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.