(b) The Network Commitment should be 8 years in duration.

(c) The Network Commitment would be capable of effective implementation, monitoring and enforcement, as a condition of the Merged Entity's spectrum licence(s).

(d) The Network Commitment has an acceptable risk profile. In particular, we consider that the remedy can be appropriately specified, circumvention risks can be appropriately mitigated, and that the Network Commitment is not likely to lead to costly market distortions.

16.317 CMA guidance notes that where enabling measures take time to address an SLC, measures that control market outcomes may be needed for a limited period to provide protection to customers from the adverse effects of an SLC.[2477] We consider that supporting measures would be required for a limited period to provide protection to customers from the adverse effects of the SLCs in the initial years of the Network Commitment and Beacon 4.1 before the competitive benefits of the roll-out are sufficiently evident. These are examined below.

Time limited customer retail protections

16.318 As outlined above (paragraph 16.218), we consider that in the retail market the Network Commitment addresses long term anti-competitive effects but not the short term adverse effects of the Merger.

16.319 Our guidance anticipates that enabling measures (such as the Network Commitment) may be expected to work relatively slowly in addressing an SLC. In these circumstances, measures that control market outcomes may be needed for a limited period to provide protection to customers from the adverse effects of an SLC.[2478]

[2477] CMA87, paragraph 3.50.
[2478] CMA87, paragraph 3.50.

16.320 To explore this further, in the Remedies Notice, we outlined that on the assumption that a Network Commitment addressed our concerns in the long term, there may be a case for considering some time-limited protections to protect customers from the adverse effects of the SLCs during the initial years of network integration and roll-out under any Network Commitment.[2479]

16.321 In the Remedies Notice we outlined that such protections might encompass, for example, allowing the Parties' existing customers to 'roll over' their existing contract terms - price, data allowance etc - for a pre-defined period. Included within this, or separately, there could also be a commitment by the Parties to protect social tariff terms and conditions. They might be accompanied by measures to encourage uptake amongst those consumers who are eligible.[2480]

16.322 As outlined below, across a number of submissions, the Parties proposed a range of short term retail customer protections. No other short term protections were put to us.

The Parties' proposed retail customer protections

16.323 In this section, we provide a description of the Parties' proposed retail customer protections including implementation considerations, before outlining the Parties' position as to how they address the SLCs in combination with the Network Commitment. The Parties proposed four retail commitments: [2481]

(a) a commitment to maintain terms and conditions of existing customers (the **Terms and Conditions Commitment**);

(b) a commitment to maintain prices for value-focussed customers on all main brands (the **Pricing Cap Commitment**);

(c) a commitment to maintain social tariffs (the **Social Tariffs Commitment**); and

(d) a commitment to exclude vulnerable customers in financial difficulty from mid-contract price rises (the **Vulnerable Customers Commitment**).

Overview of the Terms and Conditions Commitment

16.324 The Parties proposed to maintain the existing terms and conditions[2482] for all current consumer mobile voice customers across each of the Merged Entity's

[2479] CMA, Remedies Notice, 13 September 2024, paragraphs 34 to 36.
[2480] CMA, Remedies Notice, 13 September 2024, paragraph 39.
[2481] Parties, Remedies letter to the Inquiry Group; Parties' follow up submission on Remedies.
[2482] This meant that, once a customer's contract ends, they could remain on their standard tariff, with all existing contract terms and conditions being maintained including any terms which relate to pre-defined mid-contract price rises in compliance with Ofcom's latest applicable regulations.

brands (Vodafone, VOXI, TalkMobile, Three and SMARTY) for 36 months from completion of the Merger.[2483]

16.325 The Parties submitted that under this proposal, customers would remain free to select alternative tariffs and offers at their own discretion and the Merged Entity would continue to notify consumers of the 'best tariff' available to them at the end of their contract (and at least annually thereafter) under the end of contract notification requirements which came into effect in 2020.[2484]

Overview of the Pricing Cap Commitment

16.326 The Parties originally proposed to commit to maintain prices on SMARTY for 24 months from Day 1 for all tariffs that are currently £10 or less per month.[2485] The Parties submitted that this commitment would address our initial views, as set out in the Remedies Notice, about particular concerns regarding the impact of the Merger on those customers least able to afford mobile services or who might have to pay more for improvements in service quality they do not value.[2486] The Parties submitted the remedy proposal is designed to enable value focussed customers to have continued access to low prices.[2487]

16.327 Subsequent to the above proposal, the Parties submitted that they are willing to maintain prices across their main brands (Vodafone, Three, SMARTY and VOXI) for 36 months for a selection of Vodafone and Three PAYM SIMO tariffs, and VOXI and SMARTY hybrid pay as you go (**PAYG**) tariffs under 20GB monthly, using offers in place on 12 September 2024. The Pricing Cap Commitment would apply to standard tariffs only and would exclude any time-limited discounts or promotions, which would not be fixed as part of the pricing cap commitment. This would be effective from completion.[2488]

[2483] Parties' Remedies letter to the inquiry group.
[2484] Parties' Remedies letter to the inquiry group.
[2485] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.11.
[2486] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.34 and 5.37
[2487] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.12.
[2488] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.11, Parties' Remedies letter to the inquiry group; Parties' follow up submission on Remedies.
The Parties had initially proposed a 24 month commitment for the SMARTY Pricing Commitment in their response to the Remedies Notice and subsequently amended the commitment to apply across all their main brands for 36 months after the Remedies Response Hearing.

Figure 16.3: **Tariffs covered by the Parties' proposed Pricing Cap Commitment**

Brand	Type of tariff	Price	Tariff duration	Data allowance	Voice minutes and texts
Vodafone	PAYM SIMO	£18	24 months	8 GB	Unlimited
		£19	12 months		
		£29	1 month		
		£15	24 months	3 GB	
		£16	12 months		
		£26	1 month		
Three	PAYM SIMO	£12	24 months	12 GB	Unlimited
		£14	12 months		
		£22	1 month		
		£11	24 months	4 GB	
		£13	12 months		
		£19	1 months		
		£9	24 months	1 GB	
		£11	12 months		
VOXI	Pre-paid hybrid	£10	1 month	20 GB per month (with unlimited social media)	Unlimited
SMARTY	Pre-paid hybrid	£8	1 month	16 GB	Unlimited
		£7	1 month	8 GB	
		£6	1 month	5 GB	

Source: Parties response to the Remedies Working Paper, 12 November 2024, Table 3.1

16.328 The Parties believe applying time-limited commitments to a 'good mix' of tariffs across their main brands (ie Vodafone and Three PAYM SIMO, and VOXI and SMARTY hybrid PAYG tariffs) standard tariffs is appropriate as: [2489]

(a) There are [✂] million customers currently on Vodafone and Three PAYM SIMO and VOXI and SMARTY hybrid PAYG tariffs of up to 20 GB ([✂] million VUK customers and [✂] million 3UK customers) and they represent [30-40]% of the combined current Vodafone and Three PAYM SIMO and VOXI and SMARTY hybrid PAYG bases;

(b) It would be available to consumers who are not currently customers of the Parties or customers of the Parties on other tariffs, since the pricing commitment would apply to the Merged Entity's customers for the duration of the commitment;

[2489] Parties' follow up submission on Remedies.

(c) The price cap for these tariffs provides an anchor for the Parties' broader tariff portfolio (including tariffs with higher data allowances), and this would make it more difficult for the Parties to increase prices for tariffs with higher data allowances; and

(d) The data allowances offered in the pricing commitment are generous. Ofcom data from 2022 shows that the average consumer across the UK mobile market used 7.1 GB of data per month and recent Ofcom data from June 2023 shows that 50% of UK customers use 2.7GB or less.

16.329 The Parties submitted that the pricing cap commitment would be available to all existing and new retail customers.[2490] Customers who sign up to these tariffs during the commitment period would be subject to the existing terms and conditions which apply to these tariffs, which for PAYM SIMO contracts include pre-defined mid-contract price rises in compliance with Ofcom's latest applicable regulations.[2491]

Overview of Social Tariff Commitment

16.330 The Parties offered to commit to maintaining the social tariffs currently offered by VOXI and SMARTY for 36 months after the Merger closes.[2492] This would be effective immediately after the Merger closes as the tariffs already exist.[2493]

16.331 SMARTY and VOXI's social tariffs are available to customers in receipt of certain government benefits.[2494]

16.332 The social tariffs would continue to be advertised prominently so that customers can access the information relating to the tariffs. The Parties told us that VOXI For Now, VOXI's social tariff, is advertised on its main landing page, and SMARTY's social tariff is advertised on the 'All Plans' page.[2495]

16.333 The Parties proposed to commit to maintaining a clear and simple process for claiming social tariffs for customers, submitting that VOXI's eligibility process is currently managed by Moneyhub, a third party partner, and Moneyhub checks customers' bank accounts for government benefits and advises VOXI on their

2490 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.16.
2491 Parties' follow up submission on Remedies.
2492 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.17 and Parties' Remedies letter to the Inquiry Group. The Parties had initially proposed a 24 month commitment for the SMARTY Pricing Commitment in their response to the Remedies Notice and subsequently amended the commitment to 36 months after the Remedies Response Hearings.
2493 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.19.
2494 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.17.
2495 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.20.

eligibility. [2496] The Parties plan to continue to use third party charity partnership to promote the tariffs.[2497]

16.334 The Parties submitted that Ofcom surveys have found that social tariffs can ensure mobile services remain affordable for low-income customers.[2498]

Overview of Vulnerable Customers Commitment

16.335 The Parties submitted that they are willing to commit to exclude vulnerable customers from mid-contract price rises for 36 months after the Merger closes. This would include main brands and all sub-brands tariffs.[2499] The Parties submitted that a customer's vulnerability can be flagged through VUK's online portal or through customer-facing employees and through 3UK's Customer Contract Centre, retail advisors or on the 3UK app.[2500]

Implementation

16.336 The Parties submitted that their retail customer remedies would be implemented as a Final Undertaking under section 82 of the Act and would be enforceable under section 94 of the Act. As with the Network Commitment, the Parties would appoint a monitoring trustee to monitor compliance and report to the CMA. The Parties would be responsible for the remuneration of the monitoring trustee.[2501] The Merged Entity would provide reports to the monitoring trustee and the CMA would confirm the Parties are complying with the protections.[2502]

16.337 The Parties proposed a dispute resolution process involving either an independent adjudicator appointed by the monitoring trustee or an existing Ombudsman process.[2503]

The Parties' views

16.338 The Parties submitted that there is no need for any specific remedy, beyond the Network Commitment, to address the SLC in the retail market. The Parties consider that the Network Commitment would, from the outset, incentivise the Merged Entity, VMO2 (with help from Beacon 4.1) and BTEE to compete even more strongly including for low-income customers.[2504]

2496 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.21.
2497 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.21.
2498 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.38.
2499 Parties' Remedies letter to the inquiry group. The Parties had initially proposed a 24 month commitment for Vulnerable Customers Commitment in their response to the Remedies Notice and subsequently amended the commitment to 36 months after the Remedies Response Hearings.
2500 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.22.
2501 Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.25-5.26.
2502 Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.27-5.28.
2503 Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.30.
2504 Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.3-5.8.

16.339 With respect to the CMA's general framework for assessing remedies, including behavioural remedies, the Parties submitted that:

(a) **Considering the impact on the SLC**, should we have any residual concerns relating to the initial years of network integration and roll-out under the Network Commitment because we believe that the rivalry enhancing efficiencies may take some time to manifest, the proposed retail customer protections would resolve any such concerns by providing retail customers with price protections for the duration of the Network Commitment's initial years.[2505]

(b) The Parties considered that each of their four proposals would address our concerns as set out in the Provisional Findings:

(i) The Parties consider that the Terms and Conditions Commitment ensures that the short term retail protections have a wide scope and address the CMA's concerns that retail protections must be adequate in duration.[2506].

(ii) The tariffs included in the Pricing Cap Commitment represent an 'anchor' for the rest of the Parties' tariffs, whilst still leaving enough flexibility for the Parties to change and innovate on tariffs with higher data allowances, to avoid our concern of fossilising the market or providing a broad focal point for tariffs across the market. Also, the Parties consider the Pricing Cap Commitment is simple and predictable for customers to switch across all their brands. [2507]

(iii) The Parties consider that the Social Tariffs Commitment addresses our particular concerns about the impact of the Merger on those customers least able to afford mobile services.[2508]

(iv) The Parties consider that the Vulnerable Customers Commitment also addresses our particular concerns about the impact of the Merger 'on those customers least able to afford mobile services' as it specifically protects consumers who are financially vulnerable from mid-contract price rises for a period of 36 months.[2509]

[2505] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.32 – 5.33.
[2506] Parties' Remedies letter to the inquiry group.
[2507] Parties' follow up submission on Remedies.
[2508] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.37.
[2509] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.40 and Parties, Remedies letter to the Inquiry Group.

(c) As to the scope, in their response to the Remedies Working Paper, the Parties amended their proposal and submitted that the scope of any short term retail protections should be focussed and time-limited, comprising: [2510]

(i) a Pricing Cap Commitment: incorporating all standard Vodafone and Three PAYM SIMO and VOXI and SMARTY hybrid PAYG tariffs with allowances under 20GB at 12 September 2024; and

(ii) a Social Tariffs Commitment: maintaining the comprehensive social tariffs currently offered by both VOXI and SMARTY.

(d) As to the duration and timing, the Parties submitted that their retail customer protections would address any residual SLC and its effects from Day 1 of the Merger as they would be in force from the outset and do not require a long period of implementation.[2511] The Parties also submitted that the three year duration aligns with the significant improvements in coverage, congestion and speeds that will be realised by the end of Year 3.[2512]

(e) As to practicality, the Parties submitted that the retail customer protections are practically achievable, and the Parties have the relevant experience.[2513]

(f) With respect to risks the CMA typically assesses in the context of behavioural remedies, the Parties submitted that:

(i) **Specification risks:** the retail customer protections are clearly specified and form an effective basis for monitoring and compliance.[2514] The commitments do not need to be specified in a way to take account of technological change given their time limited nature.[2515] There would be a transparency requirement in the Final Undertakings to display the protected tariffs clearly and prominently on their websites.

(ii) **Circumvention risks:** no circumvention risks arise. The commitments would be public. A monitoring trustee would have a role in monitoring all of the commitments.[2516]

(iii) **Distortion risks:** the retail customer protections cannot distort the market in a way that would undermine their effectiveness.[2517] The Merged Entity would be able to amend the relevant prices downwards as they would only act as a price cap as opposed to a strict restriction

[2510] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 3.3.
[2511] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 5.42 – 5.43.
[2512] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.11.
[2513] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.44 – 5.45.
[2514] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.47.
[2515] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.48.
[2516] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.49.
[2517] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.51.

on future pricing for retail tariffs.[2518] In addition, social tariffs and protections for vulnerable consumers are already in place across the market. [2519]

(iv) **Monitoring/ enforcement risks:** the retail customer protections would not be subject to any monitoring or enforcement risks. They are easy to monitor as the exact commitments are clear and can be tracked via the brand websites.[2520] The monitoring trustee would be remunerated by the Merged Entity so no unreasonable demands are placed on CMA resources.[2521]

Ofcom's views

16.340 Ofcom told us that it has not been involved in setting retail prices in mobile markets and accordingly does not see a clear intersection between this remedy and Ofcom's role.[2522] Ofcom told us that retail customer remedy options would be less readily implemented as licence conditions as they are unlikely to be relevant to the deployment of spectrum under the licence.[2523]

16.341 Ofcom also told us that it would be too complex to have a remedy that addresses every single contract in the retail market due to varying level of allowances, contract lengths and add-ons.[2524]

16.342 Ofcom told us that if we were minded to impose time limited protections in the retail market, we should seek to make these as simple as possible to avoid market distortion.[2525] Ofcom suggested that short term tariff protections would be better due to the potential distortive effect of longer term tariff protections.[2526] Ofcom submitted that it is important that any protected tariffs do not unduly risk distortion by undermining the dynamic of promotional pricing and engagement or by setting prices below the level of the market price which could undermine MNO investment incentives across the market.[2527]

16.343 Ofcom told us that SIMO contracts provide a reasonable anchor for other types of contract (Handset & Airtime, and Split) given the ease with which these other contract types can be unbundled.[2528] Ofcom submitted that the Parties' proposal to continue to offer all their current basic SIM-only tariffs (across Three and Vodafone

[2518] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.52.
[2519] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.53.
[2520] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.54.
[2521] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.55.
[2522] Ofcom call note.
[2523] Ofcom email.
[2524] Ofcom call note.
[2525] Ofcom call note.
[2526] Ofcom call note.
[2527] Ofcom submission.
[2528] Ofcom letter.

brands as well as SMARTY and VOXI) up to 20GB could represent a reasonable anchor for other tariffs.[2529] With regards to annual price increases, Ofcom submitted that any protected tariffs will have to comply with the new rules prohibiting the use of inflation-linked mid-contract price rises which take effect from early 2025.[2530]

Third Party views

16.344 BTEE submitted that time limited protections would be ineffective and would raise risks of market distortion.[2531] BTEE's view is that such protections would create distortions to competition that are likely to last long after the three-year period given the pace of technological and price innovation in this market.[2532] BTEE further submitted that a commitment to rollover existing contracts would only give some degree of protection to the Merged Entity's customers but not address loss of competition in the acquisition market for customers out of contract or customers looking to adjust their service.[2533] BTEE submitted that, similarly, social tariffs would be limited to a specific customer group and insufficient to address any pricing SLC.[2534] BTEE submitted that retail price protections would also face specification and monitoring challenges.[2535] BTEE submitted that - since the (then) provisional SLC is not stated to be time limited - the protections to address adverse price effects on price conscious consumers would need to be long term and possibly in perpetuity.[2536]

16.345 BTEE submitted that the dynamic nature of the retail mobile market makes it challenging to design a remedy which would constrain quality adjusted prices to address the SLC then provisionally identified and not give rise to significant market distortions even for a one- or two-year period.[2537] BTEE noted that any price protections designed to control prices for the 27 million subscriptions that could be impacted by prices from the SLC would be impossible to specify with clarity and would give rise to significant circumvention risk and this would ultimately have a distortive effect on competition. [2538]

16.346 BTEE also submitted that monitoring would be an onerous and complex task (eg Ofcom would need to engage with the Merged Entity as well as several million consumers) and any retail protection could be easily circumvented due to the

[2529] Ofcom submission.
[2530] Ofcom submission.
[2531] BTEE response to the Remedies Notice, 27 September 2024, paragraphs 3.41 and 3.46 and BTEE response to the remedies working paper, 12 November 2024, paragraphs 2.1-2.4.
[2532] BTEE response to the remedies working paper, 12 November 2024, paragraphs 2.1-2.4.
[2533] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.43(a).
[2534] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.43(b).
[2535] BTEE response to the Remedies Notice, 27 September 2024, paragraphs 3.46 and 3.47.
[2536] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.53.
[2537] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.54.
[2538] BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.60.

myriad variables that affect pricing (eg tariffs and prices of handsets).[2539] BTEE urged the CMA to limit the scope of the protections to the limited sub-set of tariffs proposed by the Parties and to set an absolute duration limit of three years to limit distortive effects.[2540]

16.347 VMO2 considers that time limited protections, if required by the CMA, could be achieved through an undertaking by the Parties.[2541] VMO2 submitted that social tariffs are already encouraged by Ofcom and the Parties could be required to engage in promotional activities to encourage uptake amongst eligible consumers.[2542] VMO2 submitted that it agrees with Ofcom's advice that the CMA should seek to make the retail customer protections as simple as possible to avoid market distortions.[2543]

16.348 VMO2 submitted that it agrees with the CMA that a three year period strikes an appropriate balance in terms of cost and risks and the protections should be tied to the delivery of the Network Commitment.[2544] VMO2 submitted that monitoring and enforcement risks can be addressed by the appointment of a monitoring trustee, presenting the tariffs clearly and prominently on the Parties' websites, as well as making them available on price comparison websites and providing a dispute resolution process.[2545] Given the time-limited and targeted nature of the measures, VMO2 submitted that it does not consider specification, distortion or circumvention risks are likely to arise.[2546] VMO2 submitted that it agrees that protected tariffs would act as a constraint on the pricing decision of the Parties, as well as other market players.[2547]

16.349 Communication Chambers submitted that time limited retail protections should be linked to CPI or RPI to allow for input cost changes that are beyond the control of the MNOs.[2548]

16.350 Enders Analysis told us that retail remedies are workable provided they are not punitive, protracted, overly prescriptive and do not cause unintended consequences in a complex and competitive market.[2549]

16.351 On the design of price protections, Which? submitted that time limited price protections would pose a significant risk of distortion due to the level of heterogeneity between contract types (ie consumers on pre-pay or monthly terms may have standalone contracts or contracts bundled with handsets, with different

2539 BTEE response to the Remedies Notice, 27 September 2024, paragraphs 3.55-3.57.
2540 BTEE response to the remedies working paper, 12 November 2024, paragraphs 2.4.
2541 VMO2 response to the Remedies Notice, 27 September 2024, paragraphs 3.7-3.8.
2542 VMO2 response to the Remedies Notice, 27 September 2024, paragraphs 3.7-3.8.
2543 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.1.
2544 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.2.
2545 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.3.
2546 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.3.
2547 VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.3.
2548 Communication Chambers response to the Remedies Notice, 27 September 2024, page 5.
2549 Enders Analysis response to the Remedies Notice, 27 September 2024, page 6.

contract term length and differing data and call minutes allowances).[2550] Further, Which? submitted that there is also a distortive risk from the possibility of the MNOs increasing their prices at remedy expiry.[2551]

16.352 On other retail customer terms to be protected, Which? was of the view that we should consider flexibility of contract term length and offering (ie roaming, etc) and any retail protection would need to apply to all customers if the SLC is expected to lead to a welfare loss for all the Parties' retail customers. Which? also submitted it was in favour of social tariff protections in relation to eligibility, price, call and data allowances/speeds, service levels and contract flexibility; however, they should be promoted by the Parties to encourage uptake. However, Which? noted that there would be associated monitoring and enforcement risks in relation to enforcement of compliance by the Parties. [2552]

16.353 [✂] submitted that it was not in support of the retail customer protections, as it would not be sustainable in the long term and could lead to retail market distortion.[2553] [✂] submitted that the retail protections do not take into account ongoing changes in the market and consumer behaviour.[2554] In its view, a wholesale remedy would be more effective as it would ensure the underlying wholesale access terms are attractive and secure enough to allow the retail market to flourish in a sustainable and long-term way, and this would result in better outcomes and benefits for customers. [2555]

16.354 iD Mobile considered that the roll over of existing retail contract terms would be possible, but various factors would need to be considered for it to be effective. It also agreed with the proposal for social tariffs in principle but did not believe the commitments outlined by the Parties to be adequate.[2556] iD Mobile agreed protected tariffs should include a variety of popular and competitively priced options and offer different data allowances.[2557] The protections must also include tariffs available through indirect channels (sales made via partner retail shops).[2558] Currys (iD Mobile) submitted it is essential the tariffs are provided in indirect channels to ensure consumers will have a better opportunity to understand the available tariffs.[2559]

[2550] Which? response to the Remedies Notice, 27 September 2024, page 3.
[2551] Which? response to the Remedies Notice, 27 September 2024, page 1.
[2552] Which? response to the Remedies Notice, 27 September 2024, page 1.
[2553] [✂] response to the Remedies Notice, 26 September 2024, page 3. [✂] response to the Remedies Working Paper, 12 November 2024, page 1.
[2554] [✂] response to the Remedies Working Paper, 12 November 2024, page 1.
[2555] [✂] response to the Remedies Notice, 26 September 2024, page 3. [✂] response to the Remedies Working Paper, 12 November 2024, page 1.
[2556] iD Mobile response to the CMA's RFI.
[2557] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1.
[2558] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1.
[2559] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 1.

16.355 Liberty Global submitted that time-limited retail market protections would support the Network Commitment in addressing any concerns we may have about the Merger.[2560]

16.356 One third party told us that a 'more efficient way to protect the neediest from price rises is through a time-limited retail protection of social tariffs'.[2561]

Our assessment of the Parties' retail customer protections (behavioural framework)

16.357 In assessing the effectiveness of the retail customer protections proposed by the Parties, we are following the framework outlined in paragraph 16.12 and the behavioural risks identified above.

16.358 The Parties' proposed retail customer protections included two retail protections targeted at current customers. As described above, the proposals were to maintain the existing terms and conditions of existing customers (the Terms and Conditions Commitment) and exclude customers flagged in their system as vulnerable customers from in contract price rises (the Vulnerable Customers Commitment). We consider that, if implemented, these measures could create inertia amongst certain customers who believe they are protected, but for whom there may be betters deals in the market which, absent such protections, they might have switched to. The Parties' Vulnerable Customer Commitment, which we consider to be poorly targeted and difficult to monitor, would require a more complex dispute resolution mechanism than the one currently envisaged by the Parties, and would also, as noted above, potentially harm some vulnerable customers by disincentivising them from seeking better deals.[2562]

16.359 We note in this respect Ofcom's submission that if we were minded to impose time limited protections in the retail market, we should seek to make these as simple as possible to avoid market distortion.[2563]

16.360 We therefore consider that the Terms and Conditions Commitment and the Vulnerable Customers Commitment would not be effective, individually or as part of a behavioural package, at addressing the residual time-limited concerns in the retail market that are not addressed by the Network Commitment alone.

16.361 The rest of this assessment is focused on whether the Parties' other proposals, or an amended version of them, could be effective. The two proposals we consider further are:

[2560] Liberty Global response to the remedies working paper, 12 November 2024, page 2.
[2561] Professor Stephen Temple response to the Remedies Notice,17 September 2024, page 2.
[2562] For example, customers may continue on more expensive handsets contracts even though there may be more attractive deals available in the market or customers may continue staying on contracts with a higher data allowance than they require.
[2563] Ofcom call note.

(a) The Pricing Cap Commitment; and

(b) The Social Tariffs Commitment.

Impact on the SLC and resulting adverse effects

16.362 In this section we assess whether the Parties' proposal or a variant of it would address residual time-limited concerns in the retail market that are not addressed by the Network Commitment alone.

16.363 In Chapter 8, we found that the Merger would lead to price increases for retail customers (or to equivalent reductions in data packages or service features). We considered that any price increases would potentially affect tens of millions of mobile customers, and that we had particular concerns about the impact of the Merger on those customers least able to afford mobile services or who might have to pay more for improvements in service quality they do not value.[2564]

16.364 As set out above (paragraphs 16.176 to 16.242), we do not consider that the Network Commitment alone can comprehensively address the SLC and its adverse effects, as the rivalry-enhancing effects of Beacon 4.1 and the Network Commitment will grow over time.

16.365 We therefore consider that it is necessary to provide some time limited protections to prevent these short-term adverse effects.

16.366 When considering the impact on the SLC, we have given appropriate weight to the potential distortion risks associated with any form of price protection (see below). In particular, one of our primary concerns is that any price protections should seek to avoid as far as possible any customer inertia. Inertia could inadvertently reduce competition and prevent customers from seeking better deals. Therefore, as a design concept, any time limited protections should focus on providing customers options and require customers to make active decisions about what is in their best interest.

16.367 It is our view that a commitment to preserve an appropriate range of pre-Merger tariffs for a specified period of time may provide the protections we seek without creating any material market distortions. As set out further below, we consider that protecting a selection of tariffs alongside a social tariff commitment is likely to reduce distortion risks and make monitoring more practical. We refer to the tariffs to be included in the Pricing Cap Commitment and the Social Tariffs Commitment together as the protected tariffs (**Protected Tariffs**).

[2564] See Chapter 14, Criteria 4:Surriciency, Retail market, Price and CMA, Remedies Notice, 13 September 2024, paragraph 10(a).

16.368 We consider that, to be effective, the Protected Tariffs should represent the social tariffs and a mix of tariffs which are popular, competitively priced and span different data allowances. We consider that such a protection would provide sufficient options for new and existing customers.

16.369 We further note that, even if only a selection of tariffs were protected, this would still, to some degree, provide a constraint on the price of the Parties' other tariffs. This is because we understand that, when setting tariffs, mobile operators consider how tariffs are positioned in relation to each other.

16.370 Whilst retail customer protections would not replace the loss of competition (and would not 'work with the grain of competition'), other operators are influenced by competitors' pricing when deciding on their own tariffs, so this remedy should help keep competitor prices lower than they otherwise might be absent this remedy.

16.371 As noted above, we consider that to be effective, retail customer protections would need to target a small subset of tariffs across both Parties' brands that would be available to new and existing customers. The protections therefore would need to include Vodafone, Three, SMARTY and VOXI tariffs. The protections should include relevant tariffs from hybrid PAYG and PAYM SIMO deals across all of the above brands, that were available pre-publication of the Provisional Findings. We note that the Parties proposed that the Pricing Cap Commitment would be assessed against the pricing and contractual terms as of 12 September 2024, which is the day before the notification of the Provisional Findings.[2565]

16.372 Due to specification risks explored further below (paragraphs 16.412 to 16.419), practicality and circumvention risks, we do not consider that it is appropriate to include the following: (i) Business tariffs; (ii) PAYM handset tariffs (iii) PAYM data-only; and (iv) pure PAYG.

16.373 We consider that selecting a limited subset of tariffs from across the brands would keep the protections simple, easy to understand for customers and manageable. We understand that nearly [✂] of the Parties' retail customers are on hybrid PAYG and PAYM SIMO deals across the Vodafone, Three, SMARTY and VOXI brands. We consider that if customers are made aware of these subsets of tariffs, this is likely to create downward pressure on tariffs not captured by this customer protection.

16.374 We believe that capturing PAYM handset, pure PAYG and data only deals is markedly more complex due to the nature of these deals. For example, PAYM handset deals cover the cost of the handset and the mobile tariff in one payment. We do not consider it feasible, practical or desirable to cap handset tariffs. As

[2565] Parties' follow up submission on Remedies.12 September 2024 is the day before the Provisional Findings were notified on 13 September 2024.

outlined above, we consider that the tariffs selected would still likely provide some downward pressure on these tariffs, which we consider to overall be an effective and practical solution to our time limited concerns.

16.375 As outlined above, we consider that to be effective, the tariffs forming part of the Protected Tariffs (in addition to the social tariffs) should represent a mix of tariffs which are popular, competitively priced and span different data allowances. Further, these tariffs should be specified according to their key characteristics as set out in Table 1.2, including price, duration, tariff type, data allowance and contract length.

16.376 In order to specify an appropriate set of tariffs, we requested data on the PAYM SIMO and hybrid PAYG tariffs the Parties offered in August 2024, as well as data on the availability of promotions in the period between September 2023 and August 2024.[2566] Based on our analysis of this data, we have identified the following tariffs as representing an appropriate tariff set:[2567]

Table 16.1: Pricing cap commitment tariffs

Brand	Tariff type	Headline monthly price (£)	Pricing for initial months	Data allowance (GB)	Contract length
Three	PAYM SIMO	14	6 months half price (£7)	25	24 months
	PAYM SIMO	16	6 months half price (£8)	120	
SMARTY	Hybrid PAYG	6		5	1 month
Vodafone	PAYM SIMO	21		50	24 months
	PAYM SIMO	25		150	
VOXI	Hybrid PAYG	10		20	1 month

16.377 We would require the selected tariffs to be in full compliance with all applicable legal requirements, including Ofcom's regulations relating to mid-contract price increases.

16.378 We consider that both the Three branded tariffs should be offered to new customers in the three-year period with a half price introductory discount for the initial six months before reverting to the headline price. This is because in the period 31 August 2023 to 1 September 2024, these tariffs were either never, or very rarely offered at non-discounted prices and were most often offered with '6-months half price', or equivalent, discounts. In particular:

(a) The 25GB tariff was never offered at the headline price of £14. It was offered at an effective price of £12.25 (either in the form of a '3-months free' or a '6 months half price' discount) for about half of the days in this period.[2568] Since

[2566] Parties response to the CMA's RFI.
[2567] These tariffs should all be offered with unlimited minutes and texts, with 5G and without any speed caps.
[2568] To calculate the 'effective price', we have averaged any discount on a tariff over the tariff length of the contract and then subtracted this amount from the advertised monthly tariff price. For example, a 24-month PAYM SIMO contract might be advertised with a monthly tariff price of £14 with a promotion for 'half price for the first six months'. In this case, the effective monthly price would be £12.25 because customer would receive a total discount of £42 over the 24-month contract.

May-24, when it was offered at an effective price of £12.25, this always took the form of a '6 months half price' discount.

(b) The 120GB tariff was only offered at the headline price of £16 for 3% of days in this period. It was offered at an effective price of £14 (either in the form of a '3-months free' or a '6 months half price' discount) for about 70% of the days in this period. Since May-24, this effective price has always been offered in the form of a '6 months half price' discount.

16.379 In response to this approach, the Parties submitted that promotions should be excluded from the tariffs. In particular they submitted that:

(a) Including the promotions within the selected tariffs would be incompatible with consumer law as it could create a misleading impression that there is a promotional 'lower price' which is 'better than normal' (when in fact it would remain unchanged throughout the three years and would always be available).

(b) Requiring the selected tariffs to include promotions would increase the potential distortion risk by artificially preserving promotional prices for a three-year period. We consider distortion risks below.[2569]

16.380 We consider that it is possible to structure and advertise these tariffs in a way that is compatible with consumer law. The Parties can offer the tariffs with the initial months priced at a lower level than subsequent months and described in a way that is not misleading, in particular, by describing the tariff in a clear and transparent way making clear what the price payable will be throughout the whole contractual period. Prices should not be displayed in a way that implies the tariff is 'time-limited' or a 'special offer' in a way that would create an unfair impression of urgency, or misrepresent lower prices as discounts or promotions if they are a component element of the tariff.

Duration and timing

16.381 As outlined above (paragraph 16.218), we consider that the Network Commitment addresses long term anti-competitive effects in the retail market. However, we have found that the Network Commitment would not address short term adverse effects from the SLC in the retail market.

16.382 Our guidance anticipates that enabling measures (such as the Network Commitment) may be expected to work relatively slowly in addressing an SLC. In these circumstances, measures that control market outcomes may be needed for

[2569] Parties Retail customer protections submission.

a limited period to provide protection to customers from the adverse effects of an SLC.[2570]

16.383 As behavioural remedies are designed to have ongoing effects on business conduct throughout the period they are in force, the duration of these measures is a material consideration. Our guidance further notes that we may specify a limited duration if measures are designed to have a transitional effect.[2571]

16.384 As outlined above, the Parties originally proposed a three-year timeframe for the Pricing Cap Commitment and the Social Tariffs Commitment. However, given our residual concerns that the Network Commitment might not address short term adverse effects from the SLCs in the retail market, we consider that the timeframe of any Retail Customer Protections must be tied to a deliverable under the Network Commitment and not simply an elapsed timeframe. We consider that once it is corroborated by the CMA and Ofcom that the Parties have met their Year 3 obligation under the Network Commitment, the retail customer protections can fall away, and the Parties will no longer be required to offer the protected tariffs to new customers. We consider that the impact of the Network Commitment and Beacon 4.1 will have begun to have a material positive effect on competition at that point (paragraph 16.219), such that the retail protections could be lifted.

16.385 Our view is that by Year 3, significant improvements in the Merged Entity's coverage, reliability and capacity will have been delivered and the benefits of Beacon 4.1 on VMO2's quality and capacity will also have started to take effect:

(a) The Network Commitment by Year 3 is expected to deliver benefits from:

(i) The Parties' claimed Day 1 benefits;

(ii) Over [✂]% C-Band 5G population coverage;

(iii) [✂]% 4G geographic coverage;

(iv) Only [✂]% of customers receiving speeds below 2Mbps; and

(v) Only [✂]% of customers receiving speeds below 5Mbps.[2572]

(b) Much of the VMO2 spectrum transfer also occurs by the end of Year [✂]:

(i) Subject to completion of the Merger and Ofcom's consent, the Merged Entity will transfer spectrum assets to VMO2 in the [✂] bands;[2573]

[2570] CMA87, paragraph 3.50.
[2571] CMA87, paragraphs 7.10 and 7.11.
[2572] Parties, Relevant customer benefits.
[2573] Parties, Beacon 4.1 CMA briefing.

(ii) VMO2 will acquire the majority of the spectrum [✄] and a smaller proportion [✄];[2574]

(iii) Spectrum in the [✄] will be divested [✄];[2575]

(iv) Spectrum [✄] will be divested [✄];[2576] and

(v) VMO2 also explained that the Merged Entity will be [✄].[2577]

16.386 We also consider a three year period strikes an appropriate balance in terms of cost and risks (in particular distortion risks) identified in the following sections and therefore the protections should be tied to the delivery of the Year 3 Network Commitment.

16.387 We note that the Parties accept that their release from the retail customer protections could be conditional on completion of the Year 3 milestone for the Network Commitment.

Practicality

16.388 A practical remedy should be capable of effective implementation, monitoring and enforcement. The practicality of any remedy is likely to be reduced if elaborate and intrusive monitoring and compliance programmes are required.[2578]

Monitoring and enforcement risks

16.389 The CMA has an ongoing responsibility for the monitoring and enforcement of any behavioural remedies.[2579]

16.390 A remedy may be deemed ineffective if monitoring and enforcement are not feasible or would be costly and intrusive. This risk is exacerbated where the form of remedy is complex.

16.391 By limiting the retail customer protections to a subset of tariffs, we consider that the monitoring would be practical; however, there will be a need to monitor the following measures, on a regular basis:

(a) The Protected Tariffs remain on the market.

2574 Parties, Beacon 4.1 CMA briefing.
2575 Parties, Beacon 4.1 CMA briefing.
2576 Parties, Beacon 4.1 CMA briefing.
2577 VMO2's Response to the CMA's RFI.
2578 CMA87, paragraph 3.5 (c).
2579 CMA87, paragraph 4.71 and Section 92 of the Act.

(b) The Protected Tariffs are displayed clearly and prominently on the Parties' website.

(c) The Protected Tariffs are made available to Price Comparison Websites (PCWs) which the Parties have an existing commercial relationship with.

(d) That a dispute resolution process is set up and that disputes are settled quickly and fairly.

16.392 Whilst the CMA would remain responsible for monitoring and enforcing compliance with the Undertakings, we do not consider it appropriate that the CMA takes on the above monitoring functions, as the CMA does not have the resources or capability to undertake such a role.

16.393 Our guidance notes that the likelihood of effective monitoring will be significantly increased if it is possible to involve a sectoral regulator in the monitoring regime.[2580] However, we do not consider this appropriate for the retail customer protections. The sectoral regulator, Ofcom, does not regulate mobile retail prices or resolve individual customer complaints. As such, we consider this would be an inappropriate use of Ofcom's resources.

16.394 We consider that a monitoring trustee could perform the above functions in relation to the Protected Tariffs. We note that the Parties submitted that they propose to appoint a monitoring trustee, to be remunerated by the Parties, which they consider will ensure no unreasonable demands are placed on CMA resources.[2581] The Parties will need to commit to provide the monitoring trustee the information that it considers it needs to monitor compliance with the retail protections.

16.395 We further expect the Parties to put in place a dispute resolution process for customer disputes and for this process to be readily accessible to customers. In this regard, we note that both of the Parties contract with third parties for their current dispute procedures. The Parties should commit to extend their contracts with one or both of these providers (or an equivalent provider) and agree to abide by any outcomes from the dispute resolution process. Given the simplicity of the requirement for the Parties to keep the Protected Tariffs in the market and available to customers, we do not consider there to be a significant risk of customer disputes. However, we consider it important for a dispute resolution process to be in place in the event that they do arise.

[2580] CMA87, paragraph 7.6.
[2581] Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.55.

Acceptable risk profile

16.396 To be considered an effective remedy, we require a high degree of certainty of it achieving its intended effect.[2582] As set out above, given their behavioural nature, we examine the specification, circumvention and distortion risks associated with the Social Tariffs Commitment and Pricing Cap Commitment.

Specification risks

16.397 Specification risks arise if the form of conduct required to address the SLC or its adverse effects cannot be specified with sufficient clarity to provide an effective basis for monitoring and compliance.[2583]

16.398 There are a large number of tariffs on the market, and we consider that many are complex in nature and sometimes not easy to isolate, for example if part of a bundled service or tied to a handset. Trying to cover every tariff type would create a very high risk of misspecification and undermine our ability to monitor and enforce.

16.399 We also consider that specification risks could arise due to the complexity of the retail mobile market, the number of subscribers and the different customer groups rolling over their existing contracts or wanting to acquire new contracts.

16.400 However, as outlined above, we consider that a comprehensive remedy for these time limited retail market concerns would require the Parties to commit to keep on the market a subset of tariffs which are popular, competitively priced and span different data allowances. Whilst not covering every tariff type, we consider that this would sufficiently address the short term SLC concerns in the retail market. We consider that the specification risks are lowered if limited to protecting a subset of tariff types.

16.401 Our assessment has still identified specification risks with respect to defining the following:

(a) display and promotional requirements of the Protected Tariffs;

(b) dispute resolution process; and

(c) future tariff changes.

16.402 In terms of the requirement to promote and make available the Protected Tariffs, this needs to be implemented in a way that supports and enables customers to make informed decisions. It is our view that any remedy of this type should require

[2582] CMA87, paragraph 3.5 (d).
[2583] CMA87, paragraph 7.4 (a)

the Parties to make these tariffs visible to both their current and potential customers.

16.403 In its markets work, the CMA has previously imposed transparency requirements covering not only the type of information that needs to be displayed but also the way it is displayed and, in some circumstances, where the information needs to be displayed.[2584] To ensure that customers can access and are aware of these tariffs, we consider that any Undertakings should require the Parties to present the tariffs 'clearly and prominently' on their websites. The detailed specification would be set out in the Undertakings, applying the following principles:

(a) 'Clear' means (i) displayed in plain language; (ii) correct; and (iii) not misleading.

(b) Prominent means (i) presented in such a way as to enable consumers to easily identify, read and understand the relevant information as a whole; (ii) clearly visible in each location or is directly accessible; (iii) not obscured by other information which is shown to consumers, such as, but not limited to, information displayed in signs, banners and as pop-up text and images.

16.404 We consider that the Protected Tariffs should be displayed on the Parties' website in a way that reflects their relative competitiveness compared to other available tariffs (determined on an objective basis).

16.405 We consider that the Protected Tariffs should be made available to PCWs with which the Parties have an existing commercial relationship.[2585] We note that in their response to the Remedies Working Paper, the Parties submitted that they are unable to commit to the protected tariffs being published on PCWs.[2586] The Parties submitted that tariffs displayed on PCWs are driven by commercial agreements between the PCWs and retail operators, with the tariffs displayed on PCWs, and the manner in which they are published, ultimately determined by the PCWs themselves.[2587] We understand from the Parties' submissions that the final decision on whether and how tariffs are displayed on PCWs lies with the PCWs.

[2584] Market studies and investigations are one of the tools at the CMA's disposal to address competition or consumer protection problems, alongside its enforcement and advocacy activities. They are examinations into the causes of why particular markets may not be working well, taking an overview of regulatory and other economic drivers and patterns of consumer and business behaviour. See Market Studies and Market Investigations: Supplemental guidance on the CMA's approach

[2585] While we recognise that it is ultimately the PCWs that decide whether and how to list, rank and promote tariffs, we would be concerned if the Parties were to make these tariffs available to PCWs on terms that were intended to discourage take up of the protected tariffs or were contrary to the objective of making the rates easily accessible to consumers. For example, our expectation is that, when the protected tariffs are listed on PCWs, customers should be able to 'click through' to purchase them directly through the MNO's own website. The position to be set out in the Undertakings will have regard to market practice.

[2586] Parties response to the Remedies Working Paper,12 November 2024, paragraph 3.16.

[2587] Parties response to the Remedies Working Paper,12 November 2024, paragraph 3.16 and 3.17.

However, we remain of the view that the Parties should make the tariffs available to PCWs with which they have an existing commercial relationship.[2588]

16.406 We also note that Ofcom requires providers to send End-of-Contract Notifications (ECNs) to customers between 10 and 40 days before the end of their contract, and annual best tariff notifications (ABTNs) to out-of-contract customers, which includes information about their current contract, as well as the best tariffs for the services they buy. As part of these notifications, providers must give their customers tariff information, including the best tariffs available from their provider (customers on handset tariffs must also receive a SIMO tariffs as part of the notifications). [2589] We would expect the protected tariffs to be eligible for inclusion in these notifications so that they are presented to consumers when they represent a good deal for them.

16.407 We consider that a requirement to promote and display a limited number of tariffs through specific channels for a limited period of time is sufficiently simple that it should be monitorable and enforceable (below). However, potential concerns could arise in relation to customers being denied access to these tariffs. This requires a dispute resolution process to be put in place.

16.408 The Parties both use a third party provider for dispute resolution.[2590] We consider a contract between the Parties and one of these third party providers would be appropriate and should include a regular summary report of complaints to be provided to the monitoring trustee.

16.409 We would not want the protections to prevent the Parties from offering new and potentially better tariffs. The protections would be time limited and only cover a subset of tariffs and there would be no restrictions on the other tariffs that the parties and others can offer. This approach ensures that a mix of the better value, popular tariffs that the Parties have available pre-Merger would continue to be available to new and existing customers for the initial years of network integration – protecting them from price increases, without preventing new and innovative offers from emerging. We consider that our approach on how these tariffs are displayed strikes the right balance so that customers are not unduly prevented from getting these better deals, nor the Parties disincentivised from offering them.

[2588] Parties response to the Remedies Working Paper,12 November 2024, paragraph 3.17.
[2589] Ofcom's Statement on end-of-contract notifications and annual best tariff information, 15 May 2019, page 3.
[2590] VUK currently uses the Communication & Internet Services Adjudication Scheme. 3UK currently uses the Communications Ombudsman. Parties' response to the Remedies Notice, 27 September 2024, paragraph 5.30, footnote 193.

Circumvention risks

16.410 Circumvention risks arise as a consequence of behavioural remedies generally not dealing with the source of an SLC.[2591]

16.411 In our assessment, tying the delivery of the retail customer protections to Year 3 of the Network Commitment further incentivises the Parties to deliver on the Network Commitment.

16.412 The two key circumvention risks we consider need protecting against are:

(a) Protected Tariffs not being adequately available to customers, either through how they are displayed or sold.

(b) The Parties raising other tariffs even higher to compensate for the Protected Tariffs.

16.413 We have set out the principles above which we would incorporate into the Undertakings on the display and promotion of the tariffs. We consider that such principles should be sufficient to address any material circumvention risks.

16.414 We have considered the risk that the Parties raise the price of other non-protected tariffs above the level they would absent some tariffs being protected. Whilst this risk cannot be fully removed, we consider that the Protected Tariffs cover a sufficiently broad range of data allowances across the Parties' various brands. Further, the ability of the Parties to raise the prices of other non-protected tariffs may be constrained as we consider that the Protected Tariffs would, to some degree, provide a constraint on the price of the Parties' other tariffs. This is because, as we understand it, when setting tariffs, operators consider how they are positioned in relation to each other.[2592]

Distortion risks

16.415 Market distortions can arise when a behavioural remedy alters normal market signals and changes the incentives of the Parties and/or third parties in a negative way. Such distortions can undermine the effectiveness of the remedy.[2593]

16.416 Imposing any pricing restrictions or protections in a market has a high chance of creating market distortions, both foreseen and unforeseen. These risks, and the fact that we expect the rivalry-enhancing effects of the Network Commitment and

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2591 CMA87, paragraph 7.4 (b)
2592 We note that our analysis of the Parties' tariffs in the Pure Pricing dataset is consistent with tariffs being priced in relation to each other.
2593 CMA87, paragraph 7.4(c).

Beacon 4.1 on the market to grow over time (as discussed above), mean that we have ruled out long term behavioural remedies.

16.417 Similarly, trying to strike the right balance between protecting consumers and not creating market distortions is one of the reasons we have decided against protections covering the majority of, or possibly all, tariffs, given the risks of market distortions and unintended consequences.

16.418 At the outset, we have ruled out a remedy that would seek to provide some form of protection covering a large number of current contracts. The Parties' proposals to continue the existing terms and conditions of all current customers falls within this bracket.

16.419 Nevertheless, even with a more limited scope, there are potential risks of distortion with protections that seek to keep certain tariffs, including social tariffs, on the market. In particular:

(a) The protected tariffs may become a focal point and, if long term trends around falling price per GB continue,[2594] this focal point could dampen innovation and/or good offers that would otherwise arise.

(b) The Parties may be incentivised to worsen other non-price elements of the protected tariff offerings which are difficult to measure or specify (and which may not be covered in the existing terms and conditions), resulting in a reduction in quality (eg through throttling speed or providing worse customer service).

(c) The protected tariffs could inadvertently alter consumer behaviour in a negative way, such as leading to consumers migrating to a protected tariff when better options may exist in the market. For example, the measure may lead to less searching and switching by the customers on protected tariffs, lowering incentives for rivals to lower prices.

(d) In the event that costs rise, it could be difficult for other providers to respond without becoming uncompetitive relative to the protected tariffs. This may harm the competitive position of other providers and their ability to grow, as well as deter the entry of MVNOs. In addition, customers may migrate to the Parties on a scale which could affect their revenues to a material degree.

16.420 A number of third parties have raised concerns about distortion risks arising from retail protections, as set out in paragraphs 16.378 to 16.386. In particular, BTEE and Which? submitted that applying restrictions to a diverse range of contract

[2594] The Parties submitted to us in response to the Provisional Findings that prices per GB have come down over time over a significant period. See Parties' response to the Provisional Findings, 4 October 2024, Annex 3, paragraphs 5.30 onward.

types would lead to distortion risks. BTEE also submitted that the time limited retail protections will create material distortions to competition that, given the pace of technological and price innovation in this market, are likely to last long after the end of that three-year period.[2595]

16.421 We consider that the short, three-year time period, coupled with the limited subset of tariffs sufficiently reduces potential distortion risks. In particular:

(a) The key protection against material distortion is to keep the duration short. We consider that the protection should be linked to the Year 3 deliverables under the Network Commitment.

(b) Protecting a limited subset of tariffs also reduces potential distortion risks.

(c) We are also not requiring tariffs with unlimited data allowances to be protected as we consider that the distortion risks are likely to be greater for these tariffs. For example, Ofcom and the Parties have provided examples of ways in which customer behaviour could change in the future such that the costs associated with offering these tariffs increase, which would not be reflected in current prices.[2596]

16.422 The Parties submitted that including tariffs that reflect promotional rates increases the distortion risk by artificially preserving promotional prices for a three-year period because it would risk preventing or disincentivising the Parties from offering new and potentially better tariffs, could stifle the dynamic process whereby players innovate for new types of tariffs and promotions, and may exacerbate the risk of inertia.[2597] The Parties also submitted that requiring specific promotions to remain in the market for the duration of the retail customer protections could dampen competition as it would allow its competitors to have full visibility over its approach to promotions for the protected tariffs during this time, meaning that they could plan their retail strategies accordingly.[2598]

16.423 However, we consider that the risk of distortion from requiring tariffs on the Three brand to be offered with a six month introductory discount is limited, for a number of reasons:

(a) We are only requiring two tariffs to be retained with this pricing structure. We further note that the Parties would be able to introduce new tariffs that were better than those capped tariffs or introduce promotions for their other tariffs.

[2595] BTEE response to remedies working paper, 12 November 2024 paragraph 2.3.
[2596] Parties' remedies submission; Parties' Retail customer protections submission; Ofcom submission and Ofcom submission.
[2597] Parties' Retail customer protections submission.
[2598] Parties' email.

(b) We consider that the fact that these tariffs were regularly available to customers at these discounted prices minimises the scope for distortion. As set out above, both tariffs were either never, or very rarely, offered at a non-discounted price. Further, the discounts we have identified were available for a material proportion of the time between 1 September 2023 and 31 August 2024. We have not chosen discounts which were popular but only offered for a limited duration in order to minimise the risk of distortion.

(c) We are requiring these tariffs to be offered with the same pricing structure as they were previously available with customers being offered a lower price for the first six months. We do not consider that this would increase the risk of inertia.

16.424 Based on the assessment set out above, we consider that the scope of the proposal, the length of time and the proposed monitoring and enforcement give us comfort that the risk profile of these protections is acceptable.

Decision on time limited retail customer protections

16.425 We consider that a pricing cap commitment and a social tariff commitment, with the Protected Tariffs we have identified (together the **Time Limited Retail Customer Protections**) would complement the Network Commitment, increasing the effectiveness of the overall remedy package.

16.426 We consider these Time Limited Retail Customer Protections have an acceptable risk profile and would not lead to costly market distortions given that the proposed measures would have a short duration and would be designed with the risks outlined in mind.

16.427 The Time Limited Retail Customer Protections represent a mix of tariffs which are popular, competitively priced and span different data allowances, across the Parties' various brands.

16.428 On disclosure requirements, the Parties should offer Undertakings that follow the principles set out above of 'Clear' and 'Prominent' via their own website. For PCWs, we consider that the Parties should offer Undertakings that follow the principle that the Protected Tariffs are made available to PCWs with which they have an existing commercial relationship.

Time limited wholesale customer protections

16.429 As outlined above (paragraph 16.240), we consider that in the wholesale market the Network Commitment addresses the SLC in the longer term, but does not address shorter term adverse effects.

16.430 Our guidance anticipates that enabling measures (such as the Network Commitment) may be expected to work relatively slowly in addressing an SLC. In these circumstances, measures that control market outcomes may be needed for a limited period to provide protection to customers from the adverse effects of an SLC.[2599]

16.431 To explore this further, in the Remedies Notice, we outlined that – on the assumption that a Network Commitment were found to address our concerns in the long term – there may be a case for considering some time-limited protections for MVNOs from the adverse effects of the then provisional SLCs during the initial years of network integration and roll-out under any Network Commitment.[2600]

16.432 In the Remedies Notice, we identified Wholesale Access Terms as a potential measure to complement a Network Commitment, noting that this could involve pre-agreed non-discriminatory wholesale terms (including prices) being made available to MVNOs, subject to a reasonable limit (ie number of MVNOs or network capacity utilisation).[2601]

16.433 We welcomed views on whether Wholesale Access Terms, combined with other measures or in isolation, could address the anti-competitive effects (then) provisionally identified in the wholesale market, including whether they should be time limited or not.[2602]

16.434 We also set out our initial view that such measures were likely to present a number of challenges and risks that are associated with behavioural measures, including specification, distortion, circumvention as well as monitoring and enforcement risks.[2603]

16.435 In this section, we consider the effectiveness of Wholesale Access Terms in addressing short term concerns in the wholesale market.

Wholesale remedy options which were considered in detail

16.436 The Parties submitted that the Network Commitment addresses the SLCs in both the retail and wholesale markets. Despite this view, [✂], the Parties proposed a remedy [✂][2604] which they referred to as the Wholesale Reference Offer. This proposal was updated following further discussions with us,[2605] and following

[2599] CMA87, paragraph 3.50.
[2600] CMA, Remedies Notice, 13 September 2024, paragraphs 34 to 37.
[2601] CMA, Remedies Notice, 13 September 2024, paragraphs 40-41.
[2602] CMA, Remedies Notice, 13 September 2024, paragraph 42.
[2603] CMA, Remedies Notice, 13 September 2024, paragraph 43.
[2604] This means that the remedy proposal was [✂].
[2605] In particular, following discussions with the inquiry group and case team, the Parties updated the Wholesale Reference Offer in their response to the Remedies Notice and – following Response Hearings – in letters to the inquiry group.

publication of our Remedies Working Paper.[2606] The Parties offered to commit to offering certain pre-agreed MVNO access terms for a period of up to [✂] years.

16.437 In this section, we refer to the Parties' proposed terms as the **Wholesale Reference Offer**, and to our proposed measures as **Wholesale Access Terms** (covering both the reference offer with pre-agreed wholesale terms and the extension of existing contract terms for the Parties' MVNOs).

Overview of the Parties' Wholesale Reference Offer

16.438 The Wholesale Reference Offer – as proposed by the Parties (including updates proposed by the Parties following publication of our Remedies Working Paper) – would have the following key features:[2607]

(a) **Price:** there would be three different pricing tiers, depending on the MVNO's size (see Table 16.3), with pricing set on a per-GB basis and based on currently prevailing market terms (as observed by VUK and 3UK). In contrast with the Parties' submission in their response to the Remedies Notice,[2608] there would be no upper subscriber 'limit' for MVNOs able to access the terms in 'tier 3'. There would also be an option of a per-subscriber wholesale price for MVNOs to offer unlimited data contracts to consumers (priced at £[✂] per subscriber for each tier).[2609] This would be subject to a usage limit (calculated on a pooled basis across all of an MVNO's unlimited customers), updated following the Parties' response to the Remedies Working Paper, of [✂]% of the average data usage of the Merged Entity's subscribers using unlimited data contracts.[2610] Based on current usage, this threshold would be approximately [✂] GB per subscriber per month (measured on a pooled average basis across the MVNO's subscriber base). Above this limit, incremental usage would be charged to the MVNO at a rate of £[✂] per GB, which would be subject to the future pricing mechanism (**FPM**) below.[2611] Following the Remedies Working Paper, the Parties proposed an update to the pricing structure, with speeds over 150 Mbps being subject to a [✂]% price premium (as shown at Table 16.3).[2612]

[2606] Parties' response to the Remedies Working Paper, 12 November 2024.
[2607] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.12.
[2608] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.25 where the Parties proposed that tier 3 terms would be available to MVNOs between 1 million and 2.5 million subscribers.
[2609] Parties, Remedies Letter to Inquiry Group.
[2610] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 4.31. In their Remedies Letter to Inquiry Group, the Parties had initially offered a usage limit of [✂]% which based on current usage would have been approximately [✂] GB per subscriber per month. In light of the concerns set out in the Remedies Working Paper, the Parties proposed expanding the unlimited pricing usage threshold to [✂]%.
[2611] Parties, Remedies Letter to Inquiry Group.
[2612] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 4.11. For reference, as set out at paragraph 1.435 of the Remedies Working Paper, the Parties had previously offered that under the Wholesale Access Terms, MVNOs would only be able to obtain speeds of 150 Mbps, and speeds/ quality above this would be negotiated separately.

(b) **Future pricing mechanism**: the FPM would allow for an MVNO's pricing terms to change with reference both to the Merged Entity's ARPU and average data usage on the Merged Entity's network. The FPM uses a formula which means that when the Merged Entity's data usage per customer increases, or when the Merged Entity's ARPU decreases, the wholesale price paid by the MVNO is reduced proportionally.[2613] A separate FPM would apply, based on the Merged Entity's ARPU for unlimited contracts, for the per-subscriber fixed wholesale 'unlimited' data price.[2614] Both FPMs work such that MVNOs' pricing can [✂] be adjusted downwards.[2615]

(c) **Service equivalence:** mobile service would be provided to MVNOs' customers on the same basis as it is provided to the Merged Entity's own customers, including as this relates to 5G SA. [2616] As noted above, the Parties propose that speeds above 150 Mbps would be priced at a [✂]% premium.

(d) **Non-discrimination:** the offer would contain a term that the Merged Entity will supply the same quality of service to MVNOs' customers as it does to the Merged Entity's customers.

(e) **Access to new technologies:** MVNOs would gain access to new technologies within 9 months of the new technology being launched by the Merged Entity.[2617]

(f) **Implementation costs:** to be borne by the MVNO with a minimum of 50% of these being paid upfront, and the remainder offset against minimum revenue commitments (see below).[2618]

(g) **Contract term:** 5 years with the ability for MVNOs to request a shorter term.[2619]

(h) **Duration:** MVNOs can seek access under the Wholesale Reference Offer in the first three years following completion of the Merger. MVNOs would have until the end of the fourth year post-completion to conclude a contract on Wholesale Reference Offer terms, provided that they express interest within the first three years post-completion.[2620] This, together with the contract term, is intended to be broadly consistent with the period of the Network

[2613] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.31 and Parties, Follow-up remedies submission.
[2614] Parties response to the CMA's RFI.
[2615] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.30 and Parties, Follow-up remedies submission.
[2616] Parties, Follow-up remedies submission.
[2617] Parties, Follow-up remedies submission.
[2618] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.12(v).
[2619] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.12(vi).
[2620] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.35 and Parties' Remedies Letter to Inquiry Group.

Commitment, and with the Parties' submission that many significant benefits of the JBP will have materialised by the end of the third year post-Merger.[2621]

(i) **Minimum revenue commitment:** the Parties submitted that this would be based on a set fixed monthly rate for each tier, and calculated with reference to the minimum number of subscribers in each tier, and it is expected to be around £[✂] million per year for tier 2, and around £[✂] million per year for tier 3, with a '[✂]' for tier 1 (ie £[✂] million [✂], £[✂] million [✂], and £[✂] million [✂]).[2622]

(j) **Payment terms:** the Merged Entity can request payment in advance depending on the perceived degree of risk of the MVNO, although 30 day payment terms are 'typical'.

(k) **Capacity limit:** the Merged Entity would not be obliged to offer the Wholesale Reference Offer to any MVNO when the aggregate forecasted MVNO mobile data traffic for the coming 12 months is more than [15-20]% of the total capacity of the Merged Entity's network (as measured by the amount of data carried over the Merged Entity's network in petabytes per month). Given that the Parties estimate that currently contracted MVNOs would use around [5-10]% of projected capacity, the offer is - in substance - limited to [10-20]% of the Merged Entity's estimated total network capacity.[2623] The Parties submitted that this would cover at least 4 million (and up to 10 million) end customers of MVNOs, which the Parties estimate would cover [✂], with additional capacity for new entrants.[2624] The Parties submitted that other MVNOs can contract on separately negotiated terms, outside of this capacity limit.

(l) **Onboarding limit:** The Merged Entity would onboard simultaneously between 3 -10 MVNOs, including a combination of full MVNOs, light MVNOs and MVNAs.[2625] The Parties suggested that MVNOs can join a 'queue' if the limit has been reached, allowing MVNOs to subsequently join in the order that interest was expressed in writing, with this process being overseen by the monitoring trustee.[2626] The 10 MVNOs or MVNAs would comprise:

    (i) Up to eight tier 1 'light' MVNOs to be onboarded through pre-configured platforms; and

[2621] Parties' response to the CMA's RFI.
[2622] Parties' response to the CMA's RFI.
[2623] Parties' response to the CMA's RFI.
[2624] Parties' Remedies Letter to Inquiry Group.
[2625] Parties' follow-up remedies submission.
[2626] Parties' follow-up remedies submission.

(ii) Up to two MVNOs or MVNAs which do not fall within the above (ie any 'full' or 'hybrid' MVNOs, any light MVNOs in tiers 2 or 3, MVNOs opting not to be integrated through pre-configured platforms, or MVNAs).

(m) **Other terms:** would be negotiated separately, outside of the Wholesale Reference Offer, and might include terms relating to technical change requests (including who bears the cost), and complementary services (interconnect, international call routing, call termination).[2627]

(n) **Dispute resolution:** if the MVNO and the Merged Entity have not agreed on terms within a period of five months since the receipt of a written request to take up a Wholesale Reference Offer contract – and if the MVNO and the Merged Entity have not resolved a disagreement within four weeks of the matter being escalated in writing[2628] – a dispute resolution mechanism would apply.[2629] Certain types of disputes (such as those relating to the eligibility of an MVNO to access the Wholesale Reference Offer) would be referred to this process on an immediate basis (ie without a five month delay).[2630] An independent adjudicator (also referred to as a commercial arbitrator)[2631] would manage any disputes on the terms of access between MVNOs and the Merged Entity.[2632] The commercial arbitrator would report to the monitoring trustee or Ofcom, who would report to the CMA,[2633] and the dispute resolution process would be concluded within three months.[2634] Following the Remedies Working Paper, the Parties offered to appoint the commercial arbitrator at the outset – the arbitrator would be pre-approved by the CMA and available to adjudicate on any disputes related to the Wholesale Reference Offer as necessary.[2635]

(o) **Implementation and enforcement:** to be reflected in Final Undertakings to the CMA under section 82 of the Act, [2636] with the CMA able to enforce under section 94 of the Act. [2637]

2627 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.15
2628 Under the Parties' proposal, this would be within four weeks of the matter having been escalated to the CEO of the Merged Entity. See Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.40.
2629 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.40 and Parties follow-up remedies submission.
2630 Parties' follow-up remedies submission.
2631 We note that the terms 'adjudicator' and 'arbitrator' have been used interchangeably to describe the same concept in the context of the Wholesale Reference Offer and Wholesale Access Terms. For simplicity, we refer in the rest of this chapter we refer to a commercial 'arbitrator'.
2632 Parties' wholesale reference offer. Parties' follow-up remedies submission.
2633 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.46.
2634 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.45.
2635 Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 4.13.
2636 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.34.
2637 Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.39.

(p) **Monitoring and reporting:** to be managed by a monitoring trustee reporting to the CMA and perhaps Ofcom.[2638]

16.439 The Wholesale Reference Offer pricing structure, which would not be made public and would be provided to requesting MVNOs under a non-disclosure agreement (**NDA**),[2639] would be as set out at Table 16.3. The Parties subsequently updated the Wholesale Reference Offer to apply to all MVNOs (ie with no upper subscriber limit),[2640] and – as set out above – updated this to include a premium price for speeds above 150 Mbps.[2641]

Table 16.2: Pricing per GB tiers under the Wholesale Reference Offer (as updated by the Parties following the Remedies Working Paper)

Tier	*Structure MVNO customer base size*	*Pricing per GB: speeds up to 150 Mbps*	*Pricing per GB: speeds over 150 Mbps*	*Unlimited price per subscriber: speeds up to 150 Mbps*	*Unlimited price per subscriber: speeds over 150 Mbps*
Tier 1	< 0.5 million	[✂]	[✂]	[✂]	[✂]
Tier 2	0.5 million – 1.0 million	[✂]	[✂]	[✂]	[✂]
Tier 3	> 1.0 million customers	[✂]	[✂]	[✂]	[✂]

Source: Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.26; Parties, Remedies Letter to Inquiry Group, and Parties response to the Remedies Working Paper, 12 November 2024, Table 4.1.

16.440 The Wholesale Reference Offer would be offered on a 'first come, first served' basis,[2642] and – up to the capacity and 'onboarding' limit – the Merged Entity would be obliged to enter into an agreement with any MVNO on the Wholesale Reference Offer terms. [2643]

The Parties' views on the Wholesale Reference Offer

16.441 While the Parties considered such a remedy to be unnecessary,[2644] a view re-iterated in response to our Remedies Working Paper,[2645] they viewed the key benefits of the Wholesale Reference Offer to be that: [2646]

(a) It guarantees the continued availability of competitive pricing to MVNOs, as well as underpinning MVNOs' abilities to offer highly competitive pricing to end consumers, including price-sensitive consumers, addressing any 'residual' concerns in the retail market;

(b) It would not be unduly complex to implement, and there are a number of precedents for similar remedies, including in the UK;

[2638] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 6.36 – 6.38.
[2639] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.28
[2640] Parties, Remedies Letter to Inquiry Group.
[2641] Parties response to the Remedies Working Paper, 12 November 2024, Table 4.1.
[2642] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.18 – 6.20
[2643] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.21 – 6.22
[2644] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 6.50 and 6.6 – 6.7.
[2645] Parties' response to the Remedies Working Paper, 12 November 2024, paragraphs 4.2-4.3.
[2646] Parties' response to the Remedies Notice, 27 September 2024, paragraph 1.13.

(c) It could be effectively monitored and enforced by a monitoring trustee and commercial arbitrator; and

(d) It has been designed to minimise any impact on RCBs.

16.442 The Parties also submitted that the Wholesale Reference Offer represents a price ‘cap’, as it does not prevent the Merged Entity or MVNOs entering into separate agreements, or MVNOs negotiating separately with other MNOs.[2647]

16.443 The Parties submitted that the [15-20]% capacity limit is required to allow sufficient additional capacity to attract a number of additional MVNOs, without any material increase to congestion or degradation of the network experience (for all end users), while also ensuring that RCBs are delivered.[2648]

16.444 According to the Parties, the 9 month limit for providing MVNOs with access to new technologies that the Merged Entity have launched is designed to account for any technical work that the Merged Entity – and the MVNO itself – may need to undertake to make that technology available to MVNOs.[2649] The Parties submitted that it would increase certainty for the MVNO to be able to obtain access to new technologies within a set time period, as the Parties’ current MVNO contracts [✂] on the Parties.[2650] [✂], VUK is required to make [✂] available [✂] within [✂] of it being available to customers on VUK’s consumer price plans. This is a longer duration than the Parties have proposed including in the WRO, which applies to all technologies, demonstrating – in the Parties’ view – that 9 months is an ambitious period of time to specify in the Wholesale Reference Offer.[2651] The Parties submitted that the proposed network speed tiering is also consistent with terms offered to their current MVNO customers.[2652]

16.445 The Parties consider the FPM, calculated with reference to the Merged Entity’s ARPU, to be the most appropriate mechanism to protect MVNOs and account for future evolutions in data usage and retail pricing.[2653]

16.446 In respect of dispute resolution, the Parties summitted that this process would standardise and simplify negotiations, ensuring no unnecessary administrative burden is placed on the commercial arbitrator or the monitoring trustee.[2654]

16.447 With respect to the CMA’s general framework for assessing remedies, including behavioural remedies, the Parties submitted that:

[2647] Parties’ response to the Remedies Notice, 27 September 2024, paragraph 6.14.
[2648] Parties’ response to the Remedies Notice, 27 September 2024, paragraph 6.21.
[2649] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 4.44.
[2650] Parties’ follow-up remedies submission.
[2651] Parties’ response to the Remedies Working Paper, 12 November 2024, paragraph 4.46.
[2652] In particular, the Parties’ submitted that this is consistent with VUK’s existing contracts and that 3UK’s existing contracts [✂] network speed tiering or limits. See Parties, Follow-up remedies submission.
[2653] Parties’ follow-up remedies submission.
[2654] Parties’ follow-up remedies submission.

(a) **Considering the impact on the SLCs**: the Wholesale Reference Offer would prevent any SLC by guaranteeing the continued offer of competitive pricing terms to MVNOs.[2655] More broadly, the Merged Entity's, and VMO2's, increased network quality resulting from the Merger would mean MVNOs would benefit from access to a 'best-in-class' network. [2656] The Merged Entity's reduced network costs would also incentivise pass-through of savings, and both the Merged Entity and VMO2 – with additional network capacity – would be incentivised to compete aggressively to win wholesale business (and fill additional capacity).[2657] In relation to the wholesale market, the Parties submitted that the Wholesale Reference Offer ensures the continuation of prevailing market rates, including to new entrants (guaranteeing that MVNOs will continue to obtain competitive wholesale contracts).[2658] In relation to the retail market, the Parties submitted that the Wholesale Reference Offer would enable MVNOs to continue to offer highly competitive prices to end consumers.[2659] The Parties submitted that the timing is appropriate to protect MVNOs in the period during which initial network integration is underway, and the Wholesale Reference Offer is highly practicable, with CK Hutchison having previously successfully delivered a similar remedy in the context of another merger (ie Hutchison 3G Austria / Orange Austria).[2660]

(b) With respect to risks the CMA typically assesses in the context of behavioural remedies, the Parties submitted that:

(i) **Specification risks:** do not arise, as the Wholesale Reference Offer would clearly specify all necessary terms, which are akin to the terms already in wholesale contracts today (and are therefore familiar to MVNOs and potential adjudicators).[2661] Material technological developments, noted in our guidance as meaning behavioural remedies may be vulnerable to specification risk, are not expected during the period of the Wholesale Reference Offer, given that the UK is currently near the beginning of the 5G SA technology life cycle.[2662]

[2655] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.49.
[2656] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.51.
[2657] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 6.51 – 6.52.
[2658] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 6.54 – 6.59.
[2659] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.61.
[2660] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.69. The Parties submitted that a wholesale mobile reference offer was successfully delivered in Case M.6497 - Hutchison 3G Austria / Orange Austria (2012).
[2661] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.72.
[2662] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.73.

(ii) **Circumvention risks:** the price cap is set from the outset with terms clearly stated and not open to interpretation, leaving no room for circumvention.[2663]

(iii) **Distortion risks:** the Wholesale Reference Offer cannot distort the market in a way that would undermine its effectiveness. The pricing rates and terms will be competitive based on prevailing market conditions, and the FPM allows the terms to be adjusted for future developments in pricing and data usage. The pricing will also be confidential, and act as an upper bar for future MVNO contracts. Rather than distorting the market, the Wholesale Reference Offer will trigger a pro-competitive response from BTEE and VMO2 in their offers to MVNOs and in network investment.[2664]

(iv) **Monitoring/ enforcement risks:** the appointment of a monitoring trustee and commercial arbitrator will ensure no unreasonable demands are placed on CMA resources, and compliance will be simple to monitor.[2665]

16.448 The Parties submitted that the remedy should be designed such that the substantial RCBs are preserved. [2666]

16.449 Following publication of the Remedies Working Paper, the Parties changed certain aspects of the proposed measure and agreed with our position on certain points, with the most significant being: [2667]

(a) Ensuring that the termination of the Wholesale Reference Offer would be conditional on the CMA being satisfied that the Merged Entity had met its obligations under the Year 3 milestone of the Network Commitment;

(b) That appointment of a commercial arbitrator would take place at the outset (in response to our view set out in the Remedies Working Paper that MVNOs should have the ability to access a dispute resolution process swiftly);

(c) As above, proposing premium pricing for higher speeds (this was, in the Parties' view, in order to remove any perceived limit to using higher speeds by specifying the pricing structure, rather than this being subject to separate negotiation).

[2663] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.74.
[2664] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.75-6.77.
[2665] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.79-6.80.
[2666] Parties' response to the Remedies Notice, 27 September 2024, paragraph 6.81.
[2667] Parties response to the Remedies Working Paper, 12 November 2024, paragraphs 4.5(iii), 4.11, 4.12-4.13, 4.28-4.32.

(d) As above, making changes to the unlimited data-focussed offer to increase the pooled usage threshold for MVNOs' customers.

16.450 The Parties submitted that there were two critical points where the proposals set out in the Remedies Working Paper were not feasible:[2668]

(a) The proposal to roll-over terms to existing MVNOs of the Parties would be (i) unnecessary to support the CMA's objective, given that we had set out that the Wholesale Reference Offer – if appropriately specified – allow all MVNOs to compete based on current market conditions, (ii) highly impracticable, as many terms in existing wholesale agreements require updating, and (iii) distortive, by artificially preserving terms for a small number of MVNOs.[2669]

(b) The onboarding limit, as proposed by the Parties, could not be amended, given the critical distinction between full and light MVNOs when considering the practical implications for onboarding.[2670]

16.451 In respect of the proposed rollover of terms for MVNOs on the Merged Entity's network, the Parties submitted:

(a) Such an expansion of the Wholesale Access Terms is not required or practicable, given the CMA's view (provisionally expressed in the Remedies Working Paper) that the Wholesale Reference Offer would prevent harm accruing to MVNOs in the short term by ensuring guaranteed access to the wholesale market on terms that enable MVNOs to compete effectively in the retail market.[2671]

(b) Rollover of terms would be highly impracticable: existing terms include commercial requirements that are no longer relevant (for example migration costs or benefits for moving traffic to the network), and terms which cannot be easily replicated without specific negotiation, for example:[2672]

(i) 3UK's contract with [✂]. [✂].

(ii) 3UK's contract with [✂].

(iii) 3UK's contract with [✂].

(iv) VUK's contract with [✂]. [✂].

(v) VUK's contracts with [✂].

[2668] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 1.24.
[2669] Parties' response to the Remedies Working Paper, 12 November 2024, paragraphs 4.14-4.20.
[2670] Parties' response to the Remedies Working Paper, 12 November 2024, paragraphs 4.21-4.26.
[2671] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 4.19.
[2672] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 4.16.

(c) That rollover would create market distortions, as it would preserve one current contractual framework for the benefit of particular MVNOs, and risks being anticompetitive as it disincentivises MVNOs from seeking opportunities with other MNOs (and reduces other MNOs' incentive to proactively compete for these MVNO contracts).[2673]

(d) In response to our suggestion that the commercial arbitrator could consider whether certain terms are relevant for renegotiation, the Parties submitted that any such exercise would require a highly complex commercial assessment with respect to an individually negotiated contract (and individually negotiated MVNO agreements are complex and a web of inter-related terms that represent an overall commercial bargain). In the Parties' view, this means that this would be impracticable to carry out, and such amendments are not suitable for arbitration, but need to be negotiated.[2674]

Ofcom's views

16.452 Ofcom noted that the nature of the terms of the Wholesale Reference Offer do not seem to differ greatly from what is currently offered by the Parties, which is currently sufficient for MVNOs to compete in certain market segments.[2675]

16.453 Ofcom noted that the appropriate duration and capacity limit of the Wholesale Reference Offer is linked with efficiencies, and it also noted that the longer the obligations are imposed in the market the higher the chance of a distortion risk.[2676] Ofcom told us it is sensible to link the duration of the Wholesale Reference Offer with the Network Commitment measurement targets.[2677]

16.454 According to Ofcom, there is some risk that the terms of Wholesale Access Terms become a focal point, which could lead to higher prices than anticipated.[2678] Ofcom also noted the adjudication process would have to be straightforward and a 'brightline' process or it might be difficult to enforce.[2679]

16.455 Following publication of the Remedies Working Paper and in response to some of our clarificatory questions, Ofcom told us:

(a) In relation to onboarding limits – in general – providers had often raised concerns with them about implementation involving changes to networks and IT systems, and that various complexities mean that it was reasonable to believe that there are some practical constraints in onboarding multiple

[2673] Parties' Remedies submission.
[2674] Parties' Remedies submission.
[2675] Ofcom call note.
[2676] Ofcom call note.
[2677] Ofcom call note.
[2678] Ofcom call note.
[2679] Ofcom call note.

MVNOs simultaneously. However, Ofcom also told us that it would be worth considering these constraints in the context of the number of MVNOs likely to be available to re-contract at any one time and at the same time, whether – if potential demand exceeded supply – this could give rise to a risk of gaming.[2680]

(b) In relation to a question raised by us on how total network capacity – rather than network throughput – could be measured in relation to the capacity limit, Ofcom told us that any measure of 'total network capacity' would be difficult to calculate in reference to the amount of usage offered (or made available to an MVNO), and that total capacity is a function of spectrum (and technology) and sites deployed, the threshold for congestion, and when and where usage occurs. [2681] Ofcom told us that -- given changes over time in sites, spectrum and technology deployed in the JNP -- it would be very complex to apply assumptions about how that total network capacity should convert into the usage offered to MVNOs (and difficult to do so in a transparent way). Ofcom submitted that – in principle – defining the capacity limit as a function of the traffic actually carried on the network does give the Merged Entity the ability to constrain supply to MVNOs by also constraining demand from its retail customers, though it is unlikely that this would be commercially sensible.[2682]

Third Party views

16.456 BTEE submitted that a wholesale market remedy, however designed, would need to be in place permanently in order to be (potentially) effective, as otherwise there would be a clear gap between the permanent, structural loss of competition resulting from the Merger and a time limited remedy.[2683] BTEE submitted that this would lead to lasting distortions of competition while not being able to compensate for the loss of competition from the Merger,[2684] and that there would be inherent difficulties and tensions in specifying the terms, monitoring and enforcement of such a remedy (including given that different MVNOs have different needs and requirements).[2685]

16.457 Following publication of our Remedies Working Paper, BTEE submitted that Wholesale Access Terms would give rise to inherently unpredictable market distortions,[2686] and that accepting or imposing such a measure would replace complex dynamic judgements in price setting.[2687] BTEE further submitted that there was a need for a cap on unlimited data contracts offered by MVNOs, which

2680 Ofcom submission.
2681 Ofcom submission.
2682 Ofcom submission.
2683 BTEE response to the Remedies Notice, 27 September 2024, paragraphs 3.73.
2684 BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.70.
2685 BTEE response to the Remedies Notice, 27 September 2024, paragraph 3.75 and 3.80.
2686 BTEE response to the remedies working paper, 12 November 2024, paragraph 2.5 (heading).
2687 BTEE response to the remedies working paper, 12 November 2024, paragraph 2.6.

should not be set too high, to avoid MNOs being exposed to additional costs required to carry high MVNO traffic, and BTEE asked that any measure should include some mechanism to ensure that MVNOs bear the cost of very high ‘unlimited data’ customer usage.[2688] BTEE submitted that the FPM mechanism appears to be novel, and that it cannot adequately respond to market developments – that may exert either upward or downward pricing pressures – and, in a dynamic and unpredictable market over a nine-year period, this raises very serious risk of market distortion.[2689] More generally, BTEE submitted that a set of uniform terms risks undermining the ability of MNOs to negotiate and offer differentiated offerings to MVNOs, and creates a ‘focal point’ in the market.[2690] Without prejudice to BTEE’s view that the Wholesale Access Terms raise serious concerns, BTEE submitted that at a minimum the CMA should consider reducing the duration of the Wholesale Access Terms, given concerns about the Wholesale Access Terms affecting market developments for up to 9 years and given expected technological developments over this period.[2691]

16.458 VMO2 submitted that it does not believe a wholesale remedy is required as the Merger and Beacon 4.1 would deliver substantial benefits to the largest MVNOs (ie Tesco Mobile and Sky Mobile, which both have long term agreements with VMO2).[2692] With respect to the Wholesale Reference Offer specifically, VMO2 told us that – should the CMA continue to have concerns with respect to the wholesale market – this represents a workable and practical solution that targets the part of the market where it is most needed (ie protecting new entrants and/or smaller MVNOs).[2693] VMO2 also told us that a benefit of the Wholesale Reference Offer (to competition) would be that VMO2 would be incentivised to bid for all MVNO business, in the knowledge that the Merged Entity would be required to do so.[2694] Following publication of the Remedies Working Paper, VMO2 submitted that a three year period strikes an appropriate balance between cost and risks.[2695] Given the short duration of the commitment, VMO2 submitted that no significant distortion or circumvention risks arise and it could be adequately monitored by a monitoring trustee and commercial arbitrator.[2696] It also submitted that both VMO2 and BTEE will have to compete more aggressively knowing the Merged Entity will be offering CMA approved competitive terms.[2697]

16.459 VMO2 submitted it supports the principle that any time-limited wholesale market protections should reflect actual market practice, particularly as the remedy is

[2688] BTEE response to the remedies working paper, 12 November 2024, paragraph 2.6.
[2689] BTEE response to the remedies working paper, 12 November 2024, paragraph 2.8.
[2690] BTEE response to the remedies working paper, 12 November 2024, paragraph 2.7.
[2691] BTEE response to the remedies working paper, 12 November 2024, paragraph 2.8
[2692] VMO2 response to the Remedies Notice, 27 September 2024, paragraph 3.9 and VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.4.
[2693] VMO2 call note.
[2694] VMO2 call note.
[2695] VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.7.
[2696] VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.8.
[2697] VMO2 response to the Remedies Working Paper, 12 November 2024, paragraph 3.8.

time-limited and such agreements will be entered in the short-term.[2698] It also submitted it agrees that the Wholesale Reference Offer terms put forward by the merging parties are broadly reflective of the terms available in the market.[2699] VMO2 urged the CMA to reject proposals from market participants seeking regulatory intervention that would go beyond what the market currently offers, distorting competition and undermining incentives to invest.[2700]

16.460 [✂] submitted that it does not support a package of pre-agreed terms as it is unlikely to address the wholesale SLC and would lead to adverse outcomes for consumers.[2701] [✂] further submitted that the prescriptive parameters would need to be reviewed at least annually to ensure they are in line with market dynamics.[2702] However, [✂] supported a high-level binding commitment on minimum obligations alongside a potential capacity ring-fencing remedy.[2703] These include making new technology available to MVNOs on the network as soon as it becomes available, negotiating a reasonable price indexation mechanism taking into consideration an MVNO's ability to offer competitive offerings over time, and prohibition on discriminating between the Merged Entity's own customers and MVNO customers on its network.[2704]

16.461 Following publication of the Remedies Working Paper, [✂] submitted that the Wholesale Access Terms as set out in the Remedies Working Paper are not an effective remedy to the SLC that the CMA correctly identified in the wholesale market.[2705] [✂] submitted that the Wholesale Access Terms, which in its view largely reflect the terms suggested by the Parties, would appreciably restrict pricing competition among MVNOs and essentially freeze competition, by including prescriptive parameters around pricing and other features which go to network quality.[2706] [✂] submitted that Wholesale Access Terms would materially reduce the ability of MVNOs to offer differentiated products and/or target specific customers segments, ultimately giving UK consumers less choice and ossifying competition.[2707] [✂] submitted that [✂], and that this expectation is jeopardised by the proposed Merger.[2708] [✂] further submitted that an effective tender process in the UK market envisages four MNOs competing for [✂] (and other MVNOs') business, and critically relies on 3UK to drive price competition.[2709] [✂] expressed

[2698] VMO2 response to the Remedies Notice, 25 November 2024, paragraph 4.
[2699] VMO2 response to the Remedies Notice, 25 November 2024, paragraph 5.
[2700] VMO2 response to the Remedies Notice, 25 November 2024, paragraph 6.
[2701] [✂] response to the Remedies Notice, 27 September 2024, paragraph 4.1.
[2702] [✂] response to the Remedies Notice, 27 September 2024, paragraph 4.4-4.5.
[2703] [✂] response to the Remedies Notice, 27 September 2024, paragraph 4.6.
[2704] [✂] response to the Remedies Notice, 27 September 2024, paragraph 4.6-4.7.
[2705] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.4.
[2706] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.2.
[2707] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.2.
[2708] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.3.
[2709] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.3.

concern that it would essentially [✄].[2710] In this context, [✄] requested that certain terms – which it considers [✄].[2711]

16.462 Sky Mobile submitted that pre-agreed wholesale access terms would not be an effective remedy and that there would be a serious risk that these lead to market distortions, price symmetry and undermine competition.[2712] Sky Mobile also submitted that there are a number of specific potential specification and 'gaming' risks.[2713] Following the Remedies Working Paper, Sky Mobile submitted that the CMA is taking a significant risk by relying on a weak Wholesale Access Terms measure in the hope that sustainable wholesale competition will emerge after the Network Commitment is implemented.[2714] Without prejudice to this position (and without prejudice to Sky Mobile's suggested remedy as described at paragraphs 16.34 to 16.38 above), Sky Mobile suggested a number of adjustments to the proposed measure which, in its view, would mean that the measure could at least be strengthened, [2715] with these including:

(a) duration – the duration of the Wholesale Access Terms should be extended to 5-6 years with 4 years to express an interest, plus 1 year to negotiate the contract and a further 1-year period from contract signing for implementation and system integration on the basis there may well be a lag before any material efficiencies take effect. Sky Mobile also submitted that there should also be a 24-month run-off period included within the contract to avoid a contractual 'cliff-edge', and that MVNOs should also have the option to extend their contract beyond five years for a further five years;[2716]

(b) the capacity limit – there should not be a limit but if there was that (i) it should not be based on the Merged Entity's usage of its capacity but a measure of the levels of available capacity, and (ii) an independent third party should determine if there is sufficient capacity rather than any limit being pre-defined; [2717]

(c) the onboarding limit – this should be increased to allow at least three tier 3 MVNOs to be onboarded simultaneously at any one time. Sky Mobile submitted that an additional tier should be created for onboarding purposes for MVNOs over 4 million subscribers who would be able to onboard regardless of how many other MVNOs applied. Sky Mobile also requested that once an MVNO is in any 'queue' it cannot be timed out from the offer;[2718]

[2710] [✄] response to the remedies working paper, 13 November 2024, paragraph 2.3.5.
[2711] [✄] response to the remedies working paper, 13 November 2024, paragraphs 2.3.6-2.3.8.
[2712] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraph 38.
[2713] Sky Mobile response to the Remedies Notice, 27 September 2024, paragraphs 34-39.
[2714] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 1.
[2715] Sky Mobile response to the remedies working paper, 12 November 2024, page 2.
[2716] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 3 and 19.
[2717] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 29.
[2718] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 4, 34 and 35.

(d) price terms – these should be lower than [✂], and pricing for the unlimited offer should also be [✂] to enable MVNOs to compete against the Parties' current offers in this space, ie Smarty's unlimited offer.[2719] Regarding unlimited, Sky Mobile also requested that the usage limit threshold be increased to a minimum of [✂]% of the Parties' average unlimited usage on genuine unlimited plans.[2720] Sky Mobile also disagrees with the [✂]% price premium for speeds above 150 Mbps.[2721]

(e) the future pricing mechanism – this should at a minimum be amended so that it can only be adjusted downwards, and that it should be based on network costs – [✂];[2722]

(f) a proposed new term permitting non-exclusivity; [2723]

(g) implementation costs – no implementation costs should be paid by the MVNOs for deals valued [✂];[2724]

(h) minimum revenue commitments – such commitments [✂]. To the extent a minimum revenue commitment is included, Sky Mobile requested that [✂]. [✂];[2725] and

(i) dispute resolution – the dispute resolution process should be shortened and simplified such that if the MVNO and Merged Entity have not agreed on terms within three months, the MVNO has the option to escalate to the commercial arbitrator and this would be concluded within three months.[2726]

16.463 Sky Mobile agreed with our proposed changes with respect to service equivalence, non-discrimination and access to new technologies.[2727]

16.464 Communication Chambers submitted that it does not believe ring-fencing capacity or a price control would be justified (as it does not consider there to be any significant competition concerns with respect to the wholesale market), and that either would distort the wholesale market.[2728]

16.465 Community Fibre submitted that a Network Commitment along with capacity-based wholesale protections could be effective.[2729]

[2719] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph and Sky Mobile response to the remedies working paper, 12 November 2024, Annex.
[2720] Sky Mobile response to the remedies working paper, 12 November 2024, Annex.
[2721] Sky Mobile supplementary response to the remedies working paper, paragraph 17.
[2722] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 45.
[2723] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 47.
[2724] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 54.
[2725] Sky Mobile response to the remedies working paper, 12 November 2024, Annex.
[2726] Sky response to the remedies working paper, 12 November 2024, paragraph 63.
[2727] Sky response to the remedies working paper, 12 November 2024, paragraph 8.
[2728] Communication Chambers response to the Remedies Notice, 27 September 2024, pages 3 and 6.
[2729] Community Fibre response to the Remedies Notice, 27 September 2024, page 2.

16.466 Enders Analysis submitted it does not consider the Wholesale Reference Offer or ring-fencing remedies necessary, and that these could cause inefficient use of spectrum and resources.[2730]

16.467 Honest Mobile submitted that wholesale market remedies should ensure MVNOs access networks on fair and non-discriminatory terms and with transparent wholesale pricing.[2731] Honest Mobile further submitted that the remedies should consider new and innovative business models,[2732] and that this would ensure virtual providers such as Honest Mobile would have access on non-discriminatory terms. [2733] In response to our Remedies Working Paper, Honest Mobile submitted the remedies suggested in the working paper are overly skewed to favour existing incumbents and large-scale MVNOs, limiting the potential for smaller players to contribute to meaningful change.[2734] Honest Mobile submitted that the proposed grouping (by way of pricing tiers) would fail to recognise the impact that new entrants can make, discouraging new entrants (particularly those with fewer than 50,000 subscribers),[2735] and proposed that up to 20 tier 0 MVNOs (each with up to 50,000 subscribers) are included in the onboarding process.[2736] Honest Mobile challenged the need for differentiated pricing,[2737] submitting that the marginal cost to serve a single GB of data is consistent across the network, and tiered pricing places smaller operators at a disadvantage, making it harder to offer consumers the most competitive rates.[2738]

16.468 [✂] initially submitted that a long term wholesale access agreement for a limited number of MVNOs would allow third party MVNOs to compete profitably and sustainably across all value tiers of the retail market. [✂] submitted that the selection criteria could be a candidate's retail track record, its potential to deliver compelling offers, its commitment to long term customer growth and customer proposition,[2739] and that this agreement should provide competitive pricing to sustain competition in the MVNO market. [✂] submitted that such an arrangement would require the Merged Entity to ring-fence a proportion of its network capacity for MVNOs.[2740] Following publication of the Remedies Working Paper, [✂] submitted that the price per GB wholesale model submitted by the Parties, with the price per GB tiered depending on customer base size, is unlikely to generate meaningful interest from MVNOs (to make the remedy effective), and that other models – such as fixed wholesale cost offers per data bundle, revenue share and

[2730] Enders Analysis response to the Remedies Notice, 27 September 2024, page 3.
[2731] Honest Mobile response to the Remedies Notice, 27 September 2024, page 3.
[2732] Honest Mobile response to the Remedies Notice, 27 September 2024, page 2.
[2733] Honest Mobile response to the Remedies Notice, 27 September 2024, page 1.
[2734] Honest Mobile response to the remedies working paper, 12 November 2024, page 1.
[2735] Honest Mobile response to the remedies working paper, 12 November 2024, page 1.
[2736] Honest Mobile response to the remedies working paper, 12 November 2024, pages 1-2.
[2737] Honest Mobile response to the remedies working paper, 12 November 2024, page 2.
[2738] Honest Mobile response to the remedies working paper, 12 November 2024, page 2.
[2739] [✂] response to the Remedies Notice, page 3.
[2740] [✂] response to the Remedies Notice, page 3.

margin share – are more likely to be effective.[2741] This was because, in [✂] view, a usage-based wholesale charging model (ie price per GB as the Parties have proposed) represents a higher risk business model for MVNOs, who would be exposed to higher wholesale costs (and reduced profit margins) as subscriber data usage increases.[2742] [✂] submitted that other areas of the proposed Wholesale Reference Offer were problematic, including tiered rates (which – in [✂] view – would not incentivise market entry for new MVNOs), minimum revenue commitments, and the FPM 'indexation' mechanism (which it submitted would by definition be a lagging 'catch up' mechanic which relies on what may be differing usage profiles in the Merged Entity's customer base as compared to the MVNO).[2743] [✂] also submitted that it is essential for MVNOs to have the flexibility and choice to remain on bilateral terms for a similar duration as the Wholesale Access Terms.[2744]

16.469 [✂]submitted that Wholesale Access Terms would be the best remedy to address competition concerns as they would provide MVNOs with certainty around pricing over a fixed period and with a guaranteed MNO.[2745] [✂] submitted that the remedy should include a ceiling for wholesale pricing, terms specifying access to technologies and features, and specifications on the duration of the contract.[2746] [✂] proposed that the offer should cover a proportion of the Merged Entity's network capacity and be available for a minimum of five years, and that disputes regarding the terms could be dealt by Ofcom.[2747]

16.470 [✂] submitted that pre-agreed access terms could contribute to mitigating the SLC in the wholesale market but would be an inadequate solution due to the dynamic nature of the market. Further, [✂] submitted that the terms of the Wholesale Access Terms should be made public to increase transparency and prevent discriminatory practices.[2748] [✂] set out its concern that the proposed terms are time limited and seem to focus exclusively on MVNOs serving the retail market.[2749] [✂] submitted that the Wholesale Access Terms should be available to all relevant parties – MVNOs, MVNAs and MVNEs – to prevent the remedy inadvertently distorting competition in the market.[2750]

[2741] [✂] response to the Remedies Notice, page 3.
[2742] [✂] response to the Remedies Notice, page 3.
[2743] [✂] response to the Remedies Notice, pages 3-4.
[2744] [✂] response to the Remedies Working Paper, 12 November 2024, page 5.
[2745] [✂] response to the Remedies Notice, 1 October 2024, page 4.
[2746] [✂] response to the Remedies Notice, 1 October 2024, pages 4-5.
[2747] [✂] response to the Remedies Notice, 1 October 2024, page 5.
[2748] [✂] response to the Remedies Notice, 27 September 2024.
[2749] [✂] response to the Remedies Working Paper, 14 November 2024, page 1.
[2750] [✂] response to the Remedies Working Paper, 14 November 2024, page 2.

16.471 eir told us that Wholesale Access Terms must allow MVNOs to offer competitive retail tariffs and the GBP10 retail benchmark set by the Parties should directly inform the pricing framework for any wholesale deal.[2751]

16.472 [✂] considers that Wholesale Access Terms may work as a concept but any limitations on the access to such an offer would reduce potential benefits, and designing effective Wholesale Access Terms may be difficult due to the wide variety of factors like quality, time and price required to be considered.[2752]

16.473 [✂] does not consider that Wholesale Access Terms would materially address the concerns in the wholesale market after the reduction of MNOs from 4 to 3.[2753] In [✂] view, standardising terms would decrease additional competitiveness brought to the market by MVNOs as they would lose a competitive edge and appeal for end consumers, and this would be particularly detrimental and impactful for less well-known MVNO brands, while it could commercially benefit 'super brands' within the MVNO market.[2754] [✂] submitted that tiers could potentially act as a barrier to entry for new players as they might not receive competitive rates.[2755] [✂] submitted that the Parties should sustain their current commercial terms with existing MVNOs on their networks in perpetuity in order to prevent increasing consumer pricing and ensure ongoing consumer choice. [✂] submitted that this is because any time-limited remedy would reduce their ability to invest.[2756]

16.474 iD Mobile submitted that the single per-GB price proposal proposed by the Parties would be restrictive and suggested that the FPM should be linked more closely to the sub-brands of the Merged Entity and/or the lowest ARPU of the Merged Entity brands.[2757] iD Mobile submitted all MVNOs should have the option to access the new technology at the same time.[2758] iD Mobile agreed with the CMA's approach for dispute resolutions and proposed a maximum resolution period of 6 weeks.[2759] iD Mobile does not believe a minimum revenue commitment should be enforced on MVNOs as it would make the offer unattractive.[2760] Furthermore, iD Mobile agreed that the onboarding of MVNOs should be simplified and not be dependent on the type of MVNO.[2761] iD Mobile recommended an assessment is made before the onboarding and that an adjudicator is appointed to review the capacity performance and any deteriorations.[2762]

2751 eir response to the Remedies Notice, 10 October 2024, page 1.
2752 [✂] call note.
2753 [✂] response to the CMA's RFI.
2754 [✂] response to the CMA's RFI.
2755 [✂] response to the CMA's RFI.
2756 [✂] call note.
2757 Currys (iD Mobile) response to the remedies working paper, 12 November, page 2.
2758 Currys (iD Mobile) response to the remedies working paper, 12 November, page 2.
2759 Currys (iD Mobile) response to the remedies working paper, 12 November, page 3.
2760 Currys (iD Mobile) response to the remedies working paper, 12 November, page 3.
2761 Currys (iD Mobile) response to the remedies working paper, 12 November, page 3.
2762 Currys (iD Mobile) response to the remedies working paper, 12 November, page 4.

16.475 [✂] submitted that the current terms of the offer would not address the SLC. Different MVNOs have different requirements, and pre-agreed terms would likely lead to tensions between MVNOs and the Merged Entity and it would prove difficult for the CMA to monitor and enforce.[2763] The standardised pre-agreed terms would also potentially lead to market distortions.[2764] [✂] submitted the 3-year duration would be too short and because of the dynamic nature of the market, the parameters agreed with the CMA would have to be reviewed at least annually.[2765]

16.476 [✂] suggested the Wholesale Reference Offer should not be based on pre-agreed pricing per unit and that the effective way to formulate price terms would be to base them on a capacity cost-plus model. MVNOs would be paying a price based on usage as a percentage of total usage of the Merged Entity, based on the available spare capacity of the Merged Entity.[2766] [✂] submitted Ofcom should be closely involved in the process of agreeing the pricing terms and the future pricing mechanism with the Parties in order to minimise margin squeeze risks and otherwise ensure competitive pricing.[2767] [✂] suggested the terms should not be limited in time, given the loss of competition as a result of the transaction. [✂] suggested a minimum duration of ten years given the characteristics of the industry.[2768]

16.477 The FCS submitted that the wholesale remedies should be strengthened.[2769] The FCS suggested these remedies do not require pricing equivalence. It noted that any new entrant entering the market after the initial reference offer lapses could be at considerable disadvantage for a significant period of time. The FCS also submitted the remedy should be changed to ensure that wholesale providers have parity with the downstream retail provider in terms of availability of new technology.[2770]

Impact on the SLC and resulting adverse effects

16.478 In this section, we consider whether pre-agreed Wholesale Access Terms would address time-limited concerns in the wholesale market that are not addressed by the Network Commitment in isolation.

16.479 As set out above (paragraphs 16.175 to 16.240), we do not consider that the Network Commitment alone can comprehensively address the SLC and its

[2763] [✂] response to the remedies working paper, 12 November 2024, page 6.
[2764] [✂] response to the remedies working paper, 12 November 2024, page 7.
[2765] [✂] response to the remedies working paper, 12 November 2024, page 7.
[2766] [✂] response to the remedies working paper, 12 November 2024, page 9.
[2767] [✂] response to the remedies working paper, 12 November 2024, page 13.
[2768] [✂] response to the remedies working paper, 12 November 2024, page 14.
[2769] Federation of Communication Services response to the remedies working paper, 12 November 2024, page 1.
[2770] Federation of Communication Services response to the remedies working paper, 12 November 2024, page 2.

adverse effects, as the rivalry-enhancing effects of Beacon 4.1 and the Network Commitment will grow over time.

16.480 In the Remedies Working Paper, we set out our provisional view that a commitment to offer pre-defined Wholesale Access Terms (such as those envisaged by the Wholesale Reference Offer together with the possibility for the Parties' existing MVNOs to extend their current contract terms) would prevent harm accruing to MVNOs in the short term by ensuring guaranteed access to the wholesale market on terms that enable MVNOs to compete effectively in the retail market.

16.481 Having reviewed further evidence of MVNO contract terms and submissions from a number of third parties, we continue to consider that a Wholesale Access Terms measure – on the basis that it broadly reflects the terms of MVNO contracts across the market – can support the Network Commitment to provide a 'cap' on price and non-price MVNO terms during the initial years of network integration. We are not seeking to reflect the 'best' terms that have been negotiated in the current market (or 'better' terms than are currently available). Instead the Wholesale Access Terms need to be broadly reflective of terms currently commonly available across the wholesale market to reflect the current level of competition and constrain price and non-price terms for a limited period of time.

16.482 Over time, we consider that the combination of the additional network quality and capacity improvements deriving from the Network Commitment once fully implemented along with Beacon 4.1 (described above) would increase the ability and incentive of both the Merged Entity and VMO2 to compete for wholesale opportunities and ensure effective long term wholesale competition, such that a Wholesale Access Terms measure can be lifted.

16.483 In principle, we consider that:

(a) Wholesale Access Terms – broadly reflecting contract terms seen by MVNOs across the market – would provide an additional measure to ensure that MVNOs can compete effectively in the retail market over the initial period of network integration.

(b) MVNOs may use Wholesale Access Terms with other MNOs to seek improved terms (including on the basis that other MNOs would have some certainty that the Merged Entity is under obligation to provide an offer).

(c) The FPM would ensure that pricing and terms do not become outdated (ie changes in retail pricing and data usage will feed into updated terms).

16.484 We have assessed the key price and non-price terms of the Parties' proposed Wholesale Reference Offer against terms currently available to MVNOs across the wholesale market, in order to determine the appropriateness of terms set out in Wholesale Access Terms.

Assessment of price and non-price terms

16.485 To assess the appropriateness of the price and non-price terms of Wholesale Access Terms, we have reviewed (within the time constraints of the Phase 2 merger review process) summaries from all four MNOs of their MVNO contracts across the wholesale market. We have also had regard to submissions made by MVNOs and others as to proposed changes to the Wholesale Access Terms.

Assessment of non-price aspects

Capacity limit

16.486 We received a submission from Sky Mobile that there should be no pre-defined capacity limit and the availability of capacity on the Merged Entity's network should be independently assessed by the commercial arbitrator.[2771] Sky Mobile also submitted that, should there be a capacity limit, this should be set higher to allow a 'buffer' for the growth of MVNOs, and that it should be based on total available network capacity, rather than data usage on the Merged Entity's network.[2772]

16.487 We consider that the [15-20]% capacity limit for the Wholesale Access Terms is appropriate (with the threshold measured by the amount of data carried over the Merged Entity's network in petabytes per month). First, we consider that it is appropriate to set a capacity limit to the Wholesale Access Terms to safeguard against the risk of distortions. Theoretically if the Merged Entity's total network capacity were to be used by MVNOs, its commercial model would unlikely be sustainable.

16.488 Requiring a commercial arbitrator to independently determine available capacity on the Merged Entity's network may give rise to a specification risk (ie with the need for appropriate methods to set appropriate 'limits' in real time), and this may further lead to complex disputes. We consider that these risks are mitigated if the capacity limit is clearly defined at the outset of the measure.

16.489 Concerning the basis on which the capacity limit is measured, we requested further information on this from Ofcom, given its expertise as the industry regulator. Ofcom submitted that any measure of the Merged Entity's total network capacity would be difficult to calculate in reference to the amount of usage offered (or made available to an MVNO).[2773] Ofcom submitted that although defining the

[2771] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 4.
[2772] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 15 and 22-32 and Sky Mobile response to the remedies working paper, 12 November 2024, Annex.
[2773] Ofcom submission.

capacity limit as a function of the traffic actually carried on the network does give the Merged Entity the ability to constrain the supply to MVNOs by also constraining demand from its retail customers, it is unlikely that this would be commercially sensible.[2774] Bearing this feedback in mind, we consider that basing the capacity limit on the Merged Entity's actual usage on the network is practically feasible and transparent, and therefore less likely to lead to specification risks.

16.490 Concerning the level of the capacity limit (ie whether it should be increased to allow for a further 'buffer'), the Parties submitted that the proposed limit would cover at least 4 million (and up to 10 million) end customers of MVNOs, which the Parties estimate would cover [✂], with additional capacity for new entrants.[2775] Given that the Parties estimate that currently contracted MVNOs would use around [5-10]% of projected capacity,[2776] Ofcom noted that a [15-20]% limit provides considerable headroom for those MVNOs to grow and for new MVNOs to be accommodated.[2777] Our evidence of the data consumption of MVNOs currently on the Parties' networks and of other MVNOs in the market also confirms that the proposed capacity limit would provide considerable headroom throughout the period that it is in place.[2778]

16.491 We therefore consider that a capacity limit of [15-20]% (with the threshold measured by the amount of data carried over the Merged Entity's network in petabytes per month) is appropriate for the Wholesale Access Terms.

Onboarding limit

16.492 A number of third parties made suggestions with respect to the onboarding limit proposed, including:

(a) A suggestion from Sky Mobile that the onboarding limit should be increased to three 'Tier 3' MVNOs, and that any MVNO in a 'queue' as a result of an onboarding limit should not be 'timed out' of accessing the remedy.[2779]

(b) A suggestion from [✂] that limits should not be applied when the technical architecture of the access arrangement that is implemented is an international roaming architecture, and that onboarding limits should include MVNAs and MVNEs (as well as MVNOs).[2780]

(c) A suggestion from iD Mobile that an assessment is made before onboarding new MVNOs, to avoid adversely impacting the network service to existing

[2774] Ofcom submission.
[2775] Parties' Remedies Letter to Inquiry Group.
[2776] Parties' response to the CMA's RFI.
[2777] Ofcom submission.
[2778] CMA analysis of data provided from 3UK, VUK, VMO2 and BTEE on all their MVNO customer numbers and data consumption.
[2779] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 34.
[2780] [✂] response to the remedies working paper, 14 November 2024, page 3.

customers, and that any deterioration in an MVNO's experience would mean a right to exit their agreement or receive a penalty payment from the Merged Entity.[2781]

(d) A suggestion from Honest Mobile that up to 20 'tier 0' MVNOs (each with up to 50,000 subscribers) are included in the onboarding process.[2782]

(e) [✂].[2783]

16.493 With respect to the onboarding limit, having regard to the Parties' and Ofcom's submissions that the distinction between 'full' and 'light' MVNOs is important when considering practicalities of onboarding (which would apply only to new MVNOs and not to existing MVNOs of the Merged Entity) we consider that onboarding:

(a) Will be set at (i) six tier 1 light MVNOs (regardless of whether or not onboarded through pre-configured platforms), and (ii) three (in total) tier 2 and tier 3 MVNOs (regardless of 'full' or 'light' status).

(b) Any MVNO in a 'queue' as a result of the onboarding limit will have any 'clock stopped' on the time limit for take up of the Wholesale Access Terms.[2784] For tier 1 MVNOs, to safeguard against the risk of distortions if a large number of tier 1 MVNOs were still in the 'queue' when Wholesale Access Terms expire, this queue will have an appropriate limit (with MVNOs subject to financial and commercial checks), which would be specified in the Undertakings.

16.494 Allowance for MVNOs using a Wholesale Access Terms contract to transition from a 'light' to a 'full' MVNO during the term of an agreement would be specified in Undertakings.

Service equivalence (including speed tiering)

16.495 Broad service equivalence will be specified in a Wholesale Access Terms Measure. Some third parties expressed views in agreement with our assessment as set out in our Remedies Working Paper that speed tiering should not apply.[2785]

16.496 Following the Parties' revised proposal (set out at Table 16.3), we have reviewed summaries of a number of contracts in which speed tiering or speed caps are a feature, [✂].[2786] The Parties' proposal appears largely consistent with that seen across many contracts, and is more favourable than a number we have reviewed. We also consider that the Parties' proposal allows MVNOs to adopt differing

[2781] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 4.
[2782] Honest Mobile response to the remedies working paper, 12 November 2024, pages 1-2.
[2783] [✂].
[2784] If an MVNO is unable to onboard in light of the above limit and is placed in a 'queue' to be onboarded, it would retain this place in the queue even if the Wholesale Access Terms ceased to be available while the MVNO is still in the 'queue'.
[2785] For instance, Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 62 and [✂].
[2786] Parties' response to the CMA's RFI.

downstream retail strategies, and appeal to different customer segments. We further consider that the proposed pricing – based on our review of per-GB average pricing across many MVNO contracts – remains competitive against market averages even with a [✂]% price premium (for speeds above 150 Mbps).[2787]

16.497 We have therefore included the Parties' pricing proposal with respect to the pricing structure for speed tiering as set out at Table 16.3 in the Wholesale Access Terms.

Timing for access to new technology

16.498 In response to our Remedies Working Paper, a number of third parties submitted suggestions on the timing of access to new technology under the Wholesale Access Terms, including:

(a) A suggestion from [✂] that MVNOs' access to new technology and features should be guided only by a principle of technical feasibility, and – where it is technically feasible for an MNO (ie the Merged Entity) to make such technology / features available to MVNOs – it should be required to provide such access immediately or, where it can demonstrate that immediate access is not technically feasible, as soon as reasonably practicable.[2788]

(b) A suggestion from [✂] that the limit should be reduced to three months for those supplying Internet of Things (IoT) and machine-to-machine (M2M) services that are contracted for multiple years, given differing end customer requirements, and that limits should not apply when access to the technology is required to meet regulatory obligations.[2789]

(c) A submission from iD Mobile that MVNOs should have the option to gain access at the same time to the new technology as the Merged Entity (to avoid MVNOs being disadvantaged) and that new technology such as 6G should be supplied under current commercial terms and not be subject to a separate contract.[2790]

(d) A submission from Sky Mobile agreeing that this term required further clarity and that the 9 month limit should be a 'backstop rather than the target'.[2791]

16.499 In our review of MVNOs' contract terms, we have seen that MVNOs have terms in their contracts which cover access to new technologies launched by the MNO –

[2787] CMA analysis of data provided by all MNOs for the pricing paid by MVNOs on their networks, relative to the total data consumption of each MVNO. Including analysis of payments directly related to data consumption where relevant, and total payments.
[2788] [✂] response to the remedies working paper, 13 November 2024, paragraph 3.1.4.
[2789] [✂] response to the remedies working paper, 14 November 2024, page 3
[2790] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 3.
[2791] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 63.

however, the length of delay before access is granted varies. While the Wholesale Reference Offer includes a 9-month time limit, some MVNOs have [✂],[2792] and some contracts [✂]. We also note that access to 5G SA technology is specified under the Parties' Wholesale Reference Offer to be available to MVNOs on the same basis as it is provided to the Merged Entity's retail customers.

16.500 Taking account of this review, the views of third parties, and the Parties' proposal, we consider that any new technologies should be made available as soon as is practicable and technically feasible, and within a maximum of 9 months of the new technology being made available to any customer of the Merged Entity. For the avoidance of doubt, we note that under the Wholesale Access Terms, 5G SA will be available to MVNOs hosted on the Merged Entity's network at the same time as 5G SA is enabled on the Merged Entity's network.

Timings for dispute resolution

16.501 We received some submissions which agreed with our assessment set out in the Remedies Working Paper that timings for dispute resolution should be shortened.[2793] The Parties also set out their typical timescales for the period over which a contract is agreed, submitting that negotiations typically involve 3–6 months for the technical evaluation, followed by up to 6 months for the contracting phase,[2794] and that contract negotiations can typically take around [✂] months from a first written expression of interest to a contract signature.[2795]

16.502 Balancing practical considerations, including that the process is simplified by having many of the terms pre-agreed (therefore shortening typical timescales for discussion and negotiation), we consider that the Parties' proposal for dispute resolution timescales is reasonable. Under the dispute resolution timescales of Wholesale Access Terms:

(a) Disputes relating to certain matters would be escalated to a dispute resolution process immediately. These include disputes regarding the eligibility of an MVNO to take up Wholesale Access Terms, determining whether a refusal by the Merged Entity to provide access is a breach of the Wholesale Access Terms, or determining whether all of the individual elements of the Wholesale Access Terms have been offered during the negotiation of the MVNO agreement.

(b) Otherwise, should an agreement not have been reached within a period of 5 months (and unless the CEOs or senior team of the Merged Entity and the

[2792] Notes of calls with: [✂]; [✂].
[2793] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, pages 3-4; Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 63; [✂] response to the remedies working paper, 14 November 2024, page 4.
[2794] Parties response to the Remedies Working Paper, 12 November 2024, paragraphs 4.12-4.13.
[2795] Parties' follow up submission on Remedies; Parties, Remedies submission.

MVNO concerned have resolved the issue within 1 month of the matter being escalated to them in writing by the either party), the dispute resolution procedure shall apply and the commercial arbitrator would have 2 months to conclude on a dispute resolution process (we note that this is a shorter timescale for resolution than as proposed under the Parties' Wholesale Reference Offer).

Non-exclusivity and termination rights

16.503 Some third parties suggested that Wholesale Access Terms should include provisions either for non-exclusivity or for early termination, with some third parties submitting that the intended purpose would be to increase competitive pressure on the Merged Entity to deliver the measure as intended. In particular:

(a) Sky Mobile submitted that Wholesale Access Terms should allow for a contract that is non-exclusive, so that MVNOs can contract with other MNOs and place capacity on their networks as and when required, to ensure continuous and ongoing dynamic wholesale competition, and preventing an MVNO which has signed up to the Wholesale Access Terms remaining exposed to the reduced competitive pressure arising from the wholesale SLC.[2796]

(b) [✂] submitted that MVNOs should be able to terminate agreements by giving reasonable notice, such as 24 months.[2797]

(c) [✂] submitted that the Merged Entity should be prohibited from including exclusivity provisions that limit the ability of customers to purchase wholesale services from other MNOs.[2798]

16.504 In general, in our broad review of many MVNOs' contract terms, we have found that exclusivity to a particular MNO is common practice.[2799] In keeping with our broad aim not to reflect 'the best' terms that have been negotiated by particular MVNOs in the current wholesale market but rather terms commonly available (reflecting current market circumstances), we do not propose to introduce non-exclusivity (or early termination, which has similar aims), to a Wholesale Access Terms measure.

[2796] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 47 and 48.
[2797] [✂] response to the remedies working paper, 13 November 2024, paragraph 3.1.3.
[2798] [✂] response to the remedies working paper, 14 November 2024, page 4.
[2799] CMA analysis of information provided by all MNOs summarising the contracts with each MVNO on their network.

Price terms

Per-GB standard pricing rates and tiers

16.505 Several third parties proposed either alternative pricing rates (applying a per GB pricing structure) or alternative pricing mechanisms in response to our Remedies Working Paper:

(a) Honest Mobile and [✂] questioned the need for tiered pricing and a model whereby smaller MVNOs received more expensive rates, with this said to disproportionately impact smaller MVNOs, [2800] and the 'structural disadvantage' potentially not incentivising market entry for new MVNOs.[2801]

(b) [✂] and [✂] submitted that the model/ structure of a per-GB rate places risk in terms of margin profitability on the MVNO and that alternative models are likely to be more effective (with a fixed bundle price, revenue share, margin share suggested by [✂] and a capacity cost-plus model suggested by [✂]).[2802]

(c) Sky Mobile submitted that the current pricing should be reduced [✂].[2803]

(d) [✂].[2804]

16.506 We have found that the per GB pricing structure is common among many MVNO contract terms that we have reviewed, and that alternative mechanisms tend to be the exception. On the basis of this review, we have also found that the current proposed pricing structure is competitive compared to the pricing of many contracts, and is cheaper, on average, than the contracts we reviewed. We gathered information on the prices that MVNOs are paying across the market, both payments related directly to the data consumed, where the contract is structured in this way, and total payments made (including all payments, incentives, rebates, etc). We consider that the pricing that the Parties have proposed for each 'tier' is reflective of a competitive price for that 'tier' (ie MVNOs of this size). In respect of tier 1 contract pricing terms specifically, where third parties raised considerations around facilitation of entry and expansion, we have found that these pricing terms are competitive against existing contracts of MVNOs of this size.[2805]

16.507 Keeping in mind our aim to set Wholesale Access Terms for a time limited period which are in line with the broader market, rather than reflecting exceptions (ie

[2800] Honest Mobile response to the remedies working paper, 12 November 2024, pages 1-2.
[2801] [✂] response to the remedies working paper, 12 November 2024, page 3.
[2802] [✂] response to the remedies working paper, 12 November 2024, pages 3-4; [✂] response to the remedies working paper, 12 November 2024, pages 9-3.
[2803] Sky Mobile response to the remedies working paper, 12 November 2024, pages 10-11.
[2804] [✂] response to the remedies working paper, 13 November 2024, paragraph 2.3.8.1.
[2805] CMA analysis of data provided by the Parties, BTEE and VMO2, see Chapter 9.

'best' terms currently available or 'better' terms than are currently available), we have concluded that

(a) A per-GB pricing structure is reflected in many contracts; and

(b) The proposed pricing per GB is set at competitive rates.

16.508 We therefore consider that a per-GB pricing structure, with the pricing as set out at Table 16.3, is appropriate.

*Minimum revenue commitments (**MRCs**)*

16.509 Some third parties submitted that they did not see a need for MRCs.[2806] One third party suggested that terms of MRCs should 'roll over' month to month, such that (i) if an MVNO exceeds a MRC in one month, this 'excess' can carry over to the following month (and to subsequent months until the excess is depleted) and (ii) if an MVNO does not meet a MRC in a particular month, its payment can be spread over a pre-determined number of months.[2807] Sky Mobile submitted that any MRC should be a fixed fee (ie not derived from the number of subscribers of an MVNO) and that the MVNO should be able to determine whether this fee is 'fair', taking this to be reviewed by the commercial arbitrator should this not be the case.[2808] Honest Mobile and [✂] submitted that new entrants may find it difficult to meet MRCs under the Wholesale Access Terms.[2809]

16.510 MRCs (or similar incentivisation to encourage growth) are a feature of many of the contract terms we have reviewed.[2810] Given that the MRCs are set at minimum subscriber thresholds and use a conservative per-subscriber revenue, we consider it unlikely that they will apply or be relevant to tier 2 and tier 3 MVNOs. For tier 1 MVNOs, we requested that the Parties update the proposal to lower the requirement, and it has subsequently been adjusted to the following '[✂]' (we have observed a similar mechanism in [✂]):

(a) [✂]: £[✂] million

(b) [✂]: £[✂] million

(c) [✂]: £[✂] million [✂].[2811]

[2806] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 8; [✂] response to the remedies working paper, 12 November 2024, page 3 and Currys (iD Mobile) response to the remedies working paper, 12, November 2024, page 3.
[2807] [✂] response to the remedies working paper, 13 November 2024, paragraph 3.1.6.
[2808] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 8 and 59.
[2809] Honest Mobile response to the remedies working paper, 12 November 2024, page 1; [✂] response to the remedies working paper, 14 November 2024, page 4.
[2810] For example, [✂].
[2811] Parties' Remedies submission.

16.511 MRCs are calculated with reference to the minimum number of subscribers at each tier and the tier 3 per-GB pricing structure, but would be set as a [✂] for each tier (ie it would not be based on the number of subscribers), paid monthly (with an MVNO having the ability to request different payment terms). We include in our specification that an MVNO exceeding its MRC in a given period (for example, a month) can 'carry over' this excess until it is depleted. Similarly, if an MVNO does not meet the MRC in a particular month, its payment can be spread over a pre-determined number of months.

16.512 We have found, in our review of contract terms, that this proposed mechanism for tier 1 is competitive and reasonable compared to similar MRC structures for smaller and new entrant MVNOs who would take up tier 1 contracts. We therefore consider that the proposed structure is appropriate.

FPM

16.513 We received a range of views from a number of third parties with respect to the proposed FPM, including:

(a) BTEE submitted that the proposed FPM would be entirely novel and have unpredictable market effects, and that a novel pricing mechanism that cannot adequately respond to market developments – that may exert either upward or downward pricing pressures – in a dynamic and unpredictable market over a nine-year period raises very serious risk of market distortion.[2812]

(b) Sky Mobile submitted that an FPM should be amended so that it can only be adjusted downwards, and that it should be based on network costs – [✂];[2813]

(c) [✂] submitted that the FPM proposed was by definition a 'catch up' mechanic, meaning wholesale price adjustments are based on historic ARPU or data usage changes and the MVNO's ability to compete could be restricted if the market moves in the period following review. It further submitted that the data usage profile of a mature customer base (for example, on the Merged Entity's network) is unlikely to be similar to that of an MVNO, and that the Merged Entity's ARPU evolution is sensitive to consumer price index (CPI) adjustments.[2814]

(d) [✂] submitted that any FPM included in the Wholesale Access Terms must work to adjust pricing downwards only. Further, it is important that any FPM

[2812] BTEE response to the remedies working paper, 12 November 2024, paragraphs 2.6(c); 2.8
[2813] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 6.
[2814] [✂] response to the remedies working paper, page 4.

applies across the entire customer base of the relevant MVNO or otherwise as appropriate for that MVNO's particular commercial strategy.[2815]

(e) iD Mobile submitted that an FPM should be linked more closely to the sub-brands of the Merged Entity and/or the lowest ARPU of either one of the Merged Entity brands.[2816]

(f) [✂] submitted that Ofcom should be closely involved in the process of agreeing the FPM with the Parties to avoid 'margin squeeze' and ensure competitive pricing.[2817]

(g) [✂] submitted that the CMA should maintain the ability to review pricing based on an economic replicability test.[2818]

16.514 We have reviewed FPMs across a range of contracts and have found that currently, [✂] MVNO contract with a form of FPM which adjusts the MVNO's payments based on a specified set of costs or usage changes.[2819] Some MVNOs have adjustments based on [✂].[2820] Some MVNOs have an FPM that tracks [✂] while others track the [✂].[2821]

16.515 Given we have found that the pricing as set out in the Wholesale Access Terms is currently competitive against the market, as well as our expectation that our Time Limited Retail Customer Protections will constrain retail pricing activity, and that the mechanism would apply on a downwards [✂] basis, we consider that the proposed FPM should function to ensure that Wholesale Access Terms do not become outdated over the course of relevant contracts.

Pricing for unlimited data contracts

16.516 In respect of the Parties' proposal to allow MVNOs taking up Wholesale Access Terms to have unlimited data contracts, we received a range of feedback:

(a) BTEE submitted that any Wholesale Access Terms measure that did not include some mechanism to ensure that MVNOs bear the cost (in customer experience or investment) of very high 'unlimited data' customer usage, could have a distortive effect across the market. With these considerations in mind, BTEE submitted that any cap should not be set too high.[2822]

2815 [✂] response to the remedies working paper, 13 November 2024, paragraph 3.1.2.
2816 Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 3.
2817 [✂] response to the remedies working paper, 12 November 2024, page 13.
2818 [✂] response to the remedies working paper, 14 November 2024, pages 3-4.
2819 For example, [✂], see [✂] response to CMA's RFI, [✂], see [✂] response to CMA's RFI.
2820 In [✂] contracts, [✂] pricing adjust based on [✂], while for [✂]. [✂]. [✂] response to the CMA's RFI.
2821 For example, [✂].
2822 BTEE response to the remedies working paper, 12 November 2024, paragraph 2.6(b)

(b) Sky Mobile submitted that the fixed price for unlimited data contracts should be no higher than around £[✂] to enable MVNOs to compete effectively with the Parties' current market offerings.[2823] Sky Mobile also requested that the usage limit threshold be increased to a minimum of [✂]% of the Parties' average unlimited usage on genuine unlimited plans.[2824]

(c) [✂] submitted that pricing must also be subject to annual review by the contracting parties (including use of the dispute resolution process if required).[2825]

(d) iD Mobile submitted that the proposal is restrictive and could cause MVNOs more harm than good, submitting concerns that the MVNO would need to pay per subscriber irrespective of the amount of data consumption, and that it places an undue restriction on how much data can be consumed on the tariff which would make 'unlimited' obsolete.[2826]

16.517 In our review of contract terms across the market, we have found that a mechanism to specifically allow for unlimited data offerings is not always present, but that [✂] MVNOs have accepted contracts with a similar feature, in order to compete in the unlimited data segment of the retail market.[2827] Following the Parties' modification of the proposal (ie to increase the pooled usage limit across an MVNO's customer base to [✂]% of the average data usage of the Merged Entity's subscribers using unlimited data contracts), we are satisfied that this is a competitive offer as compared to the contracts we have reviewed.

16.518 We confirm (as outlined at paragraph 16.439(b)) that this offer would be subject to an annually reviewed FPM which would adjust the price (on a downwards [✂] basis) with reference to the Merged Entity's ARPU for its unlimited data customers.[2828]

Implementation costs

16.519 As noted above, Sky Mobile submitted that no implementation costs should be paid by MVNOs for deals valued [✂].[2829] As noted at Chapter 9, we have found that initial onboarding costs are usually paid by the MVNO[2830] and therefore consider that the Parties' proposal for MVNOs to bear implementation costs reflects a contractual term which is currently common in the wholesale market. We further note that the dispute resolution mechanism would allow to settle any

[2823] Sky Mobile supplementary response to the remedies working paper, paragraphs 8-10.
[2824] Sky Mobile response to the remedies working paper, 12 November 2024, Annex.
[2825] [✂] response to the remedies working paper, 13 November 2024, paragraph 3.1.5.
[2826] Currys (iD Mobile) response to the remedies working paper, 12 November 2024, page 3.
[2827] [✂]. [✂] response to CMA's RFI. From information provided by [✂]. [✂] response to the CMA's RFI.
[2828] Parties' response to the CMA's RFI.
[2829] Sky Mobile response to the remedies working paper, 12 November 2024, paragraph 54.
[2830] Chapter 9, paragraph 9.190.

disputes between the Merged Entity and an MVNO as to whether the MVNO's contribution reflects true implementation costs borne by the Merged Entity.

Extension of existing contract terms for the Parties' MVNOs

16.520 In our Remedies Working Paper, we considered that different MVNOs are likely to have different commercial strategies and priorities in negotiating wholesale contracts, and that the 'blueprint' terms of Wholesale Access Terms could be less attractive – from an MVNO's perspective – than what it would otherwise have negotiated (ie absent the Merger).[2831] We also acknowledge as a distortion risk that the terms could also become a market 'focal point' and that the pre-set nature of price and non-price aspects of the Wholesale Access Terms may result in less competition around a less diverse set of terms and conditions than may otherwise have been the case absent the Merger.[2832] With these considerations in mind, we proposed that MVNOs of the Parties would have the choice of contracting on either: (i) their current contract terms (as adjusted for 'future-proofing' mechanisms, and including re-contracting on their current contract lengths), or (ii) Wholesale Access Terms.[2833]

16.521 Following publication of our Remedies Working Paper, we note the Parties' submissions (set out above at paragraph 16.451) that roll-over of current contract terms would be unnecessary for our aims, highly impracticable and lead to market distortions. We also note that third parties expressed a range of views:

(a) Two third parties were supportive of this aspect of Wholesale Access Terms;[2834]

(b) One MVNO noted that updates were required [✄];[2835]

(c) One MVNO (Sky Mobile) told us that this provision would not be sufficient, as it does nothing to address the concern for the remaining MVNOs who will face the prospect of standardised 'take it or leave it' terms, without any competitive pressure to offset and strengthen their negotiating hand.[2836]

16.522 Having carefully assessed the Parties' and others' submissions, we continue to consider that this additional measure is necessary to protect the MVNOs currently using the Parties' networks against the short-term adverse effects of the Merger in the wholesale market. We consider that additional protection is necessary for the Parties' MVNOs (rather than for MVNOs using other MNOs' networks). This is because the impact of the SLC in the wholesale market on MVNOs hosted by the

[2831] CMA, Remedies Working Paper, 5 November 2024, paragraph 1.474(c).
[2832] CMA, Remedies Working Paper, paragraph 1.501
[2833] CMA, Remedies Working Paper, paragraph 1.474(c).
[2834] [✄] response to the remedies working paper, 12 November 2024, page 5; [✄].
[2835] [✄] response to the remedies working paper, 13 November 2024, paragraphs 2.3.5-2.3.6.
[2836] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 20-21.

Parties – in the initial years of the Network Commitment following the Merger – is likely to be exacerbated by the greater impact of the Merger on the Parties' commercial incentives relative to the other MNOs (given the Merged Entity will have experienced a significant change in market position) and the incumbency advantage and barriers to switching, which we have found at Chapter 8 to be significant features of the wholesale market.

16.523 We also note that the Parties offered to extend their current MVNOs' contract terms to the end of the first three years post-Merger (after which renegotiation of a new contract would be on the basis of the Wholesale Access Terms or any other commercial agreement mutually agreed),[2837] demonstrating that contract extension would be feasible. As noted above, two third parties were supportive of the rolling-over aspect of Wholesale Access Terms.[2838]

16.524 We consider that extending current contract terms strikes an appropriate balance to ensure that a variety of contract structures continue to exist throughout the period of the Wholesale Access Terms measure, to suit differing commercial needs of different MVNOs (ie mitigating some of the distortion risks identified below) and mitigate the particular risks (outlined above) facing MVNOs of the Parties. We do not consider it feasible – and it would likely be distortive – to attempt to specify particular adjustments to the terms of certain MVNO contracts (for example, [✂]).

16.525 With respect to the period over which an MVNO's contract terms should be extended, we consider that the impacted MVNOs require commercial certainty for a sufficient period to forecast and plan for their future commercial and operational requirements. Consistent with the time periods outlined for the pre-determined reference Wholesale Access Terms contract, we consider that MVNOs should be able to extend their current contract terms (on contract expiry or earlier) for the same length as their current contract, up to a maximum of 5 years.

16.526 We recognise that some terms in existing contracts may no longer be relevant upon extension. To the extent that the Merged Entity and MVNO are unable to reach agreement on such terms, we propose that:

(a) Any term that is considered by the Merged Entity or the MVNO to be no longer relevant given its originally intended purpose, and where the MVNO and the Merged Entity are unable to reach agreement on it, would be escalated to the commercial arbitrator.

(b) The commercial arbitrator would determine (i) whether it is the case that any particular term is not suitable for extension (for example terms that are no

[2837] Parties' Remedies submission.
[2838] [✂] response to the remedies working paper, 12 November 2024, page 5; [✂].

longer relevant given their original purpose), and (ii) if applicable and if suitable, an alternative and equivalent term to apply. The commercial arbitrator would use discretion, but be guided by principles to be set out in the Undertakings.

16.527 We therefore consider it to be appropriate that MVNOs of the Parties[2839] are provided with additional protection to extend their current contract terms should a live contract expire within the three year period of a Wholesale Access Terms measure, for a maximum additional contract length of 5 years.

Conclusion on the features of Wholesale Access Terms

16.528 Overall, we are satisfied that the principles suggested in the Parties' Wholesale Reference Offer are broadly reflective of terms we have seen for MVNOs using MNOs' networks 'today'. When specifying aspects of the Wholesale Access Terms, we have done so with a view to reflect terms broadly seen across the market 'today' (ie not to replicate the 'best' terms available to some MVNOs and make these available to all MVNOs, or to impose 'better' terms). This is because we consider that an approach which would significantly 'improve' terms available to all MVNOs (i) would not be consistent with the aim of addressing the adverse effects in the early years of the Network Commitment, and (ii) would likely increase market distortion risks.

16.529 With this approach in mind, and following feedback from the Parties and third parties, we have updated some aspects of the Parties' Wholesale Reference Offer (as set out in the Remedies Working Paper).

(a) **Speed tiering** – we have reviewed a number of contracts in which this (or 'speed capping') is a feature, [✂] (see above). The Parties' proposal is more favourable than a number we have reviewed, and the [✂]% price premium for speeds above 150 Mbps remains competitive when compared against average standard pricing across the market. We also consider that the Parties' proposal allows MVNOs to adopt differing downstream retail strategies, and appeal to different customer segments. We have therefore accepted the Parties' proposal (as set out at Table 16.3).

(b) **Dispute resolution** – as set out in our Remedies Working Paper, we consider that this should be overseen by a commercial arbitrator, appointed at the outset and approved by the CMA to ensure capability and independence, with the Parties to reimburse relevant costs. In respect of timescales, reflecting both the Parties' submissions regarding actual timescales in past contract negotiations with MVNOs, together with several third parties' agreement with our assessment that disputes should be

[2839] For the avoidance of doubt, as noted in Chapter 9, we consider [✂] to be an MVNO on the 3UK network.

resolved swiftly (and that faster timescales should be feasible given pre-agreed terms), we have concluded on the following timescales:

(i) If an MVNO and the Merged Entity have not agreed on terms within a period of **5 months** following the Merged Entity's receipt of a written request to take up a contract on Wholesale Access Terms (and unless CEOs or senior team of each party have been able to resolve the issue within 1 month of the matter being escalated to them in writing by either party[2840]), the matter would be escalated to the dispute resolution process, which would be resolved within **2 months**.

(ii) During any period while a dispute resolution process is ongoing, any set timescales would no longer apply (ie any 'clock' would be 'stopped' during the period of dispute resolution).

(c) **Extension of current terms for MVNOs of the Parties:** as set out further above, under a Wholesale Access Terms measure, existing MVNOs of the Parties should have the choice of either: (i) extending their current contract terms (adjusted for 'future-proofing' mechanisms for a period equal to their current contract length up to a maximum of five years), or (ii) the Wholesale Access Terms. For elements of these MVNOs' current contracts that either party (ie the MVNO or the Merged Entity) consider to be no longer relevant for the originally intended purpose, and where the MVNO and the Merged Entity are unable to reach agreement within **3 months** (unless waived by both the Merged Entity and the MVNO), this would automatically be escalated to the commercial arbitrator, who would determine within **2 months**: (i) whether the term(s) are no longer relevant and (ii) if so, updated relevant term(s) to apply.

(d) **Onboarding limits:** having reviewed feedback from the Parties and third parties (including Ofcom), we consider that the distinction between 'full' and 'light' MVNOs has a material impact on the practical implications for onboarding MVNOs. However, we also recognise that Wholesale Access Terms should be available to large MVNOs. We have therefore updated the 'onboarding' limit to be: six tier 1 light MVNOs, and three (in total) tier 2 and tier 3 MVNOs (regardless of 'full' or 'light' status). As outlined above, the queue for tier 1 MVNOs would be subject to a cap which would be specified in the Undertakings.

(e) **Minimum revenue commitments:** For tier 2 and tier 3, we consider that the Parties' approach to calculating the MRC is conservative, compared to the per-customer payments and total payments that we have seen in the market,

[2840] For the avoidance of doubt, this 1 month period could occur at any point of the 5 months before the matter is escalated to the commercial arbitrator and would not apply cumulatively.

and therefore we consider these to be achievable for MVNOs of this scale. We consider that the updated structure for tier 1 MVNOs (as set out above) is competitive as compared to MRCs seen across the market for MVNOs of this size.

(f) **Unlimited data offering:** as outlined above, the limit applied under the Parties' proposed offer for MVNOs to make available unlimited data packages has been increased to [✂]% of the average data usage of the Merged Entity's subscribers using unlimited data contracts, with the limit applying on a pooled basis across all of an MVNO's unlimited customers. Based on our review of contract terms, we consider that this represents a competitive offer.

(g) **Period over which Wholesale Access Terms are in place**: the Merged Entity will be required to offer Wholesale Access Terms until the CMA is satisfied that it has met its obligations under the Network Commitment at the agreed 'Year 3' milestone.

Duration and timing

16.530 As outlined above at paragraph 16.240, we consider that the Network Commitment addresses long term anti-competitive effects in the wholesale market. However, as noted, we have some residual concerns that the Network Commitment would not address the short term adverse effects from the SLC in the wholesale market.

16.531 Our guidance anticipates that enabling measures (such as the Network Commitment) may be expected to work relatively slowly in addressing an SLC. In these circumstances, measures that control market outcomes may be needed for a limited period to provide protection to customers from the adverse effects of an SLC.[2841]

16.532 As behavioural remedies are designed to have ongoing effects on business conduct throughout the period they are in force, the duration of these measures is a material consideration. Our guidance further notes that we may specify a limited duration if measures are designed to have a transitional effect.[2842]

16.533 We note that in response to the Remedies Working Paper a number of third parties proposed changes to the duration and timing, including:

(a) BTEE submitted that we should consider offering a five year term, with the proposed contract term of Wholesale Access Terms reducing each year that the measure is in place, given the significant market developments expected

[2841] CMA87, paragraph 3.50.
[2842] CMA87, paragraphs 7.10 and 7.11.

over the period of the Wholesale Access Terms and Network Commitment.[2843]

(b) Sky Mobile submitted that the Wholesale Access Terms should be available for expressions of interest for four years, with an additional year to negotiate a contract, and that contracts – once in place – should be extendible for a further five years. Sky Mobile also submitted that there should also be a 24-month run-off period included within the contract to avoid a contractual 'cliff-edge'.[2844]

(c) [✂] submitted that MVNOs (and MVNEs/ MVNAs) should be able to renew a contract established under the Wholesale Access Terms for an additional two terms regardless of the duration of a Wholesale Access Terms measure, and that the Wholesale Access Terms should be available for take up over the full period of the Network Commitment.[2845]

(d) [✂] submitted that a minimum duration of 10 years would be appropriate for Wholesale Access Terms, given the characteristics of the industry and the complexity of achieving successful new entry.[2846]

(e) [✂] asked for the duration of the rollover of existing contract to commence from the end of the existing term and not from the date of Merger.[2847]

16.534 We consider that the duration of the measure – ie of both (i) the time period over which Wholesale Access Terms can be taken up (ie by an MVNO expressing an interest) and (ii) the term of a contract based on Wholesale Access Terms – must balance both the need for commercial certainty for MVNOs and potential distortion risks. Taking these factors into consideration, we consider below the appropriate duration of the Wholesale Access Terms.

16.535 With regards to the time period over which Wholesale Access Terms can be taken up (ie by an MVNO expressing an interest), we consider three years to be appropriate. As noted at paragraphs 16.695 to 16.697 above, we consider that the supporting measures should apply for a limited period of at least three years to provide protection to wholesale customers from the adverse effects of the SLCs in the early years of the Network Commitment and Beacon 4.1 implementation, when the rivalry-enhancing effects of both are likely to be less strong. As further considered below, given the contracts agreed on the basis of the Wholesale Access Terms will be in place for a longer period, the reference offer can be expected to have some continued effect, both in the wholesale and retail markets,

[2843] BTEE response to the remedies working paper, 12 November 2024, paragraphs 2.6(a) and 2.8.
[2844] Sky Mobile response to the remedies working paper, 12 November 2024, paragraphs 17 and 19.
[2845] [✂] response to the remedies working paper, 14 November 2024, page 3.
[2846] [✂] response to the remedies working paper, 12 November 2024, page 14.
[2847] [✂].

throughout the period until the rivalry enhancing effects of the Network Commitment are fully realised.

16.536 As noted in our Remedies Working Paper, and consistent with the timeframe concluded for the Time Limited Retail Customer Protections, we consider that the timeframe of a Wholesale Access Terms measure must be tied to a deliverable under the Network Commitment, given that we expect – by 'Year 3' – that significant improvements in the Merged Entity's coverage, reliability and capacity will have been delivered and the effects of Beacon 4.1 on VMO2's quality and capacity will also have started to take effect (as described in the section on retail protections). This means that the lifting of the availability of the Wholesale Access Terms after three years post completion would be subject to the CMA being satisfied that the Merged Entity has met its obligations under the Network Commitment as at the 'Year 3' milestone. We note that the Parties accept that their release from the Time Limited Retail Customer Protections can be conditional on completion of the Year 3 milestone for the Network Commitment.

16.537 As provisionally set out in our Remedies Working Paper, we consider a three year period to strike an appropriate balance in terms of cost and risks (in particular distortion risks) identified in the following sections, while providing commercial certainty to MVNOs. To account for the time required to negotiate an MVNO contract and mitigate for any circumvention risk, MVNOs must express interest within this three year period post completion but MVNOs would have until the end of the fourth year post-completion to conclude a contract on Wholesale Access Terms.

16.538 With regards to the duration of the contracts based on the Wholesale Access Terms, we consider that a five year period strikes an appropriate balance in terms of cost and distortion risks, while providing commercial certainty to MVNOs.

16.539 We consider that the proposal that contract terms would shorten over the period of the measure (eg by providing MVNOs with a three year contract if they take up terms in the second year of the measure) would reduce the ability of the contracting MVNO to plan its commercial strategy and would therefore not strike the correct balance between distortion risks and commercial certainty for MVNOs.

16.540 We consider that the proposal that contract terms would last for a significant period (ie 10 years), meaning that contracts under Wholesale Access Terms could exist in the market for up to 14 years, is likely to create significant distortion risks (that we seek to mitigate by limiting the contract duration to five years). While we understand the benefits of further commercial certainty, we consider that (as concluded as paragraph 16.240) the Network Commitment would address the SLC we found in the wholesale market in the longer term by delivering a market that is at least as competitive as the current market. This means that a remedy based on specified commercial terms would no longer be needed, and MVNOs should contract based on independent commercial negotiations to agree contracts to suit their commercial strategies.

16.541 As noted above, the Wholesale Access Terms can also be expected to have some continued effect, both in the wholesale and retail markets, throughout the period until the rivalry enhancing effects of the Network Commitment are fully realised. Although the protection Wholesale Access Terms would be in place for three years (subject to the Parties meeting the 'Year 3' target under the Network Commitment), MVNO contracts under the Wholesale Access Terms would last up to five years, therefore ensuring some continued effects for a total period of 8-9 years[2848] (which aligns with the duration of the Network Commitment). The Wholesale Access Terms would therefore continue protecting MVNOs after the end of the three years. This would also have some effect in the retail market, as MVNOs covered by the Wholesale Access Terms would also be able to compete effectively in the retail market (and their pricing terms would be protected throughout their contracts by the FPM).

16.542 We therefore consider it appropriate for each MVNO contracting under the Wholesale Access Terms to contract for up to 5 years. Concerning the proposal that contracts under the Wholesale Access Terms should include a run-off period to avoid a contractual 'cliff-edge', we agree in principle and consider that an appropriate run-off period can be specified within Undertakings in light of the time needed for an MVNO to migrate to an alternative host.

16.543 As noted above at paragraph 16.525, with respect to the duration of the contract extension measure for the Parties' existing MVNOs, we consider that the duration should be consistent with the above periods decided for the contracts based on Wholesale Access Terms as the same balance between providing commercial certainty to MVNOs and distortion risks apply. We therefore consider that MVNOs should be able to extend their current contract terms (on contract expiry or earlier) for a maximum of 5 years.

Practicality

16.544 A practical remedy should be capable of effective implementation, monitoring and enforcement. The practicality of any remedy is likely to be reduced if elaborate and intrusive monitoring and compliance programmes are required.[2849]

[2848] As MVNOs would have until the end of the fourth year post-completion to conclude a contract on Wholesale Access Terms, provided that they express interest within the first three years post-completion.
[2849] CMA 87, paragraph 3.5(c).

Monitoring and enforcement risks

16.545 In this instance, we consider that the oversight of Wholesale Access Terms can be managed by a monitoring trustee that reports to the CMA. Given that the measure would be in place for a relatively short duration (and monitoring would be less complex once contracts on Wholesale Access Terms are entered into),[2850] we consider that requirements can be specified sufficiently so that monitoring and enforcement need not be prohibitively complex. Disputes are to be overseen by a commercial arbitrator who would be appointed by the CMA at the outset of the measure.

16.546 We consider that monitoring is likely to become more complex the longer the suggested measure is in place. For example, in the event of a dispute, proving a breach of an obligation (for example, timely access to new technology if that new technology is undefined as at the time of the agreement) may be practically challenging.

16.547 We consider that, over the duration of the measure, terms can be sufficiently specified to address challenges in defining or identifying non-compliance, to manage these risks and considerations. We propose that a commercial arbitrator (appointed by and reporting to the CMA, with costs reimbursed by the Merged Entity), along with the monitoring trustee, is visible and readily available throughout the measure. We also consider that the commercial incentives of the Merged Entity to increasingly offer good terms to MVNO customers as the JBP progresses are likely to incentivise the Merged Entity to comply with the measure.

Acceptable risk profile

16.548 To be considered an effective remedy, we require a high degree of certainty of it achieving its intended effect.[2851] As set out above, given the behavioural nature of Wholesale Access Terms to accompany the Network Commitment, we consider the specification, circumvention and distortion risks associated with them.

Specification risks

16.549 Specification risks arise if the form of conduct required to address the SLC or its adverse effects cannot be specified with sufficient clarity to provide an effective basis for monitoring and compliance.[2852]

16.550 As noted, we have found that price and non-price terms of the Wholesale Reference Offer (as suggested) are broadly reflective of, and competitive when

[2850] Ie once Wholesale Access Terms are no longer offered, monitoring of MVNOs' contracts based on Wholesale Access Terms will be less complex.
[2851] CMA87, paragraph 3.5(d)
[2852] CMA87, paragraph 7.4(a).

assessed against, MVNO contracts across the market. We have also made changes, reflected in the Wholesale Access Terms measure, to ensure that this is the case.

16.551 However, as our guidance notes, specification risks become more relevant in markets subject to frequent changes (eg technological changes). [2853] Given that (i) new technologies would be made available to MVNOs using the Wholesale Access Terms within a maximum of 9 months, and (ii) the measure would be closely overseen by both a commercial arbitrator and monitoring trustee who would oversee the Merged Entity's compliance with the measure, we are satisfied that, over the relatively short duration of the measure, these risks can be effectively mitigated.

16.552 In the relatively short time period over which Wholesale Access Terms would be in place, we consider that likely technological developments are able to be captured by sufficiently specified Undertakings and commercial agreements (ie the Wholesale Access Terms as specified already allow for roll out of 5G SA, and we envisage that – while 6G is unlikely to become more relevant over the course of the measure – allowance for this can be specified in sufficiently detailed Undertakings).

16.553 We therefore consider that specification risks can be appropriately managed in the design of the measure, as set out in the Undertakings.

Circumvention risks

16.554 Circumvention risks arise as a consequence of behavioural remedies generally not dealing with the source of an SLC.[2854] We consider that Wholesale Access Terms – particularly if in place for a significant time period – could give rise to circumvention risks.

16.555 For example, as a result of the Merged Entity's commercial incentives not always being aligned with the spirit and/or intention of a Wholesale Access Terms measure, [2855] there is a risk that commercial incentives may influence the Merged Entity to frustrate various processes (for example, through the use of any exceptions) or worsen less well specified aspects of the Wholesale Access Terms.

16.556 We consider that the Wholesale Access Terms can be appropriately specified (including through our changes outlined above).

[2853] CMA87, paragraph 7.4(a).
[2854] CMA87, paragraph 7.4(b).
[2855] For example, we discuss at chapter 9 of this report that MNOs consider cannibalisation (ie the implications of enabling a retail competitor to grow and/or do business) when onboarding an MVNO.

16.557 We also consider that the measure would be appropriately monitored and enforced through a monitoring and dispute resolution mechanism, respectively overseen by a monitoring trustee and a commercial arbitrator, who are appointed by and report to the CMA.

16.558 We further consider that the Merged Entity's incentives would become more aligned with the spirit and intention of the measure over time, as it makes progress under the Network Commitment, reducing circumvention risks. We therefore consider that circumvention risks can be sufficiently addressed over the relatively short duration in which the measure would be in place.

Distortion risks

16.559 Market distortions can arise when a behavioural remedy alters normal market signals and changes the incentives of the Parties and/or third parties in a negative way. Such distortions can undermine the effectiveness of a behavioural measure.[2856]

16.560 We consider that setting a 'blue print' for terms in the market, to be used by the Merged Entity (up to the capacity and onboarding limits) may – if in place over a long period – give rise to distortion risks. In response to our Remedies Working Paper, we received a number of submissions agreeing with points we had raised in this respect, and raising concerns of distortion risk (see above), including from the Parties in respect of the proposal to extend their current MVNOs' contract terms.

16.561 As an example, the existence of the Wholesale Access Terms may create 'winners' and 'losers' in the wholesale market: those able to contract under Wholesale Access Terms with the Merged Entity before the relevant limits are reached, and those that need to separately and independently negotiate terms in the context of a less competitive market than would have been the case absent the Merger. We have made changes to Wholesale Access Terms to mitigate this, including increasing the 'onboarding' limit for tier 2 and tier 3 MVNOs (and by ensuring that those who have expressed interest are not 'timed out' of the remedy if an onboarding limit prevents access at a particular time), and we assessed the sufficiency of the capacity limit in consultation with Ofcom in order to ensure that there was sufficient headroom for take-up of Wholesale Access Terms.

16.562 The Wholesale Access Terms could also become a market 'focal point', with many of the terms being public knowledge (and only pricing terms protected by NDA). Given that MVNOs may use the Wholesale Access Terms pricing as a reference point for negotiation, the pricing (or pricing in the region of what is set out in the Wholesale Access Terms) may become more widely known. Risks of pricing

[2856] CMA 87, paragraph 7.4(c).

otherwise being shared – even if unintentionally – are relatively high.[2857] We note that the FPM works to ensure that all pricing is subject to annual change, mitigating this risk over the duration of the measure.

16.563 The pre-set nature of price and non-price aspects of the Wholesale Access Terms may also result in less competition around a less diverse set of terms and conditions than may otherwise have been the case absent the Merger.

16.564 In addition, the set level of the price and non-price terms of the Wholesale Access Terms may reduce the flexibility for MVNOs to pursue different commercial strategies, including different downstream pricing strategies in the retail market – potentially distorting competition in that market.

16.565 However, based on our review of MVNO contract terms, the Wholesale Access Terms would not constrain the range of propositions offered by MVNOs in the market today, which are extensive (see Chapter 8). We also consider that the Wholesale Access Terms are likely to provide better pricing terms for many MVNOs (who may also be able to negotiate separate deals with the Merged Entity or other MNOs by using Wholesale Access Terms as a bargaining tool) potentially increasing their ability to provide retail customers with a range of different retail propositions. Further, as outlined above, we will require the Merged Entity to extend terms of current contracts of MVNOs who currently use the Parties' networks. This will act to preserve a variety of contract structures during the period of the Wholesale Access Terms measure even while the Merged Entity offers pre-set terms on its network, and other MVNOs would be able to negotiate a variety of contract structures with other MNOs.

16.566 We further consider that the risks outlined are time limited, given our view (as outlined in the section on the Assessment of the effectiveness of the Network Commitment and time limited protections) that – following full implementation of the Network Commitment and Beacon 4.1 – competition in the retail and wholesale markets would be at least as effective as would have been the case in the counterfactual. We therefore consider that the limited duration, together with the proposed monitoring and enforcement process, give us comfort that the risk profile of Wholesale Access Terms is acceptable.

16.567 Provided that the Wholesale Access Terms are in place for a short duration, we consider that the Wholesale Access Terms would be an effective short-term solution before the benefits of the Network Commitment are able to progress towards offsetting the anticompetitive effects of the SLCs we have found.

[2857] For example, the pricing may be used as a reference point as staff members move across MNOs and MVNOs in the industry with the parameters/ region of the pricing being revealed, even if unintentionally.

Decision on Wholesale Access Terms

16.568 Our decision is that the time limited Wholesale Access Terms would complement the Network Commitment, creating a remedy package that comprehensively addresses our concerns in the wholesale market. We note that the time limited Wholesale Access Terms would also affect the retail market (by allowing MVNOs to access terms which allow them to compete effectively) and support the Network Commitment – together with the Time Limited Retail Customer Protections – in addressing our concerns in the retail market.

16.569 We consider that Wholesale Access Terms – as outlined above – can act for a short duration to complement and support the initial years of the Network Commitment, acting as a cap for price and non-price terms, based on market terms pre-Merger, in a short period over which significant progress under the Network Commitment is being made.

16.570 We consider these time limited Wholesale Access Terms have an acceptable risk profile and do not lead to costly market distortions, given that the proposed measures would have a short duration and would be designed with the risks outlined in mind.

Summary of decision on effectiveness of remedies

16.571 Based on the above assessment, we have identified the following effective remedies:

(a) Prohibition of the Merger; and

(b) A remedy package comprising the Network Commitment supported by the Time Limited Retail Customer Protections and the Wholesale Access Terms (together the **Time Limited Protections**).

16.572 We have found that prohibition of the Merger would be a comprehensive, effective remedy in addressing the SLCs and the adverse effects outlined in this report and capable of ready implementation.

16.573 Overall, we consider that the Network Commitment would address the SLCs we identified in the retail and wholesale markets in the longer term by delivering a market that is at least as competitive as the current market. We consider, however, that it would need to be accompanied by short term (time limited) protections during the initial years of network integration to address the adverse effects arising from the SLCs in the short term.

16.574 If the Merger were to proceed only subject to the implementation of the Network Commitment, the SLCs identified would not be comprehensively addressed, as the rivalry-enhancing effects of Beacon 4.1 and the Network Commitment will grow over time. As such, the SLCs would not be fully addressed throughout their expected duration solely through the Network Commitment.[2858]

16.575 In these circumstances, our remedies guidance notes that, in addition to so-called 'enabling measures' like the Network Commitment that work relatively slowly in addressing an SLC, measures that control market outcomes may be needed to supplement enabling measures for a limited period to provide protection to customers from the adverse effects of an SLC.[2859] In light of the CMA's obligation to ensure that any SLC identified is remedied to a 'high degree of certainty', and its obligation to achieve a solution to the SLC which is as comprehensive as is reasonably practicable,[2860] we therefore consider that the Network Commitment alone would not be an effective remedy and that supporting measures are required to ensure the overall remedies package is effective.

16.576 In addition to the Network Commitment, the Parties put forward some time limited proposals in an attempt to address any residual time limited concerns. We found these proposals to not be without risk in terms of both their effectiveness and potential distortive impact. However, we found that amended versions of the Parties' proposals, both limited in time and scope, would provide protection during the initial years of the Network Commitment roll-out.

16.577 We have considered whether it is necessary and appropriate for the Time Limited Protections to remain in effect for the eight year duration of the Network Commitment, when the rivalry enhancing effects of the Network Commitment are fully realised. We consider this is neither necessary nor appropriate as:

(a) imposing these behavioural remedies for a longer period would risk material distortive effects, especially given the dynamic nature of the retail and wholesale markets;

(b) the time limited remedies are appropriately targeted at the initial years where the risk of harm is most acute. By Year 3 of the Network Commitment, nearly [✂]% of the Merged Entity's sites will have been fully integrated with the Merged Entity's spectrum deployed across specified frequency bands. At this stage, significant improvements in the Merged Entity's coverage, reliability and capacity will have been delivered. As the Network Commitment, Beacon 4.1 and competitor responses progressively take effect, the need for the supporting measures reduces; and

(c) the time limited Wholesale Access Terms can be expected to have some continued effect throughout the period until the rivalry enhancing effects of the Network Commitment are fully realised. Although the protection would be

[2858] CMA 87, paragraph 3.5(b).
[2859] CMA 87 paragraph 3.50.
[2860] Section 36(3) of the Act.

in place for three years (subject to the Parties meeting the 'Year 3' target under the Network Commitment), MVNO contracts under the Wholesale Access Terms would last up to five years, therefore ensuring some continued effects for a total period of 8-9 years,[2861] both directly in the wholesale market, and indirectly through MVNOs' ability to offer competitive terms in the retail market.

16.578 In light of the above, we conclude that the Network Commitment supported by the Time Limited Protections is a comprehensive, effective remedy in addressing the SLCs and the adverse effects outlined in this report and capable of ready implementation.

Proportionality

16.579 We summarised above our conclusions that there are two remedies that would be effective in addressing the SLC and its adverse effects:

(a) a remedy package consisting of the Network Commitment with Time Limited Protections; and

(b) prohibition of the Merger.

16.580 In this section we set out our view on the proportionality of the Network Commitment with Time Limited Protections and prohibition of the Merger.

16.581 After identifying remedies that would be effective in addressing the SLC and resulting adverse effects, the CMA then considers the costs of those remedies.[2862]

16.582 In order for a remedy to be reasonable and proportionate, the CMA will: [2863]

(a) Select the least costly and intrusive remedy, or package of remedies, of those remedy options that it considers will be effective; and

(b) Seek to ensure that no remedy is disproportionate in relation to the SLC and its adverse effects.

The Parties' views on proportionality

16.583 The Parties submitted that prohibition would be disproportionate as a less onerous and costly remedy is available, and prohibition would in any event be disproportionate in relation to the SLCs.[2864]

[2861] As MVNOs would have until the end of the fourth year post-completion to conclude a contract on Wholesale Access Terms, provided that they express interest within the first three years post-completion.
[2862] CMA87, paragraph 3.6.
[2863] CMA87, paragraphs 3.4 and 3.6.
[2864] Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.3.

16.584 The Parties submitted that prohibition of the Merger would have severe adverse effects on the development of competition as the UK's mobile markets would remain trapped in a low investment, low competition equilibrium which has resulted in an unsatisfactory position for millions of customers in the UK. The Parties consider that prevailing conditions of competition are not good enough to meet the future needs of customers in the UK[2865] or address the deep urban-rural divide in respect of connectivity.[2866]

16.585 The Parties also submitted that prohibition would result in the loss of the RCBs, and submitted that the CMA is required to treat the loss of RCBs as a cost of prohibition.[2867] Due to the elimination of all RCBs, prohibition would not be the least costly effective remedy.[2868] The Parties submitted that there are less onerous remedies than prohibition available to address the SLC, in particular, the Network Commitment which would not only preserve the RCBs but ensure that they are delivered in full.[2869]

16.586 In response to the Remedies Working Paper, the Parties submitted that the CMA has not properly accounted for the significant RCBs that the Merger will deliver and even if the CMA did not accept that the Parties are incentivised to deliver the full JBP absent the Network Commitment and has regard only to those benefits which would accrue in its absence, there would be a very material cost to prohibition.[2870] The Parties submitted that the benefits foregone would include the improved mobile connectivity and other RCBs deriving from 'Day 1'/early years' benefits.[2871]

Costs of effective remedies

16.587 The costs of a remedy may arise in various forms. Remedies may result in costs through distortions in market outcomes. This is more likely to be the case where behavioural remedies are used, which intervene directly in market outcomes, especially over a long period. Remedies may also result in significant ongoing compliance costs. The CMA will endeavour to minimise such costs, subject to the effectiveness of the remedy not being reduced, and will have regard to the costs to the CMA and other monitoring agencies in ensuring compliance. If remedies extinguish RCBs then the benefits foregone may be considered to be a relevant cost of the remedy.[2872]

2865 Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.4. Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.11.
2866 Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.12.
2867 Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.10.
2868 Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.12.
2869 Parties' response to the Remedies Notice, 27 September 2024, paragraph 8.12.
2870 Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.43.
2871 Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.43.
2872 CMA87, paragraph 3.10.

16.588 In this case, we have identified three forms of possible costs associated with the remedies we have found to be effective:

(a) the possible loss of RCBs in respect of prohibition of the Merger;

(b) possible monitoring costs (particularly for Ofcom and/or the CMA) in respect of the Network Commitment and Time Limited Protections; and

(c) possible market distortions in respect of the Network Commitment and Time Limited Protections.

16.589 In order to reach a view on which of the two effective remedies is the least costly, and also in order to determine whether either remedy is disproportionate to the SLCs and their adverse effects, we assess the extent of these costs below.

RCBs

16.590 When deciding on remedies, the CMA may have regard to the effects of remedial action on any RCBs.[2873] In this section, we consider whether there are any RCBs (within the meaning of the Act[2874]) that should be taken into account in our remedy assessment.

16.591 RCBs that will be foregone due to the implementation of a particular remedy may be considered as costs of that remedy.[2875] An effective remedy may be considered disproportionate if it denies customers substantial benefits arising from the merger. Insofar as these benefits constitute RCBs for the purposes of the Act,[2876] the statutory framework allows us to take them into account,[2877] in assessing what, if any, remedial action to take.

16.592 The CMA may modify a remedy to ensure retention of an RCB or it may change its remedy selection. For instance, it may decide to implement a remedy other than prohibition or, in rare cases, it may decide that no remedy is appropriate.[2878]

Framework for assessment of RCBs

16.593 The Act defines RCBs as a benefit to 'relevant customers' in the form of:

(a) lower prices, higher quality or greater choice of goods or services in any market in the UK (whether or not in the market(s) in which the SLC has occurred or may occur); or

[2873] Section 36(4) of the Act.
[2874] Section 36(4) of the Act.
[2875] CMA87, paragraph 3.16.
[2876] Section 30 of the Act.
[2877] Section 36(4) of the Act.
[2878] CMA87, paragraph 3.16.

(b) greater innovation in relation to such goods or services.[2879]

16.594 For these purposes, 'relevant customers' are direct and indirect customers (including future customers) of the merger parties at any point in the chain of production and distribution – they are not limited to final consumers.[2880]

16.595 What constitutes higher quality, greater choice or greater innovation will depend on the facts of individual cases.

16.596 RCBs can be considered even if they are expected to be realised in markets other than the one subject to an SLC finding.[2881]

16.597 In addition, for a benefit to constitute an RCB under the Act, the CMA must believe, in the case of an anticipated merger, that:

(a) the benefit may be expected to accrue within a reasonable period as a result of the creation of the relevant merger situation concerned;[2882] and

(b) the benefit is unlikely to accrue without the creation of that situation or a similar lessening of competition.[2883]

16.598 In assessing a claimed benefit's likelihood, the CMA considers the merging parties' incentives, and their ability to implement the claimed benefit, post-merger. For the CMA to consider exercising its discretion to alter a remedy proposal, the claimed RCBs must be clear. The merging parties will be expected to provide convincing evidence regarding the nature and scale of RCBs that they claim to result from the merger and to demonstrate that these fall within the Act's definition of such benefits.[2884]

16.599 A merger may lead to economies of scale, for example, in production or distribution, but if this benefit just accrued to the merged firm, it would not constitute an RCB. To qualify as an RCB, the prospective cost reductions must be expected to result in lower prices (or better quality, service, choice or innovation) than if the merger did not take place. In many instances, this may not be the case, as the parties may have scope to charge higher prices, or not pass on cost reductions, due to the reduction in competitive pressures resulting from the merger.[2885]

[2879] Section 30(1)(a) of the Act.
[2880] Section 30(4) of the Act and CMA87, paragraph 3.18.
[2881] Section 30(1)(a)(i) of the Act.
[2882] Section 30(3)(a) of the Act.
[2883] Section 30(3)(b) of the Act.
[2884] CMA87, paragraph 3.20.
[2885] CMA87, paragraph 3.22.

16.600 The CMA normally takes RCBs into account by considering the extent to which alternative remedies may preserve such benefits.[2886] The CMA may modify a remedy to ensure retention of an RCB or it may change its remedy selection.[2887]

16.601 In practice, the CMA has rarely exercised its discretion to rely on RCBs as a reason to alter its remedy decision.[2888]

The Parties' submissions on RCBs

16.602 The Parties claimed that three categories of RCBs would arise as a result of the Merger:

(a) Benefits from improved mobile connectivity (the **claimed improved mobile connectivity RCB**);

(b) Benefits from accelerated UK Advanced 5G and 5G SA cases (the **claimed 5G SA RCB**); and

(c) Benefits from improved FWA offering (the **claimed FWA RCB**).

16.603 The Parties state that all three categories of RCB derive from implementation of the JBP/JNP.[2889]

16.604 The Parties submitted that the RCBs overlap in substance with the rivalry enhancing efficiencies that will accrue as a direct result of the Merger, noting that the network improvement benefits arising from the JNP and Beacon 4.1 enhance both the rivalry enhancing benefits and the customer benefits. The Parties submitted that although the RCBs and rivalry enhancing efficiencies involve conceptually separate legal tests under the applicable legal framework, the network improvements are Merger-specific and qualify under both tests.[2890]

16.605 The Parties submitted that, if the Merger did not proceed, the RCBs which in their view are substantial would be lost and this would be an enduring detriment for the UK. The Parties told us that if remedies were required by the CMA to approve the

[2886] CMA87, paragraph 3.15.
[2887] CMA87, paragraph 3.16.
[2888] See the CC's investigation into the completed acquisition by Macquarie UK Broadcast Ventures Limited of National Grid Telecoms Investment Limited, Lattice Telecommunications Asset Development Company Limited and National Grid Wireless No.2 Limited (2008). The CC concluded that a package of behavioural remedies had a high probability of being effective in addressing the adverse effects of the merger and would pass back to customers a significant proportion of the relevant merger synergies and substantial compensation in lieu of the loss of future competition. The CMA has only ever cleared three cases on the basis of relevant customer benefits: Central Manchester University Hospitals NHS Foundation Trust/South Manchester NHS Foundation Trust, University Hospitals Birmingham NHS Foundation Trust/Heart of England NHS Foundation Trust and Derby Teaching Hospitals/Burton Hospitals.
[2889] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.28.
[2890] Parties' submission, Relevant customer benefits.

Merger, any remedies selected would need to be designed in a way that the RCBs were preserved.[2891]

16.606 In response to the Remedies Working Paper, the Parties reiterated that the proposed RCBs (detailed below) meet the cumulative conditions in relation to section 30 of the Act and therefore qualify as RCBs.[2892]

16.607 The Parties submitted that the Merger delivers substantial in-market RCBs (ie within the retail and / or wholesale markets) within the meaning of the Act, even on the basis of the network improvements that the CMA accepts as likely, namely the 'Day 1' benefits resulting from the Parties' network integration.[2893]

16.608 The Parties submitted that all the claimed RCBs would accrue within a reasonable time period, and that the CMA has previously recognised that RCBs should be assessed on a case-by-case basis and has recognised in the Provisional Findings that investment in mobile networks requires a long-term perspective.[2894] The Parties further submitted that a significant part of the network improvements, which are the foundation of the improved connectivity as well as the 5G use case and FWA RCBs, accrue within the early years following the completion of the Merger.[2895]

16.609 The Parties also submitted that the CMA could accept RCBs even when there is some inherent uncertainty in the forward-looking estimation.[2896]

16.610 In addition, the Parties submitted that the nature and extent of the substantial evidence they have provided clearly meet the applicable standard of proof in relation to the out of market benefits claimed by the Parties (ie, outside the retail market and/or wholesale market).[2897]

The claimed improved mobile connectivity RCB

16.611 The Parties submitted that the Merged Entity's JNP would deliver material quality improvements nationwide, reflected in lower quality-adjusted consumer mobile prices. This is possible only through integration of the Parties' assets and the additional investment by the Merged Entity to create a 'best-in-class' network.[2898]

16.612 As a result of the above quality improvements to the network, the Parties submitted the overall effect of this would be to enable the Merged Entity to offer

[2891] Parties' response to the Remedies Notice, 27 September 2024, paragraph 2.1, page 7.
[2892] Parties' response to the Remedies Working Paper, 12 November 2024, paragraphs 5.18-5.42.
[2893] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.3.
[2894] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.32.
[2895] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.33.
[2896] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.34
[2897] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.4.
[2898] FMN.

better quality, lower quality-adjusted prices and a lower price per GB than the Parties could offer as standalone operators.

16.613 The Parties submitted that the higher quality services that the Merged Entity's customers will benefit from as a direct consequence of the Merger represent £1.8 billion of value from improved mobile connectivity.[2899] We note that this estimate from the Parties is based on an assumption of full implementation of the JNP.

16.614 In addition, the Parties submitted that customers will experience further benefits when VMO2 and BTEE accelerate investments in their mobile networks due to incentives created by the need to respond to the Merged Entity's 'best-in-class' network and Beacon 4.1. As a result, all customers in the UK can be expected to benefit from meaningful quality improvements and better mobile connectivity.[2900]

16.615 The Parties submitted that the claimed improved mobile connectivity RCB accrues as a result of the relevant merger situation, in particular that the JBP / JNP describe the process of the Parties ceasing to be distinct.[2901]

16.616 The Parties also submitted that the CMA's Provisional Findings recognised that some of the key network improvements are likely to be delivered absent any commitments. The Parties consider that these benefits will be timely and material.[2902]

The claimed 5G SA RCB

16.617 The Parties submitted that the Merger would lead to accelerated 5G SA capability in the UK benefiting customers of communication services delivered using 5G SA / Advanced 5G capabilities, in turn driving benefits for the wider UK economy.[2903]

16.618 The Parties submitted that Advanced 5G use cases are wide ranging and would likely benefit various sectors including healthcare, media/entertainment, public safety, energy and utilities, rural industries, retail and hospitality, smart urban, transport, manufacturing, logistics and distribution.[2904]

16.619 The Parties noted that a report for the Department for Digital, Culture, Media and Sport estimated that the economic benefits from 5G for the UK could be as much as £159 billion cumulatively over 2021-35.[2905] The Parties told us that 'assuming that the wider benefits of 5G to the UK economy estimated by the Department for Digital, Culture, Media and Sport are brought forward by only one year, then the

[2899] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.14 and Parties' response to the Remedies Notice, 27 September 2024, paragraph 2.27..
[2900] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.15.
[2901] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.22.
[2902] Parties' response to the Remedies Working Paper, 12 November 2024, paragraphs 5.23-5.27.
[2903] FMN.
[2904] Parties' submission, Relevant customer benefits.
[2905] FMN and Parties' RCBs meeting slides.

Merged Entity's network would generate economic benefits to the UK by 2030 in the range of £[✂] to £5 billion'.[2906]

16.620 The Parties submitted that consumers will also benefit indirectly from the adoption of Advanced 5G use cases within key sectors. For example, Advanced 5G use cases in the healthcare sector will result in reduced time to treatment, reduced recovery times, and lower complication and mortality rates. The Parties also submitted that by 2030, 5G SA services will be available to all schools and hospitals in the UK. [2907]

16.621 According to third party sources identified by the Parties, the benefits from deploying 5G SA will include:[2908]

(a) approximately £3.4 billion annually in productivity benefits from the creation of a smart grid;[2909]

(b) £1.3 billion annually in productivity benefits from applications to rail and road transport;[2910]

(c) £1 billion annually in cost savings from 5G applications in healthcare;[2911]

(d) £2,359 per field of wheat or £7,550 on the average sheep farm in productivity and costs savings to farmers from unmanned aerial vehicles;

(e) an estimated £2 million in revenue with every 200,000 uses of tourists augmented reality applications;

(f) cost savings reaching up to £700 million over a 5-year period from smart street lighting, with the potential to cut CO_2 emissions by 1 million tonnes over the same timeframe; and

(g) an estimated £112 million in annual productivity savings for the SME sector by deploying 5G SA at speed accelerating the development of technology it enables.[2912]

2906 Parties' initial submission, 1 May 2024, paragraph 6.40.
2907 Parties' submission, Relevant customer benefits.
2908 Parties' submission, Relevant customer benefits.
2909 The Parties submitted that 5G smart grids are forecast to increase productivity by £3.4 billion annually. 5G sensors fitted along the grid will help detect and respond to spikes in demand, reducing the chance of blackouts. In 2015, the UK experienced 533 hours of blackouts, costing £23.4 billion in lost productivity. Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.16.
2910 For example, the Parties submitted that 5G sensors on trains could recover 2.6 hours per rail commuter per year and save £440 million in lost productivity; 5G enabled road management systems could save the UK economy £880 million per year; and a recent trial of 5G technology by Transport for London reduced traffic delays by 20%. Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.16.
2911 For example, the Parties submitted that 5G will transform how healthcare is delivered in the UK as it will enable remote patient monitoring, better administering of medication, and wider use of smart-health devices and sensors. Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.16.
2912 Parties response to the Remedies Working Paper, 12 November 2024, paragraph 5.16.

16.622 With respect to timeframe, the Parties submitted that:[2913]

(a) Incremental revenue from Advanced 5G use cases are expected to materialise within three years following completion of the Merger;

(b) The Merged Entity expects to have built up its network slicing capability within [✂] post-Merger, such that use cases related to network slicing are expected to be launched [✂] and generate incremental revenues from [✂]; and

(c) Advanced 5G use cases requiring broader coverage will begin generating incremental revenues from FY29. This is due to their dependence on expansive network reach, in contrast to the location-specific nature of the former use cases.

16.623 The Parties submitted that the claimed 5G SA RCB would not accrue absent the Merger as both VUK and 3UK on a standalone basis would lack the requisite capex to invest in the network improvements required to deliver the scale and quality of 5G technology that could sustain new use cases.[2914]

The claimed FWA RCB

16.624 As noted above, the Parties claim that the Merger would create a network with greater capacity. They submitted that this increased capacity would in turn enable the Merged Entity to offer FWA to a greater proportion of the country.[2915]

16.625 FWA is not offered in the UK on a universal basis but in selected areas where an MNO has spare capacity. The more capacity an MNO has, all other things being equal, the more incentive it has to offer FWA. 3UK, unlike other MNOs, does not offer fixed broadband to customers and therefore has no cannibalisation risk from offering FWA to customers.

16.626 The Parties submitted that 3UK has grown its 5G FWA base from zero in 2019 to [✂] subscribers as of May 2024. VUK has an FWA offering that has been sold to a very small base of fewer than [✂] subscribers. The Parties submitted that absent the Merger, it would become increasingly difficult for 3UK to [✂] because it is unable to further invest [✂].[2916]

16.627 The Parties submitted that the Merged Entity's greater capacity will provide FWA to more customers, as well as faster and more reliable FWA connections,

[2913] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 5.37.
[2914] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 5.42.
[2915] FWA is a type of broadband Internet access that uses radio waves from an MNOs Mobile network to provide Internet services to users in fixed locations. For some people it can be an alternative to a fixed broadband service (provided through copper or fibre connections).
[2916] Parties' submission, Relevant customer benefits.

supporting on a conservative basis around [✂] FWA customers by 2032.[2917] The Parties also submitted that the Merged Entity's network will support [✂] additional FWA customers by 2029 compared with 3UK's subscriber base at that time.[2918] The Parties submitted that this figure only focuses on the potential customers derived from cross-selling FWA to the Parties' existing mobile customers. However, in practice, the Merged Entity's FWA offering will compete for customers in the broader fixed broadband market and will benefit from the Merged Entity's wider C-band footprint and lower congestion.[2919] The Parties submitted that FWA has very material benefits for consumers relative to fibre to the home services including competitive pricing, quicker and easier installation, high reliable speeds where there is no infrastructure for fixed connections, flexibility and no requirement for long term contracts.[2920] The Parties also noted that the majority of 3UK's FWA customers are presently located in areas already served by ultrafast broadband and submitted that this is a clear indication that 5G FWA is an attractive alternative to fixed broadband services even where these are available. [2921]

16.628 The Parties submitted that in addition to being able to provide FWA to significantly more customers as a result of the Merger, it is important to also focus on the specific customer groups that might particularly benefit from an expanded FWA offering, such as rural and price-sensitive customers.[2922]

Our assessment of RCB claims

16.629 For the purposes of assessing the extent of any RCBs that should be treated as a cost of prohibition of the Merger, we have considered:

(a) possible benefits that may arise within the retail market and wholesale market; and

(b) possible benefits that may arise in markets outside of the retail market and wholesale market (ie expected to be realised in markets other than the ones subject to an SLC finding).

16.630 For each claimed RCB, we first assess whether the nature of the benefits qualify as an RCB under the definition in the Act. As stated above, this requires an assessment of whether it meets the criteria in section 30(1) of the Act – which relate to the nature of the claimed benefit – and section 30(3), which require that:

[2917] Parties' response to the Remedies Notice, 27 September 2024, paragraphs 2.35, page 18.
[2918] Parties' submission, Relevant customer benefits.
[2919] Parties' submission, Relevant customer benefits and Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.39.
[2920] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.17.
[2921] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.17.
[2922] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.39.

(a) ‘the benefit may be expected to accrue within a reasonable period as a result of the creation of the relevant merger situation concerned’;[2923] and

(b) ‘the benefit is unlikely to accrue without the creation of that situation or a similar lessening of competition’.[2924]

16.631 For any RCBs that are found to meet these statutory criteria, we then assess the likely scale of that RCB.

Possible benefits within the retail market and wholesale market

16.632 As recognised by the Parties,[2925] many of the benefits[2926] that the Parties claim will arise as a result of the Merger would also fall for assessment under the rivalry enhancing efficiencies framework.

16.633 We considered the extent to which the Merger may give rise to rivalry enhancing efficiencies in Chapter 14. We concluded that the Merger would result in substantial benefits if the JBP is fully delivered, but that the Parties were not likely to have the incentive to deliver the full JBP (in particular, that the Parties may have the commercial incentive to retain a lower number of sites than claimed in the JBP given the cost savings that can be realised through site decommissioning) and therefore the quantum of benefits was likely to be less than claimed by the Parties. We concluded that the increased rivalry from those efficiencies which were likely to result from the Merger (absent any remedial intervention by the CMA) were not sufficient to offset the adverse competitive impacts arising from the Merger in the retail market and wholesale market.

16.634 Turning to the RCB framework, the claimed improved network connectivity RCB is capable of meeting the definitions in sections 30(1)(a) and 30(4) of the Act, as it would benefit relevant customers in the form of ‘lower prices, higher quality or greater choice of goods or services… in the UK… or greater innovation in relation to those goods or services’.[2927]

16.635 However, having regard to the incentives of the Parties in the absence of legally binding commitments to deliver the full JBP, we do not believe that the extent of the benefits claimed by the Parties would materialise. Therefore, we consider that not all of the benefits claimed by the Parties as part of the claimed improved

[2923] Section 30(3)(a) of the Act.
[2924] Section 30(3)(b) of the Act.
[2925] Parties’ submission, Relevant customer benefits.
[2926] We consider that the Parties’ claimed improved mobile connectivity RCB represents most of the claimed benefits within the retail and wholesale markets. However, although we consider that the claimed 5G SA and FWA RCBs primarily accrue outside of the retail and wholesale markets, we recognise that it is not possible to draw a clear distinction between RCBs within and outside the retail and wholesale markets and we also acknowledge that those benefits might be interdependent as for instance a surge in demand for 5G in other sectors (eg rail, infrastructure, healthcare) could lead to a surge in demand for 5G within the retail and wholesale markets.
[2927] Section 30(1) and Section 30(4) of the Act.

mobile connectivity RCB 'may be expected to accrue within a reasonable period as a result of the creation of the relevant merger situation concerned' (section 30(3)(a) of the Act).

16.636 The Parties submitted that even the benefits that the CMA recognises are likely to be delivered absent legally binding commitments are 'very material' and would include the improved mobile connectivity and other RCBs deriving from 'Day 1' / early years' benefits.[2928]

16.637 As set out above in Chapter 14, we consider that, absent remedies, the Merger is likely to result in some level of network quality improvements. We consider that MOCN and network integration is likely to potentially improve reliability particularly in rural (but populated) areas and in buildings, and to provide some reduction in congestion. We also consider that MOCN (and subsequently network integration, depending on the number of sites retained) would lead to some increase in geographic coverage, but this is likely to be in areas where there is limited use of mobile connectivity. We also consider that spectrum sharing is likely to play a significant role in alleviating 4G congestion for 3UK. However, we also consider that the network quality improvements which would result relative to the counterfactual would be less than the Parties have claimed.

16.638 We also consider that over time integration of the networks and deployment of spectrum through that process will increase capacity, further reducing congestion. However, because we consider that the Parties will not be incentivised to deliver the full site investment and integration programme set out in the JBP, the full claimed benefits of the increases in capacity and reduction in congestion are not likely to be realised (absent remedial action). Whilst we note the Parties' claims relating to improvements in network latency and average speeds relative to the standalone scenarios, we note that these KPIs are based on the full implementation of the JBP and we do not consider that the Merged Entity would be likely to deliver the full JBP (absent remedial action).

16.639 We therefore find that only some of the benefits from the claimed improved mobile connectivity RCB (and possibly from the 5G SA and FWA RCBs to the extent that they arise within the retail and wholesale markets) – insofar as they relate to 'Day 1' benefits of a combination of MOCN and deployment of additional spectrum through sharing of the Parties' combined holdings (for example in relation to 1800MHz spectrum), as well as some degree of site densification relative to either Party's standalone networks and the spectrum transfer to VMO2 agreed through Beacon 4.1 – satisfy the condition in section 30(3) of the Act.

16.640 We have therefore considered the likely scale of those benefits that we consider are likely to arise (absent remedial action), as set out in Chapter 14. Whilst

[2928] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.43.

recognising that it is not possible in this case (and it is not required) to quantify precisely the extent of the anti-competitive effects and any rivalry enhancing efficiencies,[2929] having regard to all the available evidence (both quantitative and qualitative) we found that the rivalry enhancing efficiencies would not be sufficient to offset the adverse effects in relation to the retail and wholesale markets.

16.641 Accordingly, while we recognise there are RCBs that arise within the retail market and wholesale market, through improved mobile network connectivity (and possibly from the 5G SA and FWA RCBs to the extent that they arise within the retail and wholesale markets), we do not consider these to be significant when set against the adverse effects of the Merger.

Possible benefits outside the retail market and wholesale market

16.642 We consider that, to the extent they are likely to arise, many of the benefits from the claimed 5G SA RCB and claimed FWA RCB may accrue outside of the retail market and wholesale market. Those benefits have not been examined in Chapter 14, as to be taken into account in the competitive assessment, efficiencies must (amongst other criteria) enhance rivalry in the supply of those products where an SLC may otherwise arise.[2930] As defined in the Act, RCBs can in principle include benefits in any market in the UK, not only the market(s) in which the SLC may occur[2931] (to the extent such benefits otherwise meet the definition of RCBs in the Act).

16.643 As with the claimed improved mobile network connectivity RCB, we consider that the claimed 5G SA RCB and claimed FWA RCB are capable of meeting the definitions in sections 30(1)(a) and 30(4) of the Act, as they would be benefits to relevant customers in the form of 'lower prices, higher quality or greater choice of goods or services… in the UK… or greater innovation in relation to those goods or services'.[2932]

16.644 We have therefore considered whether the claimed 5G SA and FWA RCBs would satisfy the other criteria for RCBs under the Act. We have considered each claimed RCB separately.

[2929] In particular, the case law and the CMA's guidance (CMA129) are clear that in assessing the evidence, the CMA is not required to make precise predictions about the future. CMA129, paragraph 2.21 and *Intercontinental Exchange, Inc. v CMA and Nasdaq Stockholm AB* [2017] CAT 6, paragraph 246.
[2930] CMA129, paragraph 8.8.
[2931] Section 30(1)(a)(i) of the Act.
[2932] Section 30(1) and Section 30(4) of the Act.

5G SA RCB

16.645 First, we have considered whether the claimed 5G SA RCB may be expected to accrue within a reasonable period as a result of the creation of the relevant merger situation as required under section 30(3)(a) of the Act.

16.646 As noted above, for the CMA to consider exercising its discretion to alter a remedy proposal, the claimed RCBs must be clear. The merging parties will be expected to provide convincing evidence regarding the nature and scale of RCBs that they claim to result from the merger and to demonstrate that these fall within the Act's definition of such benefits.

16.647 The Parties submitted several third party quantitative studies on the benefits from deploying 5G SA but have not provided any quantitative evidence concerning the 5G SA benefits accruing from the Merger. For instance, the Parties submitted that benefits from Advanced 5G will generate at least £3.4 billion annually from the creation of an electricity smart grid. They noted that the Merged Entity will substantially contribute to the achievements of these benefits but have not provided supporting evidence or attempted to quantify the Merged Entity's contribution to these benefits.[2933]

16.648 Our assessment of the scale of the 5G SA RCB is therefore predominantly qualitative. Revenue from new 5G use cases largely does not exist at present for either Party and therefore presents particular challenges in forecasting. Ofcom told us that, given the paucity of evidence of demand for services that will rely upon 5G SA, and in particular that the demand would depend upon the difference in quality and extent of the 5G SA provided in the JBP relative to that in the counterfactual, it would be reasonable to assume that the revenue synergy (and associated public value) resulting from unlocking demand for such services would be limited.[2934]

16.649 As noted above, the Parties have identified vast benefits across many sectors of the economy. For instance, the Parties submitted that the Advanced 5G use cases are wide ranging and would likely benefit various sectors including healthcare, education, media/entertainment, public safety, energy and utilities, rural industries, retail and hospitality, smart urban, transport, manufacturing, logistics and distribution.[2935]

16.650 For example, the Parties submitted that with the Merger '[b]y 2030, 5G SA service will be available to all schools and hospitals across the nation'. The Parties stated that the Merged Entity's 5G SA deployment will improve the quality of connectivity of schools which already rely on access to connectivity as part of their essential learning environment. They submitted that the Merged Entity will unlock innovative

[2933] Parties' submission, Relevant customer benefits.
[2934] Ofcom, response to the CMA's 23 July 2024 letter.
[2935] Parties' submission, Relevant customer benefits.

use cases within schools and universities for example, advanced digital tools such as VR and AR in educational settings, virtual teaching assistants and the integration of IoT devices, enabling schools to implement smart technologies that enhance safety, security, and operational efficiency.[2936]

16.651 We received mixed evidence from third parties regarding the Parties' claimed 5G SA RCB. Ofcom told us that 5G SA will deliver greater capability and can reasonably be expected to enable new use cases, but the claims from the Parties are difficult to substantiate[2937] and there is no obvious 'killer application' or demand as of yet.[2938] In particular, to take the example of the uses of 5G SA in schools in the paragraph above, Ofcom noted that these envisaged use cases are speculative, and in many cases could equally be delivered using fibre connections that many schools will have along with Wi-Fi.[2939] VMO2 submitted that it expects 5G SA to unlock many of the innovative use cases associated with 5G, including autonomous transport solutions, remote healthcare and fully robotic factories.[2940] [✂] submitted that it does not view the roll-out of 5G SA itself to bring about any material benefits, or only to a very small sub-set of users.[2941] [✂] submitted that the key barrier to delivering transformative new 5G services, ie advanced use cases, is demand-side related and that the key driver of investment will be customer willingness to pay, and the ability to generate revenues to justify incremental investments in new services.[2942]

16.652 We consider the new use cases that would rely on 5G-SA to be nascent and it is not clear if or when many of these technologies will be readily available in the UK. As noted above, we consider that the Parties have pointed to broad benefits without trying to quantify or explain what proportion of such benefits can be attributed to the Merger.

16.653 The Parties submitted that all three categories of RCBs derive from the implementation of the JBP/JNP.[2943] Accordingly, we consider that the concerns expressed in respect of the Parties' incentives to deliver the full JBP absent legally binding commitments in Chapter 14, would also have a corresponding effect on the likelihood that the claimed 5G SA RCB would materialise in full.

16.654 We therefore do not consider that the Parties have provided sufficient evidence that the full extent of the claimed 5G SA RCB may be expected to accrue within a

[2936] Parties' response to the CMA's RFI.
[2937] Ofcom, submission.
[2938] Ofcom call note.
[2939] Ofcom, submission.
[2940] VMO2's response to the CMA's RFI.
[2941] [✂] response to the CMA's RFI.
[2942] [✂] response to the CMA's RFI.
[2943] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 5.28. The Parties made this observation in the context of a submission that the CMA appeared to be assessing the different categories of RCB inconsistently by apparently finding that the out of market RCBs would be more likely to accrue than the improved mobile network connectivity RCB. It is not the CMA's view that out of market RCBs would necessarily be more likely to accrue than the in-market RCBs.

reasonable time period as a result of the RMS and in our view the claimed 5G SA RCB is too speculative to qualify as an RCB under section 30(3)(a) to the extent claimed by the Parties.

16.655 Second – although not strictly necessary for the benefits which we have found not to meet the condition in section 30(3)(a) – we have considered whether the claimed benefit was unlikely to accrue without the relevant merger situation or a similar lessening of competition, so as to meet the condition in section 30(3)(b) of the Act.

16.656 The Parties submitted that the claimed 5G SA RCB would not accrue absent the Merger as both VUK and 3UK on a standalone basis would lack the requisite capex to invest in the network improvements required to deliver the scale and quality of 5G technology that could sustain new use cases.[2944]

16.657 However, we consider that there is a further layer of uncertainty to the Parties' 5G-SA claims as we consider that at least some of the benefits would be likely to accrue absent the Merger.

(a) Vodafone has already launched its 5G-SA service in key cities in the UK.[2945] VMO2[2946] and BTEE[2947] have also started to roll out their 5G-SA services.

(b) A BTEE internal document from [✂] states that BTEE was '[✂]'.[2948]

(c) BTEE also submitted to us that in light of BTEE's own plans of providing coverage to over 95% of the UK population within the next five years and VMO2's announcement that its 5G SA roll out was proceeding at pace in line with the Government's Wireless Infrastructure Strategy ambition to have 5G Standalone coverage in all populated areas by 2030,[2949] it considers that it is unlikely that Merger will lead to any significant 5G SA coverage, that would not be delivered in the counterfactual.[2950]

(d) A large number of 3UK's internal documents provided to the CMA show that 3UK has spent considerable resources in recent years to improve its network – [✂].[2951]

(e) Ofcom told us that if the Parties' JNP is delivered, it would likely result in earlier and more widespread deployment of 5G SA than in the counterfactual; however, it was of the view that the greater the value of any new applications

[2944] Parties' response to the Remedies Working Paper, 12 November 2024, paragraph 5.42.
[2945] See 5G Ultra | 5G Standalone | Vodafone UK, accessed by the CMA on 27 November 2024.
[2946] See Our 5G standalone connectivity - Virgin Media O2, accessed by the CMA on 27 November 2024.
[2947] BTEE submitted to us that BT launched 5G SA on 5 September 2024 in 15 cities, growing to 30 cities by 2025 - BTEE response to the CMA's RFI.
[2948] BTEE internal document.
[2949] Our 5G standalone connectivity - Virgin Media O2 , accessed by the CMA on 27 November 2024.
[2950] BTEE response to the CMA's RFI.
[2951] For example, CK Hutchison internal documents. See also CK Hutchison response to the CMA's s109.

requiring 5G SA, the more likely it would be that in the counterfactual the market would deliver widespread 5G SA deployment.[2952]

16.658 While we consider it is possible the Merger may result in faster and more extensive deployment of 5G SA, the evidence the Parties have provided on this point is not sufficiently clear to convince us that the benefit is unlikely to accrue without the Merger (or a similar lessening of competition). We therefore do not consider that the entirety of the 5G SA benefits claimed by the Parties would be unlikely to accrue absent the relevant merger situation or a similar situation. We therefore do not consider that the condition in section 30(3)(b) of the Act is satisfied for the full 5G SA RCB claimed by the Parties.

16.659 Estimation of the likely scale of the claimed 5G SA RCB inevitably involves a degree of judgement. However, considering the above evidence taken in the round, we consider that the claimed 5G SA RCB is likely to be materially less than the Parties' claim.

16.660 We also consider that account must be made for the inherent uncertainty in our assessment of the scale of the benefits. The scale of the benefits will depend for the 5G SA RCB on factors including the demand for new Advanced 5G and other MNOs' roll-out of 5G SA. These are some examples of factors that might influence how the scale of benefits may change over time, rather than an exhaustive list.

16.661 We have not found it necessary (or possible) to estimate the precise amount of the benefit that may be expected to accrue from the claimed 5G SA RCB given the material uncertainties highlighted above around the impact of 5G SA outside the retail and wholesale markets. However, based on the above evidence taken in the round, we consider that the extent of the benefits that may be expected to accrue within a reasonable period as a result of the RMS from the claimed 5G SA RCB, and which were unlikely to accrue without the RMS or a similar lessening of competition, is materially lower than the Parties' claim that the Merged Entity's network would generate economic benefits to the UK by 2030 in the range of £[✂] to £5 billion.

16.662 In summary, we find that:

(a) there are some benefits from the claimed 5G SA RCB that qualify as an RCB; however

(b) the extent of the claimed 5G SA RCB that qualifies as an RCB under the Act is significantly less than that claimed by the Parties and is not significant when set against the adverse effects of the Merger.

[2952] Ofcom response to the CMA's RFI.

FWA RCB

16.663 First, we have considered whether the claimed FWA RCB may be expected to accrue within a reasonable period as a result of the creation of the RMS, as required under section 30(3)(a) of the Act.

16.664 As noted above, for the CMA to consider exercising its discretion to alter a remedy proposal, the claimed RCBs must be clear. The merging parties will be expected to provide convincing evidence regarding the nature and scale of RCBs that they claim to result from the merger and to demonstrate that these fall within the Act's definition of such benefits.

16.665 In regard to FWA, we note that this is currently relatively little used in the UK, though there is evidence of its use elsewhere – for example, in the United States where Ofcom noted that T-Mobile has about five million FWA subscribers on a network that is similarly dense to that envisaged for the Merged Entity albeit covering a larger country.[2953] Given that FWA is relatively little used in the UK, we consider that it is also subject to some uncertainty.

16.666 We recognise that the Merged Entity may be able to increase its FWA offering relative to the counterfactual. Ofcom noted to us that the significant increase in capacity delivered by the JNP, and the significant capacity in excess of demand, if demand grows at recent trends, would provide scope for the Merged Entity to expand its FWA proposition.[2954] Ofcom also submitted that the fixed broadband market is undergoing a technology transition from lower quality and lower bandwidth copper technologies (which in many cases support some of the lowest priced fixed broadband services) to fibre. As these technologies and services are removed, this may increase the addressable market for FWA services and increase the choice for these customers.[2955]

16.667 However, we note that there remain some significant uncertainties concerning the scale of any FWA RCBs.

(a) On the demand side, we have received evidence that there is limited demand from consumers to date and that there is material uncertainty as how demand for FWA will evolve in the future.

(i) An MNO submitted that it expects FWA adoption to be limited in most locations. The MNO does not consider that FWA is substitutable for fibre to the premises for most broadband customers but that it does offer a useful option for example to: (i) customers in hard-to-reach areas where it is uneconomical to lay fibre; and (ii) frequent movers who value

[2953] Ofcom, response to the CMA's 19 April 2024 letter.
[2954] Ofcom's response to the CMA's RFI.
[2955] Ofcom's response to the CMA's RFI.

the ease and flexibility of FWA. The MNO submitted that FWA may also drive competition in the fixed broadband market for price sensitive customers that do not value network reliability or speed. 2956

(ii) BTEE submitted that FWA is a niche service primarily of interest to a small group of customers who value the flexibility of being able to move their FWA connection to another location and in some cases where fixed broadband speeds are very low. BTEE expects demand to decline further with increased fibre coverage. Further, BTEE submitted that FWA is not suitable for many of the hardest to reach premises in the UK due to issues of distance and signal strength, and a significant proportion are likely to be served through alternative satellite broadband technology instead.[2957]

(iii) Ofcom stated that it is hard to assess the scale of any benefits from FWA but that it was hard for Ofcom to believe that it would be significant.[2958]

(iv) The Parties also submitted that the claimed FWA RCB would have additional benefits as the Merged Entity's FWA offering will compete for customers in the broader fixed broadband market. Given the relatively small FWA footprint we consider any corresponding competitive impact on fixed broadband is difficult to assess.

(b) On the supply side, we make the following points about the longevity of FWA:

(i) We consider the service only makes economic sense where the Parties have spare network capacity that cannot be commercialised by other means, as FWA customers are very high data users. Over time, increasing data demand from non-FWA customers may reduce incentives to provide this service (although we note that 3.9GHz can be used for FWA and is not licensed for mobile use which means that it would not suffer from this problem).

(ii) To illustrate the challenge of MNOs offering FWA, Ofcom told us that in 2023, the average monthly data usage for a fixed residential broadband connection in the UK was 535 GB, noting that is more than 60 times the average monthly data usage for a mobile customer of 8.8 GB.[2959]

[2956] [✂] response to the CMA's RFI.
[2957] BTEE's response to the CMA's RFI.
[2958] Ofcom call note.
[2959] Ofcom's response to the CMA's RFI.

(iii) BTEE also submitted that the Merged Entity will have access to both fixed and mobile networks, and presumably will always preferentially sell fixed broadband as it is more profitable.[2960]

16.668 The Parties submitted that all three categories of RCBs derive from the implementation of the JBP/JNP.[2961] Accordingly, we consider than the concerns expressed in Chapter 14 in respect of the Parties' incentives to deliver the full JBP absent legally binding commitments, would also have a corresponding effect on the likelihood that the claimed FWA RCB would materialise in full.

16.669 We therefore do not consider that the Parties have provided sufficient evidence that the full extent of the claimed FWA RCB may be expected to accrue within a reasonable time period as a result of the RMS and in our view the claimed FWA RCB is too speculative to qualify as an RCB under section 30(3)(a) to the extent claimed by the Parties.

16.670 Second – although not strictly necessary for the benefits which we have found not to meet the condition in section 30(3)(a) – we have considered whether the claimed benefit was unlikely to accrue without the RMS or a similar lessening of competition, so as to meet the condition in section 30(3)(b) of the Act.

16.671 As for 5G SA, we consider there is a further layer of uncertainty to the Parties' FWA claims as we consider that at least some of the benefits would be likely to accrue absent the Merger considering 3UK and to a lesser extent, VUK and BTEE, have already launched FWA. In the counterfactual, Ofcom submitted that MNO-based FWA is likely to be mostly limited to 3UK. Ofcom would expect 3UK to use its 3.9GHz spectrum (that is not licensed for mobile use but can be used for FWA). Ofcom noted that there is a small incremental cost to use the 3.9GHz spectrum and that any capital constraints in the counterfactual should therefore not prevent 3UK from doing so in these cases. Therefore, in the counterfactual Ofcom would expect 3UK to be able to provide FWA service to a significant number of customers.[2962]

16.672 We therefore do not consider that the entirety of the FWA benefits claimed by the Parties would be unlikely to accrue absent the RMS or a similar situation. We do not consider that the condition in section 30(3)(b) of the Act is satisfied for the full FWA RCB claimed by the Parties.

[2960] BTEE's response to the CMA's RFI.
[2961] Parties response to the Remedies Working Paper, 12 November 2024, paragraph 5.28. The Parties made this observation in the context of a submission that the CMA appeared to be assessing the different categories of RCB inconsistently by apparently finding that the out of market RCBs would be more likely to accrue than the improved mobile network connectivity RCB. It is not the CMA's view that out of market RCBs would necessarily be more likely to accrue than the in-market RCBs.
[2962] Ofcom, submission.

16.673 Estimation of the likely scale of the claimed FWA RCB inevitably involves a degree of judgement. However, considering the above evidence taken in the round, we consider that the claimed FWA RCB is likely to be materially less than the Parties' claim.

16.674 We also consider that account must be made for the inherent uncertainty in our assessment of the scale of the benefits. The scale of the benefits will depend for the FWA RCB on factors including the evolution of demand for mobile services and the amount of excess capacity that the Merged Entity might have in the future, the comparative developments of FTTP and satellite broadband technology, and the reliability and speed of FWA. These are some examples of how factors that might influence how the scale of benefits may change over time, rather than an exhaustive list.

16.675 We have not found it necessary (or possible) to estimate the precise amount of the benefit that may be expected to accrue from the claimed FWA RCB given the material uncertainties noted above around the impact of FWA. However, we consider that the extent of the benefits that may be expected to accrue within a reasonable period as a result of the RMS from the claimed FWA RCB, and which were unlikely to accrue without the RMS or a similar lessening of competition, are lower than the Parties' claim that the Merger would allow it to support around [✄] FWA customers by 2032.

16.676 In summary, we find that:

(a) there are some benefits from the claimed FWA RCB that qualify as an RCB; however

(b) the extent of the claimed FWA RCB that qualifies as an RCB under the Act is less than that claimed by the Parties and is not significant when set against the adverse effects of the Merger.

Conclusion on extent of RCBs

16.677 As set out above, we concluded that the RCBs arising within the retail and wholesale markets (absent remedial action) were insufficient to offset the SLCs, and that the RCBs that met the statutory definition outside these markets were also not significant when set against the adverse effects of the Merger.

16.678 We have also considered the cumulative scale of the RCBs. Taking account of the in-market and out-of-market RCBs in the round, we conclude that the RCBs that are appropriate to treat as a cost of prohibition of the Merger are not significant when set against the adverse effects of the Merger.

Monitoring costs

16.679 As explained above (see paragraphs 16.253, 16.389, and 16.545), monitoring the Parties' compliance with the Network Commitment and Time Limited Protections will mean that Ofcom and the CMA each incur some cost. However, those costs are not expected to be significant:

(a) Ofcom would provide a monitoring and enforcement role in respect of the Network Commitment. Ofcom noted that it already undertakes similar monitoring analysis to that which would be required to monitor the Network Commitment metrics on mobile deployment as part of its existing functions. Ofcom expects that the additional cost to monitor the Network Commitment metrics would be likely to be marginal. Ofcom expects this additional monitoring, with the help of a monitoring trustee, to require around 2 FTE for 3 months at a cost of approximately £[✂] for each cycle of review.

(b) With respect to costs to the CMA, we note that Ofcom, as the sectoral regulator, would have the primary role in monitoring compliance with the Network Commitment. The CMA would also undertake some monitoring of the Network Commitment and would have sole responsibility for monitoring compliance with the Time Limited Protections. The CMA has an existing remedies monitoring function that could carry out this task and the monitoring trustee (funded by the Parties) would provide support to the CMA in this role. In addition, any disputes arising with respect to the Time Limited Protections would be subject to independent dispute resolution processes. Furthermore, the Time Limited Protections would be in place for three to four years[2963] (with more limited monitoring of contracts by the monitoring trustee after this period), limiting the CM0A's monitoring obligations in respect of this aspect of the remedy.

16.680 As explained above, the Parties would be required to fund a monitoring trustee for the full duration of the Network Commitment (ie 8-9 years) to support the CMA and Ofcom in their monitoring functions. Although the cost of this monitoring trustee would not be immaterial, the CMA will generally attribute less significance to the costs of a remedy that will be incurred by the merger parties than the costs that will be imposed by a remedy on third parties, the CMA or other monitoring agencies.[2964] The merger parties have the choice of whether or not to enter into a merger agreement, and on what terms.

[2963] Up to four years for the Wholesale Access Terms as MVNOs would have until the end of the fourth year post-completion to conclude a contract on Wholesale Access Terms, provided that they express interest within the first three years post-completion.
[2964] CMA87, paragraph 3.8.

16.681 Therefore, our view is that the relevant monitoring costs associated with the Network Commitment and Time Limited Protections are not significant.

Distortion risks

16.682 With regards to the risk of market distortions, we consider that the Network Commitment works with the grain of competition, but we have received evidence that the Time Limited Protections may create some market distortions. We accept these protections may have some distortive impact on the retail and wholesale markets. We have sought to limit these risks by limiting the scope and duration of these remedies to the minimum that is necessary in order to be effective at achieving the desired outcome. We are of the view that the distortion risk, whilst real, is sufficiently low that we conclude that the Time Limited Retail Customer Protections and Wholesale Access Terms both had acceptable risk profiles (see paragraphs 16.415 and 16.559).

16.683 Therefore, our view is that the distortion risk associated with the Network Commitment and the Time Limited Protections is limited.

The least costly and intrusive remedy

16.684 When selecting a remedy, the CMA must select the least costly and intrusive remedy, or package of remedies, of those remedy options that it considers will be effective.[2965]

16.685 For the reasons set out above, we consider that in the circumstances of this case a precise mathematical weighing exercise is neither necessary nor possible.

16.686 With respect to the costs of prohibition of the Merger, we have found that prohibition would leave the market unchanged and therefore does not cause distortions in outcomes. The implementation of the remedy would not give rise to compliance and monitoring costs. We have also found that the extent of benefits that are appropriate to take into account as RCBs for the purposes of the Act are not significant when set against the adverse effects of the Merger.

16.687 We also acknowledge that prohibition is an intrusive remedy, as it would prevent the proposed Merger from completing.

16.688 With respect to the Network Commitment and Time Limited Protections, we have found that while the remedy would require the CMA and Ofcom to incur monitoring costs, these would not be significant, and while there are some distortion risks,

[2965] CMA87, paragraphs 3.4 and 3.6.

these are limited. The Network Commitment would preserve those RCBs which we have found to satisfy the relevant criteria under the Act.

16.689 The Network Commitment and Time Limited Protections would be a less intrusive remedy than prohibition, as this remedy package would allow the Parties to complete the Merger.

16.690 Given our conclusions that none of the costs associated with the remedies are significant when set against the adverse effects of the Merger, our proportionality framework requires us to select the less intrusive remedy. The package consisting of the Network Commitment and Time Limited Protections is therefore our preferred remedy option.

16.691 If the Parties are not willing to offer Undertakings giving effect to the Network Commitment and Time Limited Protections as outlined in this chapter, we consider that prohibition would be the only available effective remedy and the CMA would seek to impose an Order prohibiting the Merger.

Proportionality of the Network Commitment and Time Limited Protections in relation to the SLC and its adverse effects

16.692 Having identified the least costly and intrusive effective remedy, we then consider whether this remedy would be disproportionate to the SLC and its resulting adverse effects. In doing so, we compare the extent of harm associated with the SLCs with the relevant costs of our preferred remedy outlined above.

16.693 Absent remedial action, the SLCs can be expected to lead to price increases for mobile customers (or to equivalent reductions in data packages or service features) affecting tens of millions of mobile users in the UK. We also consider that absent remedial action the Merged Entity – and its competitors – may have less of an incentive to bid for wholesale business and/or may offer less competitive prices/terms to MVNOs.

16.694 As set out above, we consider the costs of the Network Commitment and Time Limited Protections to be limited. The remedy is also not intrusive as it would enable the Parties to complete the Merger. Therefore, we conclude that our preferred remedy is not disproportionate to the SLC and its adverse effects.

Proportionality of prohibition in relation to the SLC and its adverse effects

16.695 As set out above, if the Parties are not willing to offer Undertakings giving effect to the Network Commitment and Time Limited Protections as outlined in this chapter, we consider that prohibition would be the only available effective remedy and the CMA would seek to impose an Order prohibiting the Merger. Prohibition of the

Merger would also be the only effective remedy if Ofcom's approval of the licence variation were not obtained for any reason.

16.696 Therefore, we have also considered whether prohibition of the Merger would be disproportionate to the SLC and its resulting adverse effects.

16.697 As set out above, the SLCs can be expected to lead to price increases for mobile customers (or to equivalent reductions in data packages or service features) affecting tens of millions of mobile users in the UK. We also consider that absent remedial action the Merged Entity – and its competitors – may have less of an incentive to bid for wholesale business and/or may offer less competitive prices/terms to MVNOs.

16.698 We have also found that any RCBs that would be lost as a result of prohibition of the Merger would not be significant when set against the adverse effects of the Merger (as set out above).

16.699 The loss of RCBs is the only cost we have identified associated with prohibition of the Merger (as set out above).

16.700 Therefore, in the absence of any less costly and intrusive alternative effective remedy, we consider that prohibition of the Merger would not be disproportionate to the SLC and its adverse effects.

Conclusion on proportionality

16.701 We have identified two effective remedies:

(a) Prohibition of the Merger; and

(b) The Network Commitment supported by Time Limited Protections.

16.702 We identified the relevant costs associated with each of those remedies and concluded that:

(a) The only relevant costs in the case of prohibition of the Merger are the loss of RCBs. The RCBs within the meaning of the Act that would be lost as a result of prohibition of the Merger would not be significant when set against the adverse effects of the Merger.

(b) The Network Commitment and Time Limited Protections give rise to monitoring costs for the CMA and Ofcom, and limited distortion risks but, overall, these are not significant.

16.703 We are required, as per our guidance, to select the least costly and intrusive remedy we consider to be effective. We consider that neither remedy incurs significant costs when set against the adverse effects of the Merger, but that prohibition of the Merger is more intrusive. We therefore consider that the Network Commitment supported by Time Limited Protections is more proportionate than prohibition of the Merger.

16.704 We consider the Network Commitment supported by Time Limited Protections would not be disproportionate to the SLC and its adverse effects. We further consider that, in the absence of any less costly and intrusive alternative effective remedy – which would be the case if the Parties are not willing to offer Undertakings giving effect to the Network Commitment and Time Limited Protections as outlined in this chapter – prohibition of the Merger would not be disproportionate to the SLC and its adverse effects.

Decision on remedies

16.705 We have concluded that there are two effective, proportionate remedies that would comprehensively address the SLCs in the retail and wholesale markets outlined. These are:

(a) Prohibition of the Merger; and

(b) Network Commitment supported by the Time Limited Protections.

16.706 Our preferred remedy is the Network Commitment supported by the Time Limited Protections, this being the least costly and intrusive effective remedy that is not disproportionate in relation to the SLC and its adverse effects we have identified.

Implementation considerations

Orders and Undertakings

16.707 As set out in the Merger Remedies Guidance, following publication of the final report the CMA has the choice of implementing remedies by obtaining Undertakings from the relevant parties or making a Final Order, subject to the limitations set out in section 84, section 86 and Schedule 8 of the Act. The CMA will consult with the merger parties and other parties affected by the remedies in determining the required Final Undertakings or Final Order. This will include a period of formal public consultation, as specified in Schedule 10 of the Act.[2966]

16.708 If the Parties are not willing to offer Undertakings giving effect to the Network Commitment and Time Limited Protections as described in this chapter, as the only other effective remedy, we would seek to impose an Order prohibiting the Merger.

[2966] CMA87, paragraph 4.67.

16.709 The CMA is subject to a statutory deadline of 12 weeks following its final report[2967] to accept Final Undertakings[2968] or to make a Final Order.[2969] This period may be extended once by up to six weeks[2970] if the CMA considers there are special reasons for doing so.[2971]

16.710 If Undertakings are not forthcoming from the Parties, the Merger will be prohibited and this will be set for a period of 10 years.

16.711 Our expectations are that alongside a potential consultation on Undertakings, the CMA would append the Parties' spectrum licence variation request.

Implementation of the Network Commitment

16.712 The Network Commitment will be included in Undertakings to the CMA and the Parties will seek licence variations to incorporate the Network Commitment as conditions in their spectrum licences, to be overseen by Ofcom. Ofcom would be responsible for monitoring the compliance with these conditions (see below 16.715).

16.713 Any variation of the Merged Entity's spectrum licence(s) would occur under Section 1 of WTA06. Undertakings to the CMA would be given under section 82 of the Act.

16.714 The licence variation is fundamental to the effectiveness of the remedy (see paragraph 16.271); therefore, the Parties must obtain approval for the spectrum licence variation from Ofcom prior to completing the Merger. Failing to obtain Ofcom's approval for the licence variation would result in the prohibition of the Merger (see paragraph 16.271).

Role of Ofcom

16.715 For licences issued under the WTA06, Ofcom has extensive enforcement powers, such as revoking the spectrum licence or using its direct fining powers (see paragraph 16.139 above). If the Network Commitment were incorporated as part of the Merged Entity's spectrum licence(s), Ofcom would monitor compliance with the Network Commitment.[2972]

[2967] Section 41A(1) of the Act.
[2968] Section 82 of the Act.
[2969] Section 84 of the Act.
[2970] Section 41A(2) of the Act.
[2971] CMA87, paragraph 4.68.
[2972] Parties' network commitment proposal.

16.716 Ofcom's role is vital with regards to the effectiveness of the Network Commitment as a remedy. Therefore, to ensure Ofcom can assume this role, Ofcom's approval of the licence variation will be a condition for completing the Merger.

16.717 From the date of completion of the Merger, the Parties would provide regular reports on progress against the milestone commitments to the CMA, Ofcom and the monitoring trustee (see below). The Parties would report on the number of sites integrated in the network and site level details and on the amount of spectrum deployed on those sites at specified frequencies.[2973]

16.718 The Network Commitment would set out the formal legally binding milestone commitments which would set out what the Parties need to formally achieve by years 3, 5 and 8 to be compliant with the Undertakings and their spectrum licence(s).

The role of the CMA

16.719 As outlined above, the Network Commitment and the Time Limited Protections will be implemented by way of Undertakings under section 82 of the Act to the CMA (or the CMA will seek to impose an Order to prohibit the Meger).

16.720 Whilst Ofcom will have primary responsibility for monitoring the Network Commitment, with regards to the Time Limited Protections, the CMA considers that whilst Ofcom will be kept informed of the status of these remedies, they are not suitable for incorporation as licence conditions. As such, the CMA considers that monitoring and oversight of these remedies will be the CMA's sole responsibility (This would largely be done through the reports from the monitoring trustee confirming the Parties' compliance). However, the CMA is likely to consult with Ofcom on any matters requiring its expertise.

16.721 Whilst Ofcom will take on the primary role with monitoring and enforcing of the Network Commitment through the spectrum licences, the CMA would retain responsibility for compliance with the Undertakings.

Enforcement powers

16.722 Subject to the Parties successfully obtaining Ofcom's approval for incorporating the proposed Network Commitment as part of the Merged Entity's spectrum licence(s), if the Parties do not comply with the Network Commitment, Ofcom would be able to enforce compliance by:

(a) Issuing a contravention notice;

[2973] Parties' network commitment proposal. By mutual agreement the CMA and Ofcom can amend the reporting dates and frequency.

(b) Opening a regulatory investigation in relation to the contravention of the licence;

(c) Bringing civil proceedings against the contravening party;

(d) Revoking or varying the Merged Entity's licences.

16.723 Ofcom also holds information gathering powers under the CA03 and the WTA06. Ofcom could impose financial penalties in case of contravention of the requirements request.

16.724 For breaches of the Undertakings, the CMA has the ability to bring civil proceedings under the Act if the Parties are non-compliant.

16.725 The DMCCA 2024, expands the enforcement powers available to the CMA in relation to Final Undertakings and Final Orders.[2974] This includes the ability to impose financial penalties in respect of a failure to comply with remedy Undertakings or Order without reasonable excuse. The commencement date of these enforcement powers according to the Commencement Regulations as published by the Government is 1 January 2025.[2975]

16.726 If the Undertakings are accepted, or a Final Order is made after 31 December 2024, which the CMA considers to be likely at this stage, the new enforcement powers for breaches will be applicable.

The role of the monitoring trustee

16.727 As outlined, Ofcom will have primary responsibility for monitoring the Network Commitment once incorporated into spectrum licence(s). Both Ofcom and the CMA, however, will be supported by a monitoring trustee.

16.728 A monitoring trustee will appointed to support the monitoring of compliance with the Final Undertakings, which will include the Network Commitment and the Time Limited Protections. The monitoring trustee would have a mandate to monitor compliance with the Network Commitment and Time Limited Protections for the duration they are in force. The monitoring trustee report will be provided to the CMA and Ofcom.

16.729 CMA and Ofcom approval would be required for the appointment of the monitoring trustee. We consider the scope of the mandate is likely to be large and cover a number of areas; any monitoring trustee must therefore have access to sufficient

[2974] New sections 94AA and 94AB of the Act introduced by section 143 and schedule 11, paragraph 11 of the DMCCA2024.
[2975] The Digital Markets, Competition and Consumers Act 2024 (Commencement No. 1 and Savings and Transitional Provisions) Regulations 2024

resources and skills in order to effectively execute the mandate. The monitoring trustee would be fully funded by the Parties.[2976]

16.730 We also consider that there should be an externally published annual report on the Parties' progress against the Network Commitment including network performance to be reviewed by the monitoring trustee.

16.731 Unless mutually agreed by the CMA and Ofcom, the monitoring trustee would report on the Parties' progress with the Network Commitment and compliance with the Time Limited Protections on a rolling four month basis.

16.732 In addition, the monitoring trustee would conduct a review, to be agreed ahead of time with the CMA and Ofcom, of the deployment commitments under the Network Commitment.

The role of the commercial arbitrator (Wholesale Access Terms)

16.733 A commercial arbitrator will be appointed and given decision making power with regards to disputes arising between the Parties and MVNOs in relation to the Wholesale Access Terms.

16.734 CMA approval would be required for the appointment of the commercial arbitrator (acting as a dispute resolution provider). The provider of these services should have sufficient resources to quickly and efficiently preside over multiple disputes simultaneously.

[2976] Parties' network commitment proposal.