

Anticipated joint venture between Vodafone Group Plc and CK Hutchison Holdings Limited concerning Vodafone Limited and Hutchison 3G UK Limited

Decision on relevant merger situation and substantial lessening of competition

ME/7064/23

The Competition and Markets Authority’s decision on relevant merger situation and substantial lessening of competition under section 33(1) of the Enterprise Act 2002 given on 22 March 2024. Full text of the decision published on 29 April 2024.

The Competition and Markets Authority (**CMA**) has excluded from this published version of the decision information which the CMA 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 Some numbers have been replaced by a range, which are shown in square brackets.

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SUMMARY

OVERVIEW OF THE CMA'S DECISION

1. The Competition and Markets Authority (**CMA**) has conducted a phase 1 investigation into 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**). After examining a range of evidence, the CMA believes that the Merger meets the threshold for reference to an in-depth phase 2 investigation, because it gives rise to a realistic prospect of a substantial lessening of competition (**SLC**) in the supply of retail mobile services and wholesale mobile services in the UK.
2. 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**.
3. As a result of the initial concerns found in the phase 1 investigation, the Parties have until 2 April 2024 to offer an undertaking to the CMA that will remedy the competition concerns identified. If no such undertaking is offered, then the CMA will refer the Merger for an in-depth phase 2 investigation pursuant to sections 33(1) and 34ZA(2) of the Enterprise Act 2002 (the **Act**). This would enable the CMA to investigate the impact of the Merger on competition in more detail before reaching a final decision on whether or not the Merger gives rise to an SLC.

About the businesses

4. Vodafone – listed on the London Stock Exchange – is the holding company of a group of companies providing mobile and fixed telecommunication services (such as broadband), principally across Europe and Africa. In FY2022, Vodafone generated global turnover of over €45 billion. 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.
5. CK Hutchison – listed on the Stock Exchange of Hong Kong – is a multinational conglomerate operating in about 50 countries across four core businesses: ports and related services, retail, infrastructure and telecommunications. In FY2022, CK Hutchison generated global turnover of approximately £47 billion. In the UK, CK Hutchison supplies retail mobile services to consumers and businesses and wholesale mobile services through its wholly-owned subsidiary 3UK and operates under the Three brand and the SMARTY sub-brand.

About the UK mobile industry

6. Mobile services play an integral role in the daily lives of consumers and businesses in the UK. Mobile internet access has become an essential service. Ofcom – the sectoral regulator overseeing mobile communications in the UK – expects demand for mobile data 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 increase capacity and provide the network quality needed to meet these future needs.
7. There are currently four mobile network operators (**MNOs**) in the UK – BT Group plc (**BTEE**), VMED O2 UK Limited (**VMO2**), VUK, and 3UK. All four MNOs are party to one of two network sharing arrangements in the UK: BTEE and 3UK have a network sharing arrangement, and VUK and VMO2 have a separate network sharing arrangement. This allows 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).
8. In addition to the four MNOs, there are a number of mobile ‘virtual’ network operators (**MVNOs**) active in the supply of retail mobile services in the UK, including Sky Mobile, Tesco Mobile, Lebara, and Lyca Mobile. These MVNOs do not own the underlying mobile radio network infrastructure they use to provide mobile services to UK consumers (and so – to a large extent – cannot influence the network quality they offer customers), instead entering into agreements with one of the MNOs to access their network.

Why did the CMA review this Merger?

9. The CMA has a statutory duty to promote competition for the benefit of consumers. This includes a duty to investigate mergers that could raise competition concerns in the UK where it has jurisdiction to do so. The CMA believes that it has jurisdiction to review the Merger: each of 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 the turnover test is met given VUK and 3UK together generated more than £70 million turnover in the UK in FY2023. This means that arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
10. The Parties announced the proposed combination of their UK telecoms businesses on 14 June 2023. The Merger is subject to certain regulatory

conditions, including merger control clearance from the CMA and approval under the UK National Security and Investment Act 2021 (**NSI Act**). National security concerns are a matter for the UK government, which may choose to intervene under the NSI Act if it finds concerns.

What evidence has the CMA looked at?

11. At phase 1, the CMA must establish whether there is a *realistic prospect* of an SLC which merits a reference to an in-depth phase 2 investigation, carried out by an independent panel. This is a lower threshold than that used during a phase 2 investigation, which requires the CMA to determine whether it is more *likely* than not that an SLC will result from the merger.
12. To understand the impact of the Merger on competition, the CMA considered a wide range of evidence in the round. The CMA received multiple submissions and responses to information requests from the Parties. As part of its phase 1 investigation, the CMA gathered data (including on shares of supply, switching by customers, tenders for MVNO contracts and prices) and reviewed a large number of internal documents from Vodafone and CK Hutchison to understand their businesses, financial performance, competitive strategies and plans, and the competitive landscape in which VUK and 3UK operate. The CMA also gathered evidence from other sector participants, including MNOs and MVNOs, as well as the Parties' retail business customers, which included both written and oral submissions as well as relevant data.
13. Throughout its phase 1 investigation, in line with its guidance in relation to merger investigations involving regulated sectors, the CMA also engaged with Ofcom given its sector expertise.

What did the evidence tell the CMA...

...about the effects on competition of the Merger?

14. The CMA looked at whether the Merger would lead to an SLC in the supply of retail mobile services and wholesale mobile services in the UK, comparing the competitive effects of the Merger against the conditions of competition that would exist without the Merger. The Parties submitted that, compared to BTEE and VMO2, VUK and 3UK are both sub-scale and do not currently generate sufficient returns to invest sustainably in their networks. The CMA's phase 1 analysis of the Parties' recent financial performance and internal strategic documents suggests that both VUK and 3UK are currently viable and competitive businesses and that they would continue to invest in their networks absent the Merger. The CMA therefore believes that if the Merger did not go ahead, 3UK and VUK would

continue to compete with each other, as well as with other mobile operators, in a broadly similar way as today.

15. The CMA found that the Merger raises significant competition concerns based on three theories of harm (ie hypotheses about how the Merger could harm competition):

(a) First, as a result of **horizontal unilateral effects in the supply of retail mobile services to both consumers and businesses in the UK.**

- (i) In general terms, the concern under horizontal unilateral effects essentially relates to the elimination of a competitive constraint by removing an alternative that customers could switch to. The CMA's main consideration is whether there are sufficient remaining good alternatives to constrain the merged entity post-merger. Where there are few 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.
- (ii) In the present case, the CMA is concerned that the Merger would eliminate competition between two major players in the supply of retail mobile services, whose smaller scale – in particular 3UK's – relative to the other MNOs currently gives them a strong incentive to compete aggressively for new customers. This is because the CMA believes that smaller MNOs have stronger incentives to increase their revenue, either through competing aggressively to achieve subscriber growth or seeking to find additional revenue streams, in order to be able to maintain and invest in their network. Evidence seen by the CMA suggests that 3UK, although the smallest MNO, is also the lowest priced MNO, and in the last four years has been pursuing growth strategies while improving its network quality and investing in 5G capability. Evidence seen by the CMA suggests that VUK has a strong brand, sustained network ambitions – including in relation to 5G – and a strategy to position itself as a converged challenger to VMO2 and BTEE, by offering both mobile and fixed telecommunication services.
- (iii) Combined, VUK and 3UK would become the largest mobile operator by revenue with a share of more than 30%, in a concentrated market. The CMA believes that due to its increased size, the Merged Entity may have less incentive to compete aggressively compared to each Party on a standalone basis, and in particular 3UK. The CMA believes that this may, in turn, reduce the competitive pressure faced by other mobile operators, in particular BTEE and VMO2, and that the remaining competitive constraints, including those posed by MVNOs (which are individually very small and some of which serve niche segments of the

market), are insufficient to offset this loss of competition. As a result, the CMA believes that the Merger may lead to higher retail mobile prices for consumers and businesses, and MNOs investing less in network quality.

- (iv) The CMA's competition concerns in the supply of retail mobile services are compounded by the loss of competition at the wholesale level – on the basis that the ability of MVNOs to compete effectively at the retail level depends on competition between MNOs at the wholesale level – and disruption to network sharing arrangements resulting from the Merger. Regarding the latter, the CMA is concerned that the Merged Entity may have the ability and incentive to disrupt the effective functioning of the two network sharing arrangements which could have the effect of limiting the constraint exerted by BTEE and VMO2.
- (b) Second, as a result of **horizontal unilateral effects in the supply of wholesale mobile services in the UK**.
- (i) As noted above, the concern under horizontal unilateral effects essentially relates to the elimination of a competitive constraint by removing an alternative that customers could switch to.
 - (ii) In the present case, the CMA is concerned that the Merger would reduce the number of MNOs competing to host other mobile operators on their networks from a maximum of four to a maximum of three (in circumstances where not all MNOs compete for all opportunities to host an MVNO on their network). Evidence seen by the CMA also suggests that both 3UK and VUK are regarded as credible wholesale suppliers and constrain each other when competing for tenders.
 - (iii) The CMA therefore believes that the loss of 3UK and VUK as independent competitors would diminish prospective and existing MVNOs' ability to leverage competition between MNOs, thereby placing them in a weaker negotiating position to obtain favourable wholesale access terms.
- (c) Third, the Merged Entity may gain access to its competitors' commercially sensitive information through its **participation in both MNO network sharing arrangements**.
- (i) Compared to the current situation, whereby each of VUK and 3UK are only party to one of the two MNO network sharing arrangements in the UK, the Merged Entity would be party to both network sharing arrangements. Although information sharing protocols exist, the CMA is nonetheless concerned that by participating in both network sharing arrangements, the Merged Entity may gain access to commercially

sensitive information of both its remaining MNO competitors. This could include data on investments, information on deployment plans, technical specifications, or any other commercial strategy information.

- (ii) The CMA is concerned that in the context of a concentrated market with only three remaining MNOs, the Merged Entity may be able to use this information to compete less aggressively because, for example, it may be able to predict its MNO competitors' commercial strategies and therefore tailor its own commercial strategies in response, such as by reducing its network investment to the minimum necessary to match its rivals. This may in turn deter the Merged Entity's rivals from making significant network investments, adversely affecting consumers.

...about any entry or expansion?

- 16. The CMA has seen no evidence of any scope for entry by MNOs due to high costs and the availability of spectrum. As regards MVNOs, the CMA believes 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, the CMA has 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.

...about the Parties' claimed efficiencies?

- 17. When announcing the proposed Merger, the Parties publicly made a number of claims about pro-competitive efficiencies and consumer benefits which they said would result from it. For example, the Parties said that from 'day one' (ie within the first 12-months from closing of the Merger) 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 over ten years to create one of Europe's most advanced standalone 5G 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).
- 18. Cost and revenue synergies often form part of the rationale for mergers, and it is not uncommon for firms to make efficiency claims in merger proceedings. Some studies have found that firms often do not fully realise the expected synergies from their mergers and, even for the synergies that they do realise, firms do not always pass on the benefits to their customers. Merger efficiencies therefore must be likely to be realised so as to ensure that customers in the UK do benefit overall from a merger; this means that the evidence supporting claimed future efficiencies needs to be verifiable.

19. If the CMA finds that a merger gives rise to competition concerns (as is the case here), it must then assess whether there are any ‘countervailing factors’ which prevent or mitigate any SLC arising from a merger, including potential efficiencies. There are two categories of efficiencies: (1) rivalry-enhancing efficiencies and (2) relevant customer benefits:
- (a) **Rivalry-enhancing efficiencies.** These are efficiencies resulting from a merger that make the merging firms stronger competitors. These efficiencies may prevent an SLC by offsetting any anti-competitive effects of the merger.
 - (b) **Relevant customer benefits.** These are specified benefits to UK customers that result from a merger. For example, a merger may lead to new innovations as a result of the combination of the unique assets of the merging firms. Relevant customer benefits can be taken into account in two ways: (1) as an exception to the duty to refer a merger for an in-depth phase 2 investigation (if the benefits outweigh the SLC and any adverse effects caused by the merger) and (2) in considering remedy options (for example, if an effective remedy option preserves benefits that alternative remedies do not).
20. Part way through the formal 40 working day phase 1 investigation, the Parties made detailed submissions to the CMA, including by providing economic modelling, which they submitted substantiated both rivalry-enhancing efficiencies and relevant customer benefits that the Merger would give rise to. The CMA has assessed the Parties’ modelling within the time constraints of a phase 1 investigation and has identified a number of potential issues which it considers limit the extent to which the CMA can rely on the modelling to substantiate the claims made, particularly in a phase 1 context.
21. For example, the CMA notes that the modelling relies on a number of assumptions (including about the number of sites and amount of spectrum to be deployed by the Merged Entity and the financial returns that the Merged Entity would generate from network investment, particularly in relation to standalone 5G). The Parties’ Joint Business Plan (**JBP**) and Joint Network Plan (**JNP**) are cited as evidence of the Merged Entity’s intentions but these plans do not take into consideration the competitive landscape post-Merger. In light of the competition concerns that the CMA has identified, the CMA believes that the Merged Entity may in fact have a strong commercial incentive to maximise its profits by rationalising and limiting investment in its network and raising its prices.
22. For these reasons, the CMA does not believe that there are sufficiently evidenced rivalry-enhancing efficiencies or relevant consumer benefits which either prevent the realistic prospect of an SLC or mean that the CMA should exercise its discretion not to refer the Merger for an in-depth phase 2 investigation.

What happens next?

23. As a result of these concerns, the CMA believes the Merger gives rise to a realistic prospect of SLCs in the supply of retail mobile services and wholesale mobile services in the UK.
24. The Parties have until 2 April 2024 to offer an undertaking which might be accepted by the CMA to address the SLCs. If no such undertaking is offered, or the CMA decides that any undertaking offered is insufficient to remedy its concerns to the phase 1 standard, then the CMA will refer the Merger for an in-depth phase 2 investigation pursuant to sections 33(1) and 34ZA(2) of the Act.
25. Following such a further detailed investigation, the CMA would reach a final decision as to whether or not the Merger gives rise to an SLC.

ASSESSMENT

1. PARTIES, MERGER AND MERGER RATIONALE

26. VUK, a wholly-owned subsidiary of Vodafone, is active in the UK and had a UK turnover of €6,824 million¹ for the year ending 31 March 2023.²
27. CK Hutchison's telecommunications business consists of its wholly-owned subsidiary CK Hutchison Group Telecoms Holdings Limited. 3UK, a wholly-owned subsidiary of CK Hutchison, is active in the UK and had a UK turnover of £[X] million for the year ending 31 December 2023.³
28. On 14 June 2023, Vodafone and CK Hutchison entered into a contribution agreement (the **Contribution Agreement**)⁴ relating to the establishment of a joint venture.⁵ 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; Vodafone will hold 51% of the issued share capital of this entity; and each of VUK and 3UK will sit as a wholly-owned subsidiary of this entity.⁶
29. The Parties submitted that the strategic and economic rationale for the Merger is as follows:⁷
- (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 converged players (BTEE and VMO2) and two weak players (VUK and 3UK).⁸ 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;⁹
 - (b) absent the Merger, VUK's and 3UK's lack of scale will further impede their ability to compete;¹⁰

¹ £5,899 million when using the average [exchange rate for EUR v GBP for the period 1 April 2022 to 31 March 2023](#).

² Final Merger Notice submitted to the CMA on 25 January 2024 (FMN), paragraph 3.2, Table 6.1.

³ Email from Freshfields Bruckhaus Deringer LLP to the CMA on 15 March 2024, 14:11.

⁴ Vodafone Annex VGP S109 1-1.0002.

⁵ FMN, paragraph 2.2.

⁶ FMN, paragraph 2.3.

⁷ FMN, paragraph 2.27.

⁸ FMN, paragraphs 2.28-2.32.

⁹ FMN, paragraphs 2.33-2.35.

¹⁰ FMN, paragraphs 2.36-2.38.

- (c) VUK and 3UK need greater scale to address the investment challenge posed by the need to deploy Advanced 5G¹¹ and address explosive growth in data traffic;¹² 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.¹³

30. Whilst most of the Parties’ internal documents discussing the Merger available to the CMA are broadly in line with their stated strategic and economic rationale, the CMA believes that it can place limited weight on such documents.¹⁴ Discussions in relation to the Merger commenced between the Parties [X] and as early as [X], 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.¹⁵

2. PROCEDURE

31. The CMA commenced its phase 1 investigation on 26 January 2024. As part of its phase 1 investigation, the CMA gathered a significant volume of evidence from the Parties. In response to targeted information requests, the CMA received and reviewed internal documents from Vodafone and CK Hutchison. The Parties also had opportunities to make submissions and comment on our emerging thinking throughout the phase 1 investigation. For example, on 29 February 2024 the CMA invited the Parties to attend an issues meeting, and the Parties submitted their views on the CMA’s issues letter dated 26 February 2024 (the **Issues Letter**) in writing.
32. The CMA also gathered evidence from other market participants, including competitors, wholesale customers and retail business customers of the Parties.

¹¹ Defined at paragraph 152.

¹² FMN, paragraphs 2.39-2.73.

¹³ FMN, paragraphs 2.74-2.87.

¹⁴ [Merger Assessment Guidelines \(CMA129\)](#), March 2021, paragraph 2.29(a).

¹⁵ Vodafone Internal Documents, VF_00003824_001, pages 5-7; VF_00003823_001, page 1; VF_00003792_001, pages 7 and 12; VF_00003827_001, pages 11-14; VF_00003795_001, pages 5-6. CK Hutchison Internal Documents, CKH_00000022, pages 3 and 8; CKH_00000055, page 20; CKH_00000056, pages 4 and 10.

33. The CMA has assessed the evidence it has gathered in the round, and the context in which the evidence was produced has been considered when deciding how much weight to give it.

34. The Merger was considered at a Case Review Meeting.¹⁶

3. JURISDICTION

35. A relevant merger situation exists where two or more enterprises cease to be distinct and either the turnover or the share of supply test is met.¹⁷

36. Each of VUK and 3UK is an enterprise within the meaning of section 129 of the Act. As a result of the Merger, Vodafone and CK Hutchison will combine these enterprises into the Merged Entity. This will result in Vodafone holding 51% of the issued share capital in the Merged Entity, and CK Hutchison holding the other 49%.¹⁸

37. Regarding levels of control, the CMA believes that:

- (a) Vodafone will have a controlling interest over the Merged 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 Merged Entity (which amounts to an acquisition of control for the purposes of section 26(3) of the Act). 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 Merged Entity's board of directors,¹⁹ and have [~~§~~] rights at the board and shareholder level over a large set of policy matters (including budgeting, finance, branding, and further acquisitions).²⁰

38. As a result of the acquisition by Vodafone of a controlling interest in the Merged 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 Merged Entity, VUK will cease to be distinct from enterprises controlled by CK Hutchison.

¹⁶ [Mergers: Guidance on the CMA's jurisdiction and procedure \(CMA2revised\)](#), January 2021, from page 65.

¹⁷ [CMA2revised](#), chapter 4; section 23 of the Act.

¹⁸ FMN, paragraphs 2.3-2.6.

¹⁹ Clause 5.1 of the Shareholders' Agreement, in agreed form as of 14 June 2023 (the **SHA**), provided as Annex VGP s109 1-1.0003 to the s109 notice dated 13 July 2023.

²⁰ Clauses 4.1 – 4.2 and Schedule 2 of the SHA.

39. The combined UK turnover of the businesses contributed to the Merged Entity exceeded £70 million in the last financial year, as referred to in paragraphs 26 and 27 above, so the turnover test in section 23(1)(b) of the Act is satisfied.
40. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

4. COUNTERFACTUAL

4.1 Relevant framework

41. The CMA's assessment of any merger involves a comparison of the prospects for competition with the merger against the competitive situation without the merger. The situation without (or 'absent') the merger is known as the 'counterfactual'. This is an analytical tool which, in a phase 1 investigation, helps the CMA to determine whether a merger gives rise to a realistic prospect of an SLC.²¹
42. 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 the CMA's analysis is usually not to the same level as in its competitive assessment.²² 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.²³
43. As a result of these limitations, the CMA considers the counterfactual in a broad sense. It focuses on significant changes to conditions of competition where there are reasons to believe that those changes would materially impact its competitive assessment (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).²⁴
44. The CMA's assessment of the counterfactual does not seek to ossify the market at a particular point in time. 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.²⁵

²¹ [CMA129](#), paragraphs 3.1.

²² [CMA129](#), paragraphs 3.6 and 3.7.

²³ [CMA129](#), paragraph 3.14.

²⁴ [CMA129](#), paragraphs 3.8 and 3.9.

²⁵ [CMA129](#), paragraph 3.3.

45. Further, at phase 1, the CMA is required to assess whether the merger creates a realistic prospect of an SLC.²⁶ For the purposes of the counterfactual assessment, this means that if the CMA must consider a range of potential counterfactual scenarios where each of those scenarios is a realistic prospect, it will choose the most competitive counterfactual, ie the one where the merger firms exert the strongest competitive constraint on each other, and where third parties exert the weakest competitive constraint on the merger firms.²⁷
46. Using this framework, the CMA has considered the Parties' submissions on the relevant counterfactual against which to assess the competitive impact of the Merger.

4.2 Parties' submissions

47. The Parties have not submitted that there will be any significant changes to the structure of the market going forwards (ie that either of VUK or 3UK should be assessed as 'exiting' the relevant markets or as entering into new markets).²⁸ However, the Parties have made several submissions on the importance of 'scale' in the UK mobile industry, VUK's and 3UK's lack of scale, and the impact the Parties' financial performance may have on their competitive capabilities in the future, absent the Merger.
48. In particular, the Parties submitted that:
- (a) the UK mobile industry is 'dysfunctional' and characterised by a bifurcated market structure, in which two scaled players (VMO2 and BTEE) earn sufficient returns to invest in improving their network quality, but lack incentive to do so, owing to limited competitive pressure from the remaining 'sub-scale' players (each of the Parties).²⁹ This means that, absent the Merger, the UK would continue to lag behind other European countries in respect of 5G roll-out, falling short of the UK government's ambitions,³⁰ leading to a progressive softening of competitive pressure in the market to the detriment of UK consumers, businesses and overall economic growth.³¹
 - (b) 3UK is 'trapped in a circle' of low scale, low returns and under-investment with no share of supply growth.³² While 3UK has recently made significant investments to improve network performance, both its network reputation and

²⁶ [CMA129](#), paragraphs 2.33 and 2.34.

²⁷ [CMA129](#), paragraph 3.12.

²⁸ For more information on the 'exiting firm scenario', see [CMA129](#), paragraphs 3.21-3.38.

²⁹ FMN, paragraphs 11.8-11.11.

³⁰ Parties' response to the Issues Letter, 4 March 2024, paragraph 2.1.

³¹ Parties' response to the Issues Letter, 4 March 2024, paragraphs 2.3 and 2.4.

³² FMN, paragraph 11.13.

brand reputation remain poor, and [REDACTED].³³ Certain areas of its network [REDACTED],³⁴ [REDACTED],³⁵ [REDACTED],³⁶ [REDACTED].³⁷ Based on returns achieved and expected from 3UK, [REDACTED].³⁸

(c) VUK is [REDACTED],³⁹ [REDACTED].⁴⁰ [REDACTED],⁴¹ [REDACTED]⁴² [REDACTED].⁴³ [REDACTED],⁴⁴ [REDACTED].⁴⁵ [REDACTED].⁴⁶

4.3 CMA assessment

49. The CMA assessed the extent to which the factors raised by the Parties would affect 3UK and VUK's ability and incentive to compete in the relevant markets absent the Merger. This is not the same exercise as appraising the commercial and financial success of the Parties, or determining the degree to which they may or may not be characterised as 'sub-scale' as compared to other MNOs.

4.3.1 The role of scale in the UK mobile industry

50. As discussed at paragraph 277(a), the Parties and third-parties have indicated that the UK mobile industry is characterised by high fixed costs and significant ongoing investment requirements, largely resulting from the need for each MNO to maintain its network infrastructure.⁴⁷ As such, a number of third-parties told the CMA that having sufficient scale (ie sufficient subscribers providing sufficient revenues to cover the costs of maintaining that infrastructure) is important to an MNO's ability to compete effectively.⁴⁸

51. Several third-parties also indicated that both Parties are likely to already generate sufficient revenues, based on a sufficient number of subscribers, to benefit from economies of scale.⁴⁹ Some third-parties also submitted that certain market features, such as the presence of network sharing arrangements, may reduce an MNO's investment costs.⁵⁰ One large MVNO suggested that VUK's and 3UK's

³³ FMN, paragraphs 11.13-11.20, 11.31-11.33; Parties' response to the Issues Letter, 4 March 2024, paragraph 2.11.

³⁴ FMN, paragraphs 11.16-11.17.

³⁵ FMN, paragraphs 11.47, 11.49.

³⁶ Parties' response to the Issues Letter, 4 March 2024, paragraph 2.5.

³⁷ FMN, paragraph 11.37.

³⁸ FMN, paragraphs 11.56-11.64; Parties' response to the Issues Letter, 4 March 2024, paragraphs 2.24 – 2.28.

³⁹ FMN, paragraphs 11.69-11.71.

⁴⁰ Parties' response to the Issues Letter, 4 March 2024, paragraph 2.29.

⁴¹ FMN, paragraph 11.78.

⁴² The terms Advanced 5G, NSA 5G and 5G SA used in the Counterfactual section are as defined in section 5.1.4.3.1.

⁴³ FMN, paragraph 11.68.

⁴⁴ FMN, paragraphs 11.75-11.76, 11.81; Parties' response to the Issues Letter, 4 March 2024, paragraph 2.29.

⁴⁵ Parties' response to the Issues Letter, 4 March 2024, paragraph 2.30.

⁴⁶ FMN, paragraphs 11.88-11.91.

⁴⁷ FMN, paragraph 1.13 and responses to the CMA competitor and wholesale questionnaire from third parties, January 2024.

⁴⁸ Responses to the CMA competitor and wholesale questionnaire from third parties, January 2024.

⁴⁹ Responses to the CMA competitor and wholesale questionnaire from third parties, January 2024.

⁵⁰ Responses to the CMA competitor questionnaire from third parties, January 2024.

recent network investments may have ‘deflated’ some measures of profitability in the short term but ensured that each will continue to be competitive in the long term. The same MVNO also suggested that the position of firms within a market is likely to naturally fluctuate over time depending on the strategic and business choices that firms make, but that both Parties had recently benefited from strong growth performance as compared to the market, and that both are healthy, sizable businesses with clear ambitions to grow.⁵¹

52. Ofcom has noted that it considers that some variation in financial returns (as measured by return on capital employed (**ROCE**) compared to the weighted cost of capital (**WACC**)⁵² is to be expected in a market where there are significant economies of scale and competitors of different sizes and where those competitors have different strategies, and that there is scope for smaller MNOs to improve their financial performance by continuing to compete (and invest).⁵³ It has however, recognised that this is uncertain and alternative scenarios exist.
53. In assessing the Parties’ ability and incentive to continue to provide a competitive constraint absent the Merger, the CMA analysed the Parties’ submissions, their financial performance, and internal documents.

4.3.2 3UK

54. The CMA has assessed whether – absent the Merger – 3UK would become a weaker competitor such that the prevailing conditions of competition is not the appropriate counterfactual.⁵⁴
55. The CMA notes that the starting point for this analysis is the CMA’s finding that 3UK exerts a competitive constraint on other mobile operators in the supply of retail mobile services and wholesale mobile services⁵⁵ (for the reasons set out in detail in the competitive assessment at section 5).
56. The CMA has considered – given the Parties’ submissions – whether 3UK’s competitive position may deteriorate significantly absent the Merger as a result of the challenges that the Parties submitted 3UK faces.

⁵¹ Third-party submission to the CMA, October 2023.

⁵² ROCE is a measure which compares the profit theoretically available to providers of capital (meaning equity and debt funding), usually using operating profit or Earnings Before Interest and Tax (**EBIT**) (‘return’), to a company’s total net equity and debt funding (‘capital employed’). ROCE is often benchmarked against the WACC, which is an estimate of the average return on investment that providers of capital – both debt and equity – expect, given the risks associated with a particular business, business model or industry.

⁵³ [Ofcom’s future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.32. Ofcom bases this conclusion on its analysis of average industry returns by MNOs being above the average cost of capital between 2019-2021.

⁵⁴ The CMA generally compares the competitive effects of a merger against the prevailing conditions of competition, unless it has evidence to suggest otherwise.

⁵⁵ As set out in section 5.2.3 and defined in paragraph 233.

57. For the purposes of this assessment, the CMA has considered evidence of:
- (a) 3UK's historic financial performance over time (contextualised by its internal documents);
 - (b) the impact of 3UK's recent network investment on its financial performance and on its network quality;
 - (c) its future plans, including internal documents that consider its future competitive capability; and
 - (d) CK Hutchison's incentive to continue to support 3UK.

4.3.2.1 3UK's ability and incentive to continue to provide competitive constraint

58. The CMA assessed 3UK's profitability over the period FY17 – FY22 (Appendix A, section 9.1.1).⁵⁶ 3UK's performance over this period has been stable (with no significant revenue loss) and consistently profitable.
59. While 3UK's profitability has [redacted]⁵⁷ [redacted].^{58,59} The CMA does not find evidence that 3UK is facing such financial difficulty that it is at risk of financial failure (and notes that the Parties have confirmed that this is not the case).⁶⁰
60. 3UK's strategy appears to have shifted [redacted] non-standalone 5G (**NSA 5G**) [redacted] in order to achieve this.
- (a) In its budget presentation planning for FY18 (prepared in November 2017), 3UK identified challenges (such as low brand recognition and difficulty growing revenue in the context of the industry's low growth rate),⁶¹ but presented ambitious targets to grow its gross profit (through subscriber growth) at a compound annual growth rate (**CAGR**)⁶² of [10-20]% from FY17 to FY22, while maintaining yearly capital expenditure (**capex**) at near constant levels.⁶³ This suggests that at this point in time, 3UK anticipated achieving subscriber and revenue growth without needing significant network quality investments.

⁵⁶ 3UK's performance over the period FY17 – FY22 [redacted].

⁵⁷ When measured by unlevered free cashflow (**UFCF**).

⁵⁸ [redacted].

⁵⁹ [redacted].

⁶⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 2.

⁶¹ CK Hutchison Confidential Annex CKH S109-1 8.009, [redacted].

⁶² CAGR gives an average yearly growth metric which aids comparability across different companies by dampening the effect of volatility in performance over several periods (as compared to a standard arithmetic mean).

⁶³ CK Hutchison Confidential Annex CKH S109-1 8.009, [redacted].

(b) However, later, in its budget presentation for [REDACTED] (discussed at paragraph 103).⁶⁴

(c) In subsequent budgeting documents [REDACTED].⁶⁵ [REDACTED].

61. Evidence from 3UK's internal documents suggests that 3UK's significant investment in its network is showing early signs of success, both in network quality and in recent revenue growth. Internal documents suggest that 3UK's network quality has improved, and that 3UK now outperforms VMO2 and has narrowed the gap with VUK:

(a) Internal documents show that during 2021, 3UK moved ahead of VMO2 on Umlaut's MNO benchmarks.⁶⁶ Specifically, 3UK moved from fourth to third best in overall network performance and was ranked as second best in 'data'.⁶⁷

(b) Internal documents also show that 3UK was recognised as the most improved network in 2021 and 2022 according to Umlaut benchmarks.⁶⁸ In one internal document from 2023, 3UK mentioned that [REDACTED].⁶⁹ Another internal document shows that 3UK is closing the network quality gap between itself and VUK. The same document shows that 3UK has maintained its lead over VMO2 ever since it moved ahead of VMO2 in 2021.⁷⁰

(c) One internal document from 2022 shows that 3UK received a 'Speedtest Award' from Ookla for the 'Fastest 5G Network' in the UK. In the same document, 3UK mentions that [REDACTED].⁷¹

(d) An internal document from 2023 shows that during the period between 2021 and 2023, the proportion of customers leaving 3UK [REDACTED].⁷² The same internal document notes that these trends demonstrate [REDACTED].⁷³ Another internal document supports this view, highlighting that [REDACTED].⁷⁴

62. The Parties submitted that 3UK [REDACTED], as mentioned in paragraph 48(b). The CMA notes that 3UK [REDACTED] records its spare data capacity and its congestion levels

⁶⁴ CK Hutchison Confidential Annex CKH S109-1 8.013, pages 46, 47, 76, 84, 85.

⁶⁵ CK Hutchison Internal Document CKH_00000854.

⁶⁶ As noted in paragraph 130(a), both Parties monitor their quarterly Umlaut results and these measures are referenced in their board level documents.

⁶⁷ CK Hutchison Internal Documents, CKH_00000952, page 45; CKH_00003613, page 3.

⁶⁸ CK Hutchison Internal Documents, CKH_00000204, page 36; CKH_00000062, page 34.

⁶⁹ CK Hutchison Internal Document, CKH_00000062, page 34.

⁷⁰ CK Hutchison Internal Document, CKH_00001186, page 44.

⁷¹ CK Hutchison Internal Document, CKH_00000071, page 34.

⁷² In response to the CMA's Issues Letter, [REDACTED] (see Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 17). [REDACTED] (CK Hutchison Internal Document, CKH_00005965, page 3).

⁷³ CK Hutchison Internal Document, CKH_00001029, page 41.

⁷⁴ CK Hutchison Internal Document, [REDACTED], page 50.

[REDACTED].⁷⁵ Evidence from these documents suggests that 3UK has successfully reduced congestion on its network since 2021 by increasing capacity. For example:

(a) Internal documents show that [REDACTED].⁷⁶ [REDACTED].⁷⁷ [REDACTED].⁷⁸

(b) Internal documents show that congestion on 3UK's network has fallen [REDACTED].⁷⁹ The CMA notes that the [REDACTED] described at paragraph 285.⁸⁰

63. In terms of financial performance, 3UK has also seen significant recent growth, [REDACTED] fixed wireless access (**FWA**).⁸¹ 3UK has publicly described its performance as outperforming competitors across the telecommunications industry, stating that the business had achieved 'almost double the growth of our competitors combined', when considering overall contract net adds in 2022.⁸²
64. While this investment has not yet translated into significant growth in 3UK's overall share of supply at the retail level (see Table 3), the CMA notes that the Parties submitted – in the context of their JBP – that 'it is typical to work to multi-year investment plans that deliver benefits over a decade or more' in the telecommunications industry.⁸³ A third-party MNO also told the CMA that [REDACTED].⁸⁴
65. 3UK's most recent budget [REDACTED].⁸⁵ [REDACTED].⁸⁶ The CMA also notes that 3UK's future plans demonstrate that [REDACTED].⁸⁷ The Parties submitted that 3UK's plans are [REDACTED].⁸⁸ The CMA recognises that there is inevitably some uncertainty over whether targets will be met. However, the CMA believes that it is reasonable for it to place weight on 3UK's own perspective of its forward-looking competitive capability as presented to its ultimate shareholder.

⁷⁵ For example, CKH Hutchison Internal Document CKH_00001187.

⁷⁶ CK Hutchison Internal Documents, CKH_00000202, page 55; CKH_00000203, page 60; CKH_00000204, page 38.

⁷⁷ CK Hutchison Internal Documents, CKH_00000201, page 45; CKH_00001187, page 51.

⁷⁸ CK Hutchison Internal Document, CKH_00001187, page 51.

⁷⁹ CK Hutchison Internal Documents, CKH_00000074, page 53; CKH_00001187, page 50.

⁸⁰ The Parties submitted in response to the CMA's Issues Letter that [REDACTED]. In the time available for its phase 1 assessment, the CMA considers that 3UK's assessment of its network capacity performance over the course of time measured in its internal documents is likely to be indicative of its changing view of capacity.

⁸¹ See Appendix A, section 9.1.2.

⁸² See '[Three UK publishes Full Year Results](#)', 16 March 2023. 3UK also noted publicly that the Business customer base had doubled year-on-year; and that its FWA (5G Home) customer base had tripled year-on-year.

⁸³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 273.

⁸⁴ Note of call with a third-party, October 2023.

⁸⁵ CK Hutchison Internal Document, [REDACTED], pages 10 and 13.

⁸⁶ CK Hutchison Internal Document, [REDACTED], pages 15, 39, 40, 41, 42

⁸⁷ CK Hutchison Internal Document, [REDACTED], page 34. The CMA notes that [REDACTED]. [REDACTED] (see CK Hutchison Internal Document, CKH_00000804, page 2, CK Hutchison Internal Document, CKH_000000838, page 3; CK Hutchison Internal Document [REDACTED], page 34). [REDACTED]. [REDACTED].

⁸⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 20.

66. Given that 3UK's performance contributes to a significant proportion of CK Hutchison's telecommunications business performance,⁸⁹ and it contributes positively to the group's profitability and revenue growth (see Appendix A, section 9.1.4), the CMA does not believe that there is evidence of an incentive for CK Hutchison to cease its support of 3UK.

4.3.2.2 *Conclusion on 3UK's ability and incentive to continue to provide competitive constraint in the relevant markets*

67. For these reasons set out above, the CMA believes that there is a realistic prospect that 3UK will have both the ability and incentive to continue to compete in broadly the same way as currently observed in the supply of retail mobile services and wholesale mobile services, absent the Merger.

4.3.3 **VUK**

68. As for 3UK, the CMA notes that the starting point for this analysis is the CMA's finding that VUK exerts a competitive constraint on other mobile operators in the supply of retail mobile services and wholesale mobile services (for the reasons set out in detail in the competitive assessment at section 5).

69. The CMA has therefore assessed whether VUK's competitive position may deteriorate significantly absent the Merger. In assessing this, the CMA has considered:

- (a) Evidence of VUK's financial performance in the context of the Vodafone group, including as assessed by internal documents; and
- (b) VUK's future plans, including as outlined in its internal documents.

⁸⁹ Based on publicly available financial reporting, the CMA notes that the global telecommunications business of CK Hutchison is likely to be important to the group as a whole. CK Hutchison's published financial reporting shows that, while the telecommunications business generated only 20% of total revenue in FY22, it disproportionately contributed to group profitability: as assessed by CK Hutchison, the telecommunications business comprised 35% of total reported EBITDA and 27% of total reported EBIT. This compares favourably to other less profitable divisions of the CK Hutchison business (such as its retail business, which generated 37% of FY22's total group revenue but 12% of profitability as measured by reported EBITDA). The CMA also notes that 3UK, within CK Hutchison's telecommunications business, is also likely to be considered significant. In FY22, the UK business contributed 29% of the telecommunications business's revenues, 24% of its 'underlying' EBITDA. A further assessment of 3UK's financial performance as compared to the wider CK Hutchison group over time shows that its revenue growth has performed in line with other divisions of CK Hutchison's telecommunications business (see Appendix A, Figure 17). While its margins (as measured by EBITDA margin) have consistently been low compared to other group operating segments (see Appendix A, Figure 18), it has been consistently profitable and contributing to group performance in this metric.

4.3.3.1 Evidence of VUK's financial performance, including in the context of the Vodafone group

70. The CMA conducted an assessment of VUK's financial performance in the context of the broader Vodafone group, including considering performance metrics used by the Vodafone group and the evolution of these over time. Based on its review of internal documents and assessment of financial performance, the CMA notes that:

- (a) A number of Vodafone's internal documents highlight global challenges associated with the telecommunications industry as compared to other markets, and with [redacted].⁹⁰ Considering ROCE and WACC metrics in particular, internal documents show that in several markets, [redacted].⁹¹ Internal documents also suggest a plan and expectation [redacted].⁹²
- (b) VUK is likely to be considered important to the Vodafone group. Vodafone's latest published financial report (for FY23) showed that VUK represents Vodafone's second largest market and contributes 14% of total global service revenue.⁹³ In publicly available financial reporting, the UK business has outperformed other Vodafone operating companies in some metrics and has underperformed in others. As can be seen at Appendix A, Figure 19, VUK's revenue growth has been largely in line with the group's performance, with the UK more recently outperforming other Vodafone geographies to show some of the highest growth rates in Europe. In line with VUK's revenue growth performance compared to the Vodafone group, several internal documents highlight VUK [redacted].⁹⁴ Considering profitability over a more extended period of time (measured with EBITDA⁹⁵ margins) VUK has underperformed against Vodafone's other operating companies, and its margins have been in decline over recent periods (see Appendix A, Figure 20). For the purposes of its counterfactual assessment, the CMA notes, however, that VUK has consistently shown EBITDA profitability over this period and in this respect, has contributed positive profitability to the Vodafone group's headline performance. The CMA also notes that, while VUK has made EBIT⁹⁶ losses over the period FY20 – FY22, it has achieved

⁹⁰ Vodafone Internal Documents, VF_00000501, pages 4, 5, 6, 8, 9 ; VF_00003832, page 1; and VF_00003796, pages 3, 4.

⁹¹ Vodafone Internal Document, VF_00000501, page 23.

⁹² Vodafone Internal Documents, VF_00000501, pages 23, 87; VF_00004673, pages 14, 16. See also Vodafone Internal Document, VF_00034085, page 39. [redacted].

⁹³ Service revenue is a significant subsegment of total revenue measured and reported by Vodafone and is the focus of several of its key performance indicators. The UK's contribution to Vodafone's service revenue is taken from [Vodafone's Annual Report for FY23](#).

⁹⁴ Vodafone Internal Documents, VF_00000501, page 9, 13, and VF_00003796 pages 6, 8.

⁹⁵ EBITDA means Earnings Before Interest, Tax, Depreciation and Amortisation. It is a profit metric which disregards capital structure (interest), jurisdiction (tax), and asset-related non-cash expenses (depreciation and amortisation) to aid comparability of companies' performance and is resultingly a key measure for external reporting for many different types of businesses and business models.

⁹⁶ EBIT means Earnings Before Interest and Tax and is largely equivalent to 'operating profit'.

a return to EBIT profitability more recently in FY23. In respect of cashflow, the CMA notes that internal documents indicate that the VUK business generated [REDACTED].⁹⁷

4.3.3.2 Evidence of VUK's strategic plans

71. The CMA has seen significant evidence in internal documents of VUK's strategy to continue to compete (and invest) in the relevant markets. These are discussed further at section 5.4.1.3.2.2. Of particular relevance to the Parties' submissions are VUK's internal documents setting out [REDACTED] standalone 5G (**5G SA**), [REDACTED].⁹⁸ This is consistent with the Parties' submissions that VUK has various ambitions related to [REDACTED],⁹⁹ [REDACTED].¹⁰⁰
72. The Parties submitted that VUK's plans have an inherent element of ambition and stretch targets,¹⁰¹ and [REDACTED].¹⁰² The CMA recognises that many businesses, including Vodafone, may alter and adapt plans over time, taking account of performance and funding abilities. However, the CMA believes that it is reasonable for it to place weight on Vodafone and VUK's own perspective of VUK's forward-looking competitive capability.

4.3.3.3 Conclusion on VUK's ability and incentive to continue to compete in the relevant markets

73. The CMA believes that, based on the evidence discussed, Vodafone does not have the incentive to cease supporting VUK's ongoing competitive capability or deteriorate its value. Further, the CMA notes that the Parties submitted, and this is supported by internal documents reviewed by the CMA, that VUK has [REDACTED] plans to continue to invest in its network quality.
74. For the reasons set out above, the CMA believes that there is a realistic prospect that VUK will have both the ability and incentive to continue to compete – in broadly the same way as currently observed – in the supply of retail mobile services and wholesale mobile services, absent the Merger.

⁹⁷ [REDACTED]. The CMA notes that the Parties submitted that [REDACTED] (see Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 26.) However, as discussed at Appendix A, paragraph 907, based on the information currently available to it, the CMA considers that Vodafone's internal documents provide a representative view of Vodafone's perspective on its performance.

⁹⁸ Vodafone Internal Documents, VF_000004673_001, pages 81-82, and 85; VF_00000951_001, pages 1-2; VF_00004767_001, pages 5-6; VF_00000898_001, page 6; and VF_00004795_001, page 12.

⁹⁹ FMN, paragraph 11.79.

¹⁰⁰ FMN, paragraph 11.81.

¹⁰¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 22 and 29.

¹⁰² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 22, 27 – 29.

4.4 Conclusion on the relevant counterfactual

75. For the reasons set out above, the CMA believes that the appropriate counterfactual against which to assess the impact of the Merger is the prevailing conditions of competition.

5. COMPETITIVE ASSESSMENT

5.1 Background and nature of competition

76. This investigation involves the anticipated merger between two of the four MNOs currently operating in the UK. This section provides an overview of the markets in which the Parties are active, focusing on the products and services relevant to the CMA's competitive assessment.

5.1.1 Overview of mobile services

77. Mobile services play an integral role in the daily lives of consumers and businesses in the UK. The UK telecoms sector generated £31.8bn in revenue in 2022, a year-on-year decline of £1.5bn (5%). Retail fixed and mobile services generated £14.0bn and £12.9bn respectively, with wholesale fixed and mobile services making up the remaining £4.9bn. Mobile services accounted for 48% of total retail revenues in 2022, an increase of 1.4 percentage points from 2021. The total number of mobile subscriptions increased by 3% to 111.8 million in 2022.¹⁰³
78. As already noted, Ofcom is the communications regulator in the UK and publishes key data on the telecommunications industry.¹⁰⁴ Based on Ofcom's most recent publications, the telecommunications industry in the UK is a historically well-developed and mature market.¹⁰⁵
79. In recent years, mobile internet access has become an essential service for people and businesses and Ofcom expects the demand for mobile data to grow to meet changing customer needs, although it notes that the future rate of growth is uncertain.¹⁰⁶ Ofcom has therefore considered three different scenarios for growth in mobile traffic up to 2035 – see Figure 1.

¹⁰³ [Ofcom Communications Market Report](#), July 2023. The increase in total number of mobile subscriptions was due to increases in the number of subscriptions for all connection types, with the largest increase (1.6 million, or 7%) being for Machine-to-Machine subscriptions.

¹⁰⁴ Most recently Ofcom published its annual report: [Ofcom Connected Nations: UK Report 2023](#), December 2023; and [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022.

¹⁰⁵ 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.

¹⁰⁶ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), 6 December 2022.

Figure 1: Ofcom three estimated scenarios for data traffic growth



Source: [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, page 14.

80. In one of its most recent reports, Ofcom reported that mobile traffic continues to grow, with overall traffic levels increasing by around 25% year on year, compared to a rise of approximately 27% between 2021 and 2022.¹⁰⁷ 3UK's internal documents show [X].¹⁰⁸
81. 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 in December 2022 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 seems less likely in the next few years.¹⁰⁹ More recently, in July 2023 Ofcom found that average monthly data volume per mobile data user increased by 1.6 gigabytes (GB) or 24% in 2022. This represented a slightly higher percentage growth than the 23% increase found in 2021.¹¹⁰ In part, the uncertainty of the future rate of growth of mobile data is dependent on the update of new technologies dependent on NSA 5G and 5G SA (defined at section 5.1.4.3.1).

¹⁰⁷ [Ofcom Connected Nations: UK Report 2023](#), December 2023, page 35.

¹⁰⁸ FMN, Confidential Annex CKH 11.002, page 3.

¹⁰⁹ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.7.

¹¹⁰ [Ofcom Communications Market Report](#), July 2023, page 2.

5.1.2 Mobile telecommunications services providers in the UK

5.1.2.1 MNOs

82. 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.

5.1.2.1.1 VUK

83. 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.

84. VUK had 16.7 million mobile subscribers in Q3 2023.¹¹¹

85. VUK has a network sharing arrangement with VMO2. This is described in more detail in section 5.1.7.3

5.1.2.1.2 3UK

86. 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'.¹¹²

87. 3UK had 10.7 million mobile subscribers in Q3 2023.¹¹³

88. Superdrug is an MVNO hosted on 3UK's network and is a sister company within the CK Hutchison group. As of 2022, Superdrug had [X] subscribers.¹¹⁴

89. 3UK has a network sharing agreement with BTEE. This is described in more detail in section 5.1.7.2.

5.1.2.1.3 BTEE

90. 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

¹¹¹ FMN, Table 15.13.

¹¹² Three, [Broadband without Landline | Broadband Only Deals | Three](#).

¹¹³ FMN, Table 15.13.

¹¹⁴ FMN, Annex 15.00001.

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.

91. 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 plans to focus on EE as its primary brand for consumers, with plans to close the Plusnet mobile brand and BT Mobile no longer available to new customers.¹¹⁵
92. BTEE operates exclusively in the UK and offers both fixed and mobile communications services to consumers, businesses.
93. BTEE had 21.1 million mobile subscribers in Q3 2023.¹¹⁶
94. As described above, BTEE is in a network sharing agreement with 3UK.

5.1.2.1.4 VMO2

95. 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.
96. VMO2 launched its sub-brand Giffgaff in 2009 and is a 50% owner of Tesco Mobile, the largest MVNO in the UK.
97. VMO2 offers a fixed cable and fibre business alongside its mobile business.
98. VMO2 had 24.1 million subscribers in Q3 2023.¹¹⁷
99. As mentioned above, VMO2 has an active network sharing arrangement with VUK.

¹¹⁵ FMN, paragraph 15.11.

¹¹⁶ FMN, Table 15.13.

¹¹⁷ FMN, Table 15.13.

5.1.2.1.5 *Spectrum and respective spectrum holdings*

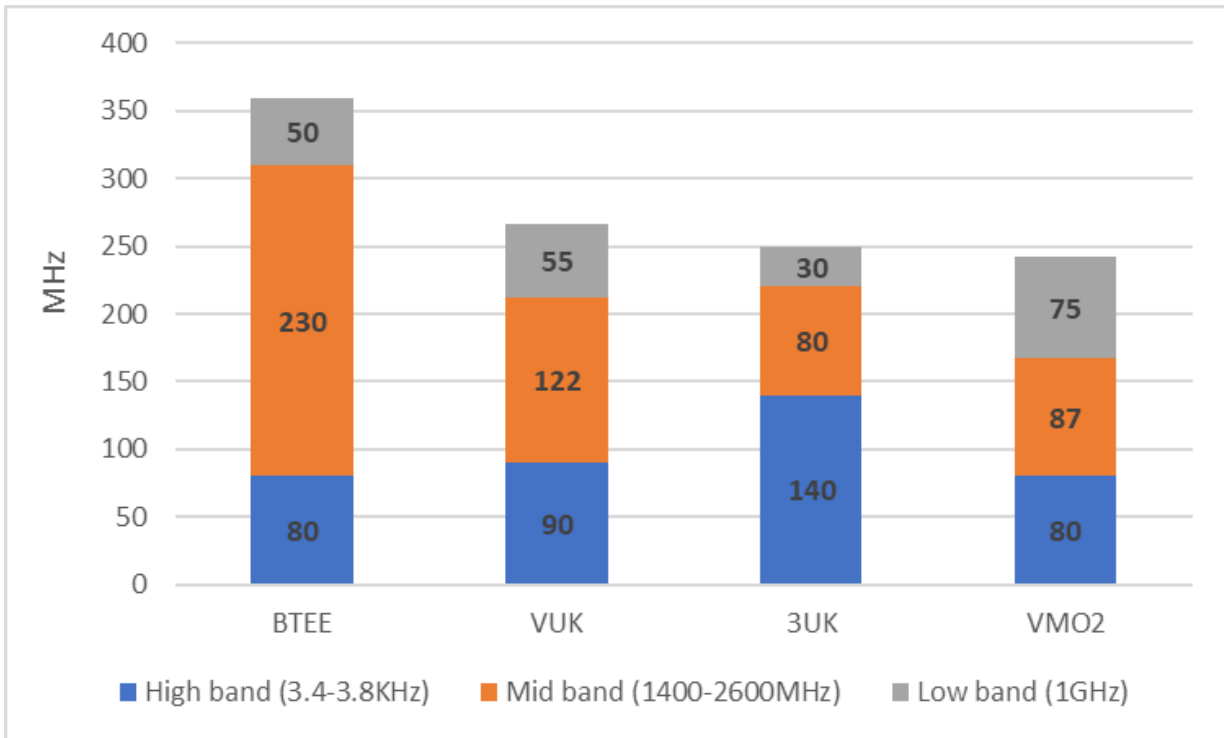
100. Spectrum is the range of available radio frequencies. Ofcom is responsible for spectrum allocation in the UK and as part of this responsibility, it must have regard to, among other things, the promotion of competition.¹¹⁸
101. Spectrum is essential to deliver mobile services and MNOs require a balance 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.¹¹⁹
102. Figure 2 gives an overview of the current allocation of spectrum. In order to supply 5G, the optimal spectrum band is the high band between 3.4-3.8 GHz (also referred to as **C-band** spectrum).¹²⁰ C-band spectrum plays an important role in delivering Advanced 5G use cases in conjunction with 'massive MIMO' (**mMIMO**) Radio Access Network (**RAN**) equipment.

¹¹⁸ 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 2100 MHz \(1900 - 1920 MHz\) spectrum](#), March 2023.

¹¹⁹ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 3.6.

¹²⁰ 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.

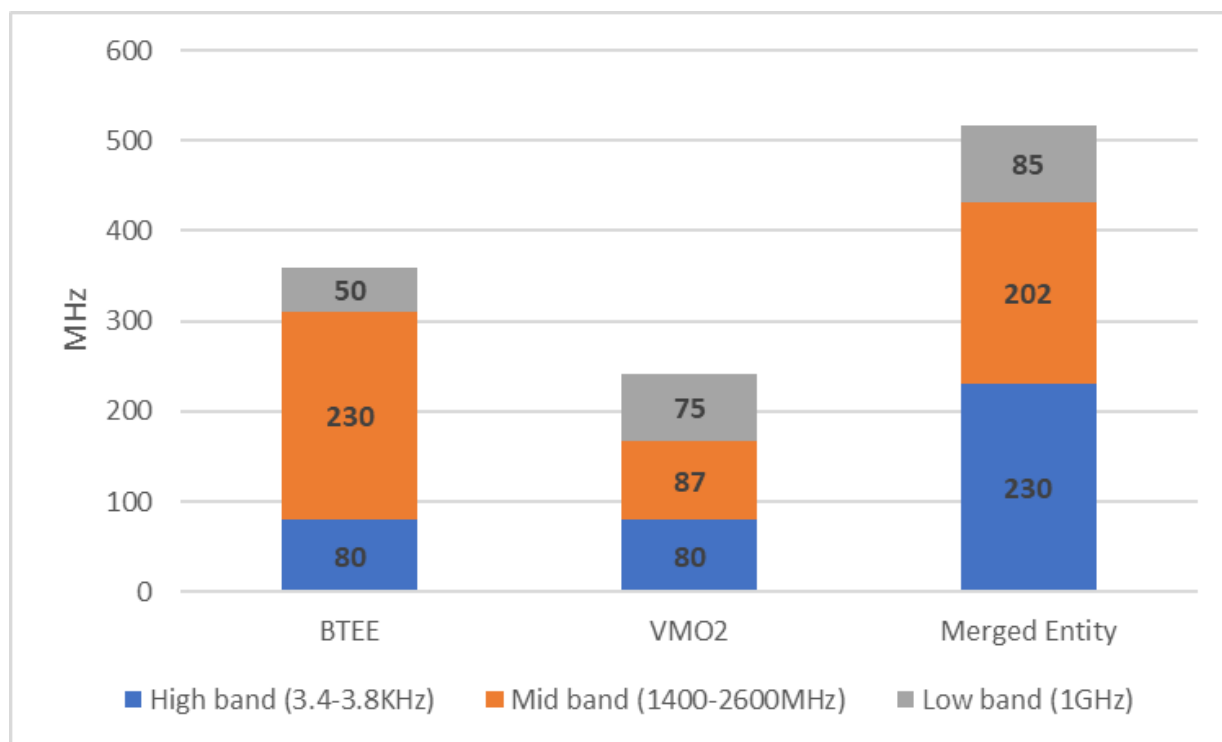
Figure 2: Mobile spectrum holdings in the UK



Source: FMN, Figure 15.1.

103. As is evident from Figure 2, 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 3 below, after the Merger the Merged Entity would own 46% of total spectrum below 6 GHz, 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 3: Post-Merger mobile spectrum holdings in the UK



Source: CMA analysis based on FMN, Figure 15.1.

104. [redacted].

5.1.2.2 MVNOs

105. MVNOs are operators which do not own their own national radio network, instead entering into wholesale agreements with an MNO to enable the MVNO to use its network as an input to provide retail mobile services to consumers and business customers.

106. MVNOs can be either ‘full’ or ‘light’.¹²¹

- (a) Full MVNOs 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 their network infrastructure and are only dependent on MNOs for the RAN that delivers connectivity. Only a few MVNOs are full MVNOs: Sky Mobile, Tesco Mobile, Lyca Mobile and Truphone,¹²² however full MVNOs supply [80-90]% of all subscribers supplied by MVNOs.¹²³

¹²¹ FMN, paragraph 15.409. 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.

¹²² [redacted] (FMN, paragraph 15.409 (ii)).

¹²³ Based on FMN, Annex 15.00001 excluding “Other”, [redacted].

- (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, 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.

107. 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.
108. Table 1 shows the ten largest MVNOs in the UK by number of subscribers. Each of these is discussed in turn below, with the exception of Superdrug which is discussed in section 5.1.2.1.2.

Table 1: Ten largest MVNOs in the UK by number of subscribers

<i>MVNO</i>	<i>Network</i>	<i>Launch</i>	<i>Full/Light</i>	<i>Number of subscribers (as of 2022)</i>
Tesco Mobile*	VMO2	2003	Full	5.4 million
Sky Mobile	VMO2	2017	Full	3.0 million
Lebara	VUK	2007	Light	[>]
Lyca Mobile	BTEE	2006	Full	1.7 million
iD Mobile	3UK	2015	Light	[>]
Utility Warehouse	BTEE	2002	Light	380,000
Asda Mobile	VUK	2007	Light	[>]
Gamma	3UK/BTEE	2001	Light	[>]
TalkTalk	VUK	2003	Light	[>]
Superdrug**	3UK	2018	Light	[>]

Source: FMN, Annex 15.00001.

* Joint venture between Tesco and VMO2

**Superdrug is a CK Hutchison subsidiary

5.1.2.2.1 Tesco Mobile

109. 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 5 million subscribers as of 2022. It offers mobile network services on pay monthly (**PAYM**) and pay-as-you-go (**PAYG**) handset and SIM-only (**SIMO**) deals.¹²⁴

5.1.2.2.2 Sky Mobile

110. Sky Mobile launched in January 2017. It has grown rapidly, leveraging a strong brand in fixed broadband and entertainment services to grow its subscriber base

¹²⁴ FMN, paragraph 15.32.

to over 3 million as of 2022, and is by far the largest independent MVNO. Sky Mobile is hosted on VMO2's network.¹²⁵

5.1.2.2.3 *Lebara*

111. Lebara Group, trading as Lebara, is present as an MVNO in the UK, across Europe, Saudi Arabia, and Australia. Lebara is hosted on VUK's network and has been since its UK launch in 2007. As of 2022, Lebara had approximately [X] subscribers. Traditionally, Lebara was known for targeting a niche customer segment but over the past few years, Lebara has repositioned itself to provide a value proposition to the mass market.¹²⁶ Lebara has also transitioned to a full MVNO in Germany and France [X].¹²⁷

5.1.2.2.4 *Lyca Mobile*

112. Lyca Mobile was established in 2006 as an international MVNO with a focus on low-cost inter-country telecoms services. It entered the UK market in 2007. As of 2022, 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 2023, Lyca Mobile switched to the BTEE network and is in the process of migrating its customers. Lyca Mobile has expanded its mobile service offerings in the UK, with PAYM contracts as well as PAYG SIM contracts.¹²⁸

5.1.2.2.5 *iD Mobile*

113. iD Mobile is a UK-based MVNO founded in 2015 with approximately [X] customers in the UK as of 2022. 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. iD Mobile has historically focused on a core market of younger customers, typically within the age range 18-34, but has stated that it aims to expand its share of supply beyond this core audience.¹²⁹

5.1.2.2.6 *Utility Warehouse*

114. Telecoms Plus Plc, trading as Utility Warehouse, is the UK's only fully integrated multiservice retailer that offers customers a range of home services bundled into

¹²⁵ FMN, paragraph 15.32.

¹²⁶ FMN, paragraph 15.32.

¹²⁷ FMN, paragraph 15.409(ii).

¹²⁸ FMN, paragraph 15.32.

¹²⁹ FMN, paragraph 15.32.

one monthly bill, including energy, broadband, home insurance and mobile services. As of 2022, Utility Warehouse had approximately 380,000 mobile customers. Utility Warehouse announced in September 2020 an extension to its agreement with host BTEE, which has been in place for over 20 years.¹³⁰

5.1.2.2.7 *Asda Mobile*

115. Asda Mobile is a UK MVNO, with approximately [X] subscribers as of 2022. Asda Mobile launched in 2007 and has been hosted on VUK's network since entry. Asda Mobile offers smaller data allowances, with its cheapest bundle starting at £5 for 3GB of data and unlimited minutes and texts.¹³¹

5.1.2.2.8 *Gamma*

116. Gamma is an MVNO which offers mobile services to business (in addition to its business broadband services). 3UK hosts approximately [X] of Gamma's subscriber base, [X].¹³² As of 2022, Gamma had approximately [X] mobile subscribers with 3UK.

5.1.2.2.9 *TalkTalk*

117. TalkTalk is currently hosted on VUK's network and had approximately [X] mobile subscribers, as of 2022. It is also the fourth largest broadband provider in the UK. [X].¹³³

5.1.3 **Parameters and nature of competition at the retail level**

5.1.3.1 *Parties' submissions*

118. 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.¹³⁴ The Parties further submitted that key elements of non-price competition are network quality, brand, quality of customer service and supplementary factors, such as handset range.¹³⁵

119. 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

¹³⁰ FMN, paragraph 15.32.

¹³¹ FMN, paragraph 15.32.

¹³² FMN, footnote 541.

¹³³ FMN, paragraph 15.402.

¹³⁴ FMN, paragraph 15.116.

¹³⁵ FMN, paragraph 15.117.

resulted in a pricing landscape that is very heterogenous and differentiated and which offers consumers a wide range of choice and flexibility.¹³⁶

120. In relation to network quality specifically, 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.¹³⁷ The Parties submitted that network quality is not limited to network speeds and encompasses multiple dimensions, including (i) coverage (in terms of population and land mass, both indoors and outdoors), (ii) throughput and reliability (ie fast and reliable connection, in particular by reference to download and upload speeds), and (iii) capacity (ie networks need to be sized to cope with the customer base and their demands).¹³⁸

5.1.3.2 CMA assessment

121. As part of its merger investigation, the CMA asked the Parties' competitors to rate the importance of a pre-populated list of factors¹³⁹ 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.
122. The CMA provides below an overview of the responses of the Parties' competitors:
- (a) The most important factors according to respondents were:
- (i) value for money – which all respondents considered to be very important.
 - (ii) reliability of network¹⁴⁰ – 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).

¹³⁶ FMN, paragraph 15.178.

¹³⁷ FMN, paragraphs 15.118-15.119.

¹³⁸ FMN, paragraph 15.118.

¹³⁹ 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.

¹⁴⁰ For completeness, the CMA notes that several responses to the CMA competitor questionnaire from third parties 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.

- (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 latency¹⁴¹ 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.
123. 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.¹⁴²
124. The CMA 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 that competitors believe consumers consider to be the most important when making their purchasing decision. Nearly all respondents said that switching was easy¹⁴³ and that getting a better price or value for money, or bad network quality are key reasons for switching.¹⁴⁴ The only notable difference is that while customer service was not identified as important at the point of purchase, poor customer experience was considered to be a key reason for switching by the vast majority of respondents.
125. These results are also broadly in line with Ofcom's findings. 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'.¹⁴⁵ Further, Ofcom's report on comparing customer service published in May 2023 shows that

¹⁴¹ This is the time taken to get a data response.

¹⁴² Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁴³ Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁴⁴ Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁴⁵ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraphs 3.14 and 4.2.

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%).¹⁴⁶

126. The CMA also received survey evidence from a third-party – who is not a mobile operator – indicating that when asked to ‘rank which is the most important to you 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’.¹⁴⁷
127. The CMA believes that whilst network quality related parameters of competition play an important role in customer decisions, price and value for money continue to be other important parameters guiding customers’ choice.

5.1.3.3 Measures of network quality

128. There are multiple dimensions to network quality. The Parties submitted that they consider a wide range of metrics relating to network quality from both internal and external sources.
129. The Parties submitted that they internally monitor their network quality:
- (a) VUK most closely monitors three key metrics that it considers closely correlate to customer experience and the measures of network quality referenced in paragraph 120 above: [redacted],¹⁴⁸ [redacted],¹⁴⁹ [redacted].¹⁵⁰
 - (b) 3UK regularly monitors the following headline metrics: [redacted],¹⁵¹ [redacted].¹⁵²
130. Based on the Parties’ submissions and internal documents, the CMA believes that although there is no clear industry consensus on measures of network quality, there are some external measures that are helpful to compare network quality between MNOs.
- (a) Umlaut 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

¹⁴⁶ [Ofcom comparing customer service: mobile, landline and home broadband](#), May 2023, page 9.

¹⁴⁷ Third party submission to the CMA, March 2024.

¹⁴⁸ [redacted].

¹⁴⁹ [redacted].

¹⁵⁰ FMN, paragraph 15.123.

¹⁵¹ This is reported in two ways; [redacted].

¹⁵² FMN, paragraph 15.138.

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.¹⁵³ Both Parties monitor their quarterly Umlaut results and these measures are referenced in their board level documents.¹⁵⁴

- (b) RootMetrics' overall performance test captures a combination of reliability and speed results from data, call and text testing and MNOs are also ranked across six categories (reliability, accessibility, speed, data, calls and texts).¹⁵⁵ Both Parties monitor RootMetrics results in their internal documents, although the Parties submitted that VUK does not purchase data from RootMetrics.¹⁵⁶ Prior to Ookla acquiring RootMetrics in 2021,¹⁵⁷ 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.¹⁵⁸
- (c) NetCheck measures overall network quality and reliability, broken down by voice, data, crowdsourcing and by city. NetCheck is monitored by VUK, including in its internal documents, but not by 3UK.¹⁵⁹
- (d) Opensignal publishes a bi-annual UK mobile network experience report. Both Parties monitor Opensignal reports which are referenced in their board level documents.¹⁶⁰
- (e) Ofcom publishes measures of availability (measured by complaints) and coverage, broken down by geographic and population coverage (measured by number of sites). Both Parties monitor their Ofcom results.¹⁶¹

131. The CMA does not consider it necessary to reach a view on whether certain external measures of network quality may be more relevant to its assessment (and if so which ones). The CMA notes that the Parties appear to rely on these external measures, in conjunction with their internal measures, in their internal strategy documents.

¹⁵³ FMN, footnote 386 and the Parties' response to data questions, 15 September 2023, question 7.

¹⁵⁴ See for example, CK Hutchison Internal Document CKH_00001186 and Vodafone Internal Document VF_00001489_001.

¹⁵⁵ FMN, footnote 389.

¹⁵⁶ Parties' response to data questions, 15 September 2023, question 7; and CK Hutchison Internal Document CKH_00000979 and Vodafone Internal Document VF_00001489_001.

¹⁵⁷ [Ookla Acquires RootMetrics](#), 14 December 2021.

¹⁵⁸ For example, CK Hutchison Internal Document CKH_00000658 and Vodafone Internal Document VF_00000770_001.

¹⁵⁹ Parties' response to data questions, 15 September 2023, question 7; and Vodafone Internal Document VF_00000898_001.

¹⁶⁰ For example, CK Hutchison Internal Document CKH_00000075 and Vodafone Internal Document VF_00000590_001.

¹⁶¹ Parties' response to data questions, 15 September 2023, question 7.

5.1.4 Industry trends and technological developments

5.1.4.1 Tariff trends

132. Mobile communications subscriptions can be post-paid (or PAYM) or pre-paid (or PAYG). Post-paid subscriptions are those charged after the services are used, whilst pre-paid subscriptions are those for which the payment is collected by the provider before the service is used.
133. Ofcom estimates that of the pre-pay tariffs available in Pure Pricing's September 2023 Monthly Mobile Pricing report, 96% were hybrid PAYG tariffs. Hybrid PAYG tariffs have no minimum contract period and offer an inclusive allowance of calls, text, and data which usually expires after a month. Any use outside the inclusive allowances is deducted from a pre-pay credit balance, as is the case with traditional PAYG services.¹⁶²
134. Retail mobile services can be offered to customers as SIMO subscriptions, where the user buys their airtime from a mobile provider and uses it with a separately acquired handset (**PAYM SIMO**) or with the provision of a handset (**PAYM handset**). Mobile operators also offer customers PAYM data-only subscriptions.
135. SIMO subscriptions were the most frequently used type of service at the end of Q2 2023, representing 41% of total mobile subscriptions, up three percentage points from 2022. 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 contract.¹⁶³ By contrast, PAYM handset tariffs (either in a combined or split contract) accounted for 37% of all mobile subscriptions in Q2 2023, down six percentage points from 2022.¹⁶⁴ In one report of July 2023, Ofcom stated that the number of PAYG subscriptions increased in 2022 for the first time in over a decade, due to the growing take-up of hybrid PAYG tariffs.¹⁶⁵

5.1.4.2 Fixed-mobile convergence and bundling

136. 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

¹⁶² [Ofcom pricing trends for communications services in the UK](#), December 2023, page 28.

¹⁶³ [Ofcom pricing trends for communications services in the UK](#), December 2023, page 26.

¹⁶⁴ [Ofcom pricing trends for communications services in the UK](#), December 2023, page 5.

¹⁶⁵ [Ofcom Communications Market Report](#), July 2023, page 2.

the other to the ability of operators to offer both mobile and fixed services to retail customers (retail convergence).¹⁶⁶

137. Regarding the ability to provide fixed-mobile bundles, the Parties submitted that the UK telecommunications sector is characterised by the presence of large-scale converged network operators that can provide a wide range of services to a larger base. The Parties submitted that, following the mergers of BT with EE in 2016 and Virgin Media with O2 in 2021, a large proportion of retail mobile customers are served by an operator that offers a converged fixed-mobile offering, and that these two mergers together with the entry of Sky Mobile in 2017 have already substantially altered the competitive landscape for UK mobile telecommunications. The Parties submitted that, in line with FMC penetration forecasts, BTEE, VMO2 and Sky Mobile have significant potential to grow their converged customer base.¹⁶⁷
138. 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.¹⁶⁸ 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.¹⁶⁹
139. 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 (as of 2021, only 18% of UK mobile users purchased both mobile and fixed services from the same provider).¹⁷⁰ 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.¹⁷¹

¹⁶⁶ Case M.7612 *Hutchison 3G UK/Telefónica UK*, recital 63. The Parties have not put forward arguments regarding technological convergence and this point is not further discussed in this decision.

¹⁶⁷ FMN, paragraphs 12.7, 12.9-12.11, figure 12.3; FMN, Annex 12.00004 'Analysis Mason, Fixed-mobile convergence in the UK: trends and forecasts 2023-2028 (April 2023)'.

¹⁶⁸ 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).

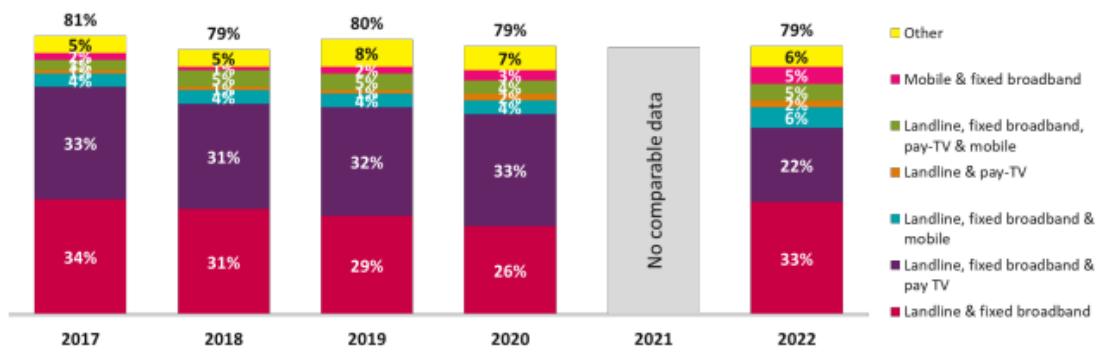
¹⁶⁹ [CMA final report on the anticipated acquisition by BT Group plc of EE Limited](#), paragraphs 5.6(c) and 5.11.

¹⁷⁰ [Ofcom's discussion paper on future approach to mobile markets](#), February 2022, paragraphs 5.64-5.65; [Ofcom Technology Tracker 2021](#), Table 156, Mobile (personal) standalone - defined by supplier used for mobile and other services. The CMA notes that Ofcom has not released updated figures since February 2022.

¹⁷¹ [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.

140. The CMA considered whether the uptake of fixed-mobile bundles in the UK may increase in the next couple of years and whether fixed-mobile converged operators would have an advantage over mobile-only operators.
141. Ofcom acknowledged that following the mergers highlighted by the Parties it is possible that the sale of fixed-mobile bundles could start to increase in importance, but it is not clear what impact this would have, and noted that non-converged operators are able to offer fixed-mobile bundles using regulated wholesale services from Openreach, or commercial wholesale services from other wholesale providers, and they might also use other forms of connectivity such as FWA.¹⁷²
142. In December 2022, Ofcom published a report showing that approximately 80% of UK households purchased two or more communications services from the same service provider as part of a bundle in 2022, but that only a small proportion (5%) included a mobile element, see Figure 4.¹⁷³

Figure 4: 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.

143. A report by Enders Analysis suggests that there is no evidence that fixed and 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 of billions in M&A activity in the

¹⁷² [Ofcom's discussion paper on future approach to mobile markets](#), February 2022, paragraphs 5.66-5.67.

¹⁷³ [Ofcom pricing trends for communications services in the UK](#), December 2022, pages 29-30.

sector.¹⁷⁴ In another report, Enders Analysis also noted that it sees little evidence of convergence reducing churn.¹⁷⁵

144. Shares of supply provided by the Parties show that BTEE and VMO2, two converged MNOs, have lost share in the overall supply of retail mobile services (see section 5.4.1.2.1) in the last three years, whereas 3UK – a non-converged operator – has steadily gained subscribers over the same period.¹⁷⁶ The CMA considers that this is a good indication that the ability of operators to offer fixed-mobile bundles has limited bearing on their ability to compete and win customers.
145. The CMA also sought views from competitors on the importance of fixed-mobile bundles¹⁷⁷ currently and in the near future, and 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 2-3 years). These views are summarised as follows:
- (a) The take-up of fixed-mobile bundles has been slow to date.¹⁷⁸
 - (b) The responses from several mobile operators suggest that being able to offer fixed-mobile bundles is not critical to compete or succeed in retail mobile services in the UK, although it can be advantageous. Rather, it is one of the strategies available to operators to compete.¹⁷⁹
 - (c) Most respondents expect the take-up of fixed-mobile bundles to increase (although not significantly) in the near future, as most MNOs are converged operators, but customers will largely continue to purchase mobile services on a standalone basis as opposed to through fixed-mobile bundles. This is in part because converged offerings are not particularly compelling for customers.¹⁸⁰
 - (d) One respondent noted that given neither of the Parties operate a scale fixed network, the Merged Entity would offer the same options as each of VUK and 3UK today.¹⁸¹

¹⁷⁴ Enders Analysis, Convergence evolution: The case for fixed/mobile convergence in flux, May 2022 (Vodafone Internal Document, VF_00017588_0001, page 2).

¹⁷⁵ Enders Analysis, Pressures mounting: UK mobile market in Q3 2023, December 2023, page 29 (© Copyright 2023 Enders Analysis Limited. All rights reserved).

¹⁷⁶ FMN, Table 15.13.

¹⁷⁷ Defined in the questionnaire as 'the bundling of fixed services and mobile services, supplied by the same provider but not necessarily under a single contract, for example if the services were cross-sold'.

¹⁷⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁷⁹ Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁸⁰ Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁸¹ Response to the CMA competitor questionnaire from a third party, January 2024.

146. The Parties submitted that the share of FMC household penetration is around 25%, and have pointed to the forecast by Analysys Mason which predicts that this penetration will grow in the next few years, reaching 40% by 2028.¹⁸² However, this is inconsistent with [redacted] prepared by VUK [redacted].¹⁸³ The CMA notes that, based on [redacted].¹⁸⁴ The CMA notes that the Parties' submission is also inconsistent with the Ofcom data presented at Figure 4.
147. [redacted] suggesting that 3UK does not perceive this as an impediment to its ability to compete in retail mobile services.
148. Based on the available evidence, the CMA believes that although the take-up of fixed-mobile bundles in the UK may slowly increase in the next two to three years, these are not set to play a key role in terms of operators' ability to compete for and win customers.

5.1.4.3 *Technological developments*

149. 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 SA, and embedded-SIMs (**eSIMs**).¹⁸⁵ The CMA discusses those in turn below.

5.1.4.3.1 *5G, 5G standalone and Advanced 5G*

150. 5G is the fifth generation of cellular networks. 5G networks have enabled access to increased bandwidth and more efficient use of radio spectrum, resulting in faster download speeds and lower latency (meaning reduced lag when using the network). 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.¹⁸⁶ Ofcom considers that in the absence of 5G SA and Advanced 5G (explained in paragraph 152), NSA 5G delivers a similar service to 4G and customers may not be prepared to pay a premium for 5G (as discussed further in section 6.2.3.2.3).¹⁸⁷ One 3UK internal document also

¹⁸² FMN, paragraph 12.11 and Figure 12.13.

¹⁸³ Vodafone Internal Document, VF_00033070_00001, page 26.

¹⁸⁴ Vodafone Internal Documents, VF_00000276_001, page 23; VF_00000179_001, page 24; VF_00023319_00001, page 26.

¹⁸⁵ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.42.

¹⁸⁶ FMN, footnote 57.

¹⁸⁷ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.19.

suggests that [X]¹⁸⁸ and third-party comments suggest that there is not significant consumer demand for or understanding of 5G services.¹⁸⁹

151. 5G SA is an implementation of 5G that uses a 5G SA core network, rather than the 4G core network. 5G SA offers broader capabilities than NSA 5G, including ultra-low latency, network slicing functions,¹⁹⁰ and potentially improved coverage. These capabilities may be required to enable certain new applications over mobile, such as advanced augmented reality or virtual reality and robotic applications over mobile networks. Ofcom has noted that in order to meet future demand and deliver the quality of experience needed by people and businesses, MNOs will need to invest to deploy the capacity needed to carry more mobile traffic as well as invest in new technologies, including 5G SA.¹⁹¹
152. Advanced 5G is a 5G network that is achieved through a combination of 5G SA, widespread deployment of C-band spectrum, high-bandwidth backhaul and a low latency network architecture, including a 5G core network.¹⁹²
153. The Parties, some third parties, Ofcom and the UK Government¹⁹³ have identified 5G as important to the UK economy and the Government has announced its ambition to deliver nationwide coverage of 5G SA to all populated areas by 2030.¹⁹⁴ The Parties submitted that 5G SA and Advanced 5G may not be required to address future growth in data traffic from existing consumer applications with throughput and latency requirements that can be met with 4G and NSA 5G.¹⁹⁵ This is broadly consistent with third-party feedback on 5G SA, suggesting that it remains a nascent technology that has yet to develop widespread use cases.¹⁹⁶ However, the Parties submitted that future customer needs mean that it would not make economic and commercial sense to expand capacity with older 5G technology.¹⁹⁷
154. In December 2023, Ofcom noted that the availability of NSA 5G continues to grow rapidly, although 4G continues to provide the backbone of consumers' mobile experience.¹⁹⁸ MNOs are currently progressing with their respective NSA 5G roll-

¹⁸⁸ CK Hutchison Internal Document, CKH_00002911, page 3.

¹⁸⁹ Responses to the CMA competitor questionnaire from third parties, January 2024.

¹⁹⁰ Network slicing is a feature of 5G SA networks. It 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.

¹⁹¹ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.8.

¹⁹² FMN, Annex B, pages 1-2.

¹⁹³ See, for example, Policy paper, [UK Wireless Infrastructure Strategy](#), April 2023, and Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

¹⁹⁴ Policy paper, [UK Wireless Infrastructure Strategy](#), April 2023.

¹⁹⁵ FMN, paragraph 2.54.

¹⁹⁶ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

¹⁹⁷ FMN, paragraph 2.54.

¹⁹⁸ [Ofcom Connected Nations; UK Report 2023](#), December 2023, page 35.

outs and so far, all MNOs have deployed 5G using the 4G core networks.¹⁹⁹ In December 2023, Ofcom found that the availability of NSA 5G continues to grow rapidly, estimating that 3UK has the most extensive outside premises coverage of 78% and BTEE has the most coverage overall of 63%.²⁰⁰ 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 [redacted] absent the Merger.²⁰¹ 3UK has [redacted] absent the Merger.²⁰²

155. 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.²⁰³ This is consistent with the Parties' internal documents which show VUK monitoring the NSA 5G roll-out of 3UK, BTEE and VMO2.²⁰⁴ In particular, 3UK views its NSA 5G roll-out as [redacted].²⁰⁵ Ofcom also recognised that MNOs may have lower incentives to invest in NSA 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 NSA 5G.²⁰⁶ There is also evidence of this in the Parties' internal documents²⁰⁷ and feedback from third parties which suggests that customers may not be able to distinguish between 4G and NSA 5G or 5G SA.²⁰⁸

5.1.4.3.2 eSIM

156. An eSIM is a form of programmable SIM that is embedded directly into a device, thereby removing the need for a physical SIM card.²⁰⁹
157. When customers switch mobile providers, 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. 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

¹⁹⁹ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, footnote 7.

²⁰⁰ [Ofcom Connected Nations: UK Report 2023](#), 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.

²⁰¹ FMN, paragraph 11.81(ii).

²⁰² FMN, paragraph 11.39.

²⁰³ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 3.11.

²⁰⁴ For example, Vodafone Internal Document VF_00001262_001, page 17.

²⁰⁵ CK Hutchison Internal Document CKH_00002933, page 13.

²⁰⁶ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 4.19.

²⁰⁷ For example, CK Hutchison Internal Document CKH_00002911, page 3 [redacted].

²⁰⁸ Responses to the CMA competitor questionnaire from third parties, January 2024.

²⁰⁹ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, footnote 106.

promote eSIM use among residential customers. 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.²¹⁰

158. eSIM-enabled devices (ie devices that accept both a physical SIM and an e-SIM) have been available since 2017 in the UK.²¹¹ While in the US Apple moved to eSIM-only handsets for its iPhone 14 devices in September 2022, eSIM-only handsets are yet to be introduced in the UK. As of January 2024, the CMA understands that only the four MNOs along with Sky Mobile, Tesco Mobile and Lyca Mobile offer eSIMs but most of those still request consumers switch to a physical SIM card first.²¹²
159. The Parties submitted that the increasing take-up 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 consumers.²¹³ The Parties submitted that eSIMs present the following key issues:
- (a) increased consumer churn as eSIMs remove barriers to switching for consumers, as they remove the need for a customer to obtain a new physical SIM card when switching MNOs, and therefore make the switching experience more seamless and attractive for consumers;²¹⁴
 - (b) the increased threat of entry by hyperscalers (defined in section 5.1.5.2 to include [§<]) in retail mobile or as a distribution channel [§<], through offering consumers who purchase their eSIM-enabled devices the ability to change mobile operator at any time;²¹⁵ and
 - (c) the increased strength of MVNOs, as fully digital eSIMs reduce barriers to entry for new MVNOs.²¹⁶
160. 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.

²¹⁰ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, Box A3.

²¹¹ See for example [The Verge, Google's Pixel 2 phones are the first to use built-in eSIM technology](#), October 2017.

²¹² [MoneySavingExpert, What is an eSim?](#), January 2024.

²¹³ FMN, paragraphs 12.40-12.43.

²¹⁴ FMN, paragraphs 12.31-12.32.

²¹⁵ FMN, paragraphs 12.33-12.37.

²¹⁶ FMN, paragraphs 12.38-12.39.

161. 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 services).²¹⁷ At the same time, Ofcom has recognised that there is still uncertainty for now as to how the deployment of eSIM will unfold in practice.²¹⁸
162. In the course of its merger investigation, the CMA 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.²¹⁹ The CMA summarises below qualitative comments made in this context:
- (a) One MNO shared the Parties' concerns that eSIMs gaining momentum could result in disintermediation of MNOs, thereby impacting operators' ability to connect with customers and continue to invest in the infrastructure necessary to provide quality of service and coverage for all customers.²²⁰
 - (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.²²¹
 - (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 eSIM available, migration between networks will remain far from seamless.²²²
 - (d) Another MVNO told the CMA that eSIM is a significant development expected in the next few years with all devices transitioning and that this will

²¹⁷ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, Annex 3, paragraphs A3.21-A3.23.

²¹⁸ [Ofcom's future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, Annex 3, paragraph A3.25.

²¹⁹ Responses to the CMA competitor questionnaire from third parties, January 2024.

²²⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

²²¹ Response to the CMA competitor questionnaire from a third party, January 2024.

²²² Response to the CMA competitor questionnaire from a third party, January 2024.

increase the technical load required for both MNOs and in particular MVNOs which requires significant investment.²²³

163. The CMA's review of the Parties' internal documents has shown that while the Parties perceive some risks associated with the deployment of eSIMs they have also identified ways to mitigate those along with new opportunities. For example:
- (a) While eSIM is described as [REDACTED], the relevant taskforce also indicates [REDACTED]. In terms of opportunities to capture new propositions, VUK identifies [REDACTED].²²⁴
 - (b) In relation to [REDACTED] eSIM [REDACTED], the same document notes that [REDACTED].²²⁵ The CMA recognises that as of the date of this document, [REDACTED].²²⁶
 - (c) Another VUK document from [REDACTED].²²⁷
 - (d) In a report from June 2023, 3UK recognises that [REDACTED].²²⁸ [REDACTED].²²⁹ [REDACTED].²³⁰
 - (e) In a presentation from October 2023, 3UK discusses [REDACTED].²³¹ [REDACTED].²³²
164. Taking the available evidence in the round, the CMA does not believe that there is sufficient evidence to conclude that the deployment of eSIMs – the timing of which remains uncertain – would lead to the disintermediation of MNOs, including the Parties.

5.1.5 Other players in the market

5.1.5.1 MVNEs and MVNAs

165. As an alternative to negotiating wholesale access to a mobile network, 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 network subsystems, business support systems, provisioning and administration services. These platforms can provide a full end-to-end

²²³ Response to the CMA competitor questionnaire from a third party, January 2024.

²²⁴ Vodafone Internal Document VF_00003362_001, page 4. Also, Vodafone Internal Document VF_00000497_001.

²²⁵ Vodafone Internal Document VF_00003362_001, pages 6, 52 and 58.

²²⁶ Vodafone Internal Document VF_00003362_001, pages 55-57.

²²⁷ Vodafone Internal Document VF_00002785_001, page 1.

²²⁸ CK Hutchison Internal Document CKH_00000386, pages 8-9 and 17-18.

²²⁹ CK Hutchison Internal Document CKH_00000386, page 12.

²³⁰ CK Hutchison Internal Document CKH_00000386, page 13.

²³¹ CK Hutchison Internal Document CKH_00001029, pages 46-49.

²³² CK Hutchison Internal Document CKH_00001029, pages 56-57.

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 PCCWG will be launching an MVNE on the 3UK network in 2024 under the brand name Console Connect.²³⁴

(b) MVNAs (such as Transatel²³⁵) 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 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.

166. 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 (as defined at section 5.2.35.2.3). 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.
167. Third-party feedback suggests MVNEs and MVNAs play a limited role in supplying wholesale mobile services in the UK. Seven of the ten largest MVNOs (as mentioned in Table 1) responding to the CMA's third-party questionnaire were not in a position to comment or had limited views on MVNAs, suggesting a low level of engagement between MVNOs and MVNAs. One MVNO stated they were not aware of any MVNAs in the UK.²³⁶ Another MVNO suggested that their presence is very limited in the UK and that MVNOs tend to have a direct relationship with an MNO.²³⁷
168. 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 but make the business model more difficult to achieve because of the reduced margin.²³⁸

²³³ FMN, footnote 536.

²³⁴ FMN, footnote 540.

²³⁵ FMN, paragraph 15.418.

²³⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

²³⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

²³⁸ Responses to the CMA wholesale questionnaire from third parties, January 2024.

5.1.5.2 *Hyperscalers & system integrators*

169. The Parties submitted that system integrators (**Sis**) and hyperscalers have a role in the supply of retail mobile services to business customers. 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.²³⁹ Similarly, 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.^{240, 241}
170. Third party responses suggest that hyperscalers and Sis currently operate in different, but complementary product categories to business mobile services²⁴² and as such do not currently compete with MNOs or MVNOs in the provision of retail mobile services to business customers.²⁴³ Instead, hyperscalers and Sis procure from or partner with existing network providers for mobile connectivity services, which they then combine with their own products/services to offer a suite of services to their customers.²⁴⁴
171. 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;²⁴⁵ and (ii) the cost of compliance in a heavily regulated market.²⁴⁶
172. Third parties indicated that they expect the number of hyperscalers to grow over the coming years²⁴⁷ and expect Sis and hyperscalers to continue to drive substantial increase in utilisation and demand but do not anticipate they will build their own infrastructure.²⁴⁸ One third-party MNO indicated that it expects continued innovation and product development from hyperscalers within the value-added mobile services category and assumes [X],²⁴⁹ whereas another third-party MNO indicated that it could not comment on whether the position of hyperscalers and

²³⁹ FMN, paragraphs 15.375 and 15.394.

²⁴⁰ FMN, paragraphs 15.375 and 15.396.

²⁴¹ 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, paragraph 15.396).

²⁴² Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴³ Responses to the CMA competitor questionnaire from third parties, January 2024.

²⁴⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁴⁹ Response to the CMA competitor questionnaire from a third party, January 2024.

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.²⁵⁰

5.1.5.3 Resellers

173. 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.²⁵¹

5.1.6 Parameters and nature of competition at the wholesale level

174. The CMA understands that MNOs primarily compete at the wholesale level on price, with other parameters such as network quality and equal access to the network and latest technologies being of lesser importance. This is supported by MVNOs' responses to the CMA's merger investigation:

- (a) five out of 10 stated that price was the most important factor when selecting an MVNO host;²⁵²
- (b) two out of 10 stated that network quality was the most important factor;²⁵³ and
- (c) one out of 10 stated that equal access to the network and latest technologies was the most important factor.²⁵⁴

175. While overall it was not seen as the most important factor, one third party submitted that network quality is important because 'network quality perceptions affect brand perceptions'.²⁵⁵ Third parties also told the CMA that network quality can include a range of dimensions:

- (a) one large MVNO stated that the aspects of network quality it considers are '4G and 5G coverage, voice quality, and throughout (ie speed) of data in Mb/s';²⁵⁶ and
- (b) another large MVNO stated that it has 'a focus on strong network access and coverage'.²⁵⁷

²⁵⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁵¹ FMN, paragraph 15.375.

²⁵² Response to the CMA competitor and wholesale questionnaires from third parties, January 2024.

²⁵³ Response to the CMA wholesale questionnaire from a third party, January 2024.

²⁵⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁵⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

²⁵⁶ Response to the CMA competitor questionnaire from a third party, January 2024.



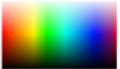

²⁵⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

5.1.7 Network sharing arrangements

5.1.7.1 Background to network sharing

176. A mobile network consists of four principal components:²⁵⁸
- 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;
 - 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;
 - transport aggregates traffic from multiple radio sites and connects with network functions and to the core; and
 - virtualised core services provide mobile services such as voice, data and messaging.

Figure 5: Extent of sharing under different network sharing arrangements

	No sharing	Passive sharing	Active sharing	Spectrum sharing / roaming	Full network sharing (JV/merger)
 Mobile site					
 Base station					
 Frequency band					
 Core network					

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

177. 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, MNOs can choose to share the site infrastructure²⁵⁹ (passive

²⁵⁸ Parties' submission to the CMA, *Teach-in: Transaction Rationale and Joint Network Plan*, 19 July 2023, slide 4.

²⁵⁹ 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).

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.

178. 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.
179. There are two network sharing arrangements in the UK:
- (a) MBNL (defined in paragraph 181) which includes primarily passive network sharing between 3UK and BTEE;²⁶⁰ and
 - (b) CTIL/Beacon (defined in paragraph 189) which includes passive and active network sharing between VUK and VMO2.
180. Some MNOs also deploy and operate a proportion of their RAN independently of the network sharing arrangements.

5.1.7.2 MBNL

181. 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 partner could achieve on its own, delivering improved geographic coverage at lower network cost.²⁶¹
182. To this end, T-Mobile and 3UK entered into a [redacted] (together, the **MBNL Agreements**). Pursuant to the MBNL Agreements, the MBNL joint venture was incorporated with a term until 31 December 2031 ([redacted]). The original MBNL Agreements provided for passive sharing of network sites and site infrastructure (including towers, feeders and cabling) across an agreed grid of sites and active 3G equipment sharing. The shared sites that sit in MBNL consist of approximately [redacted] sites, which represent approximately [80-90]% of 3UK's sites.²⁶²
183. 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**).²⁶³ The Parties submitted that [redacted].²⁶⁴ Upon termination of MBNL under the MBNL Agreements, the sites that are allocated to

²⁶⁰ [redacted].

²⁶¹ FMN, paragraph 15.550.

²⁶² Calculated using information from FMN, Confidential Annex CKH 15.007, question 42.1. [redacted]

²⁶³ FMN, paragraph 15.615.

²⁶⁴ FMN, paragraph 15.616.

3UK will be transferred to Cellnex in accordance with the allocation and transfer provisions of the agreements between 3UK and Cellnex. The Parties submitted that [REDACTED].²⁶⁵

184. 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.²⁶⁶ 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.²⁶⁷ MBNL also has ongoing responsibilities on behalf of both BTEE and 3UK to support the management of the passive infrastructure, including [REDACTED].²⁶⁸ The CMA understands that [REDACTED].²⁶⁹
185. Under the most recent iteration of the MBNL Agreements which came into effect in April 2023,²⁷⁰ 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. Specifically, BTEE and 3UK have agreed:²⁷¹
- (a) [REDACTED];
 - (b) [REDACTED],²⁷² [REDACTED]; and
 - (c) [REDACTED].
186. BTEE and 3UK are each [REDACTED] under the MBNL Agreements to [REDACTED].²⁷³ [REDACTED]. This is discussed in greater detail at section 5.4.3.1.2.1.2.1.
187. In the same iteration of MBNL Agreements which came into effect in April 2023, [REDACTED]. A demand process governs the upgrades to shared network sites, [REDACTED].²⁷⁴
188. 3UK considers [REDACTED], noting that both parties perform all upgrades independently of each other and [REDACTED].²⁷⁵ The Parties submitted that [REDACTED] BTEE and 3UK will pursue their respective network strategies independently and unilaterally with minimal coordination. 3UK also submitted that [REDACTED].²⁷⁶ [REDACTED] and the CMA's assessment of

²⁶⁵ FMN, paragraph 15.618.

²⁶⁶ Active sharing is now limited to sharing 3G equipment in rural areas.

²⁶⁷ FMN, paragraphs 15.552 and 15.556.

²⁶⁸ FMN, paragraph 15.556.

²⁶⁹ Note of call with Parties on 19 December 2023.

²⁷⁰ Referred to as [REDACTED] within 3UK.

²⁷¹ FMN, paragraph 15.555.

²⁷² [REDACTED], FMN, paragraph 15.572 (ii).

²⁷³ Clause 9.5 of the Co-Operation Agreement

²⁷⁴ FMN, paragraphs 15.596 and 15.592.

²⁷⁵ FMN, paragraph 15.592.

²⁷⁶ FMN, paragraph 15.600.

the impact of the Merger on competitive constraints is discussed in section 5.4.3.1.2.

5.1.7.3 CTIL/Beacon

189. Cornerstone Telecommunications Infrastructure Ltd is a 50/50 joint venture concerning passive infrastructure between Vodafone (through its subsidiary Vantage Towers) and VMO2 (**CTIL**).²⁷⁷ Through the network sharing arrangement Beacon, VUK and VMO2 also share active infrastructure ([REDACTED] 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 [REDACTED].²⁷⁸
190. In 2017, VUK and VMO2 agreed to unwind active sharing in certain areas, meaning the parties 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, the parties agreed to unwind all active sharing in the major population centres in the UK (known as Beacon 3). After Beacon 3, in general terms, VUK hosted MORAN in the West and VMO2 hosted MORAN in the East.²⁷⁹
191. There are therefore three types of sites currently used by Vodafone:
- (a) [REDACTED];
 - (b) [REDACTED]; and
 - (c) [REDACTED].²⁸⁰
192. [REDACTED]²⁸¹ [REDACTED].²⁸²
193. [REDACTED]:
- (a) [REDACTED]; and
 - (b) [REDACTED].
194. [REDACTED].

²⁷⁷ FMN, Annex B, page 3.

²⁷⁸ FMN, paragraphs 15.478-15.479. 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.

²⁷⁹ FMN, paragraph 15.480.

²⁸⁰ FMN, paragraph 15.483. [REDACTED].

²⁸¹ [REDACTED].

²⁸² [REDACTED].

5.1.8 Mobile telecommunications infrastructure in the UK

195. There is a well-documented difference in mobile coverage in urban and rural areas in the UK. For example, Ofcom noted that:²⁸³
- (a) there continues to be a significant difference between indoor coverage in urban and rural areas in 2023, with:
 - (i) 4G coverage across MNOs being between 96-98% for urban and between 73-82% for rural;
 - (ii) voice coverage across MNOs being over 99% for urban and between 81-97% for rural; and
 - (b) there continues to be a significant difference between outdoor coverage in urban and rural areas, with individual MNOs' 4G coverage outside rural premises ranging from 94-98% (up from 93-98% of the previous year) while each MNO continues to serve over 99% of urban premises.
196. The UK Government in 2020 noted that 'strong competition promotes industry investment in mobile coverage in dense urban areas, but rural areas have fewer potential customers and have not seen the level of investment needed to provide good coverage'.²⁸⁴
197. In March 2020, the UK Government announced that it had entered into an agreement with the four MNOs to provide a funding grant to deliver a 'Shared Rural Network'. Under the terms of this agreement, each MNO has committed to providing good quality data and voice coverage to 88% of the UK landmass by 30 June 2024 and 90% by 30 June 2026. Ofcom is responsible for measuring MNOs' compliance with the coverage commitments in the agreement.²⁸⁵
198. One third party that operates in the devolved nations of the UK commented that it did not consider that there were any notable differences between the markets of the devolved nations and the rest of the UK.²⁸⁶

5.2 Frame of reference

199. Where the CMA makes an SLC finding, this must be 'within any market or markets in the United Kingdom for goods or services'. An SLC can affect the whole or part of a market or markets. Within that context, the assessment of the relevant

²⁸³ [Ofcom Connected Nations: UK Report 2023](#), December 2023, Table 3.1.

²⁸⁴ DCMS, [Shared Rural Network](#), March 2020.

²⁸⁵ Ofcom [Mobile coverage obligations](#), February 2024.

²⁸⁶ Response to the CMA wholesale questionnaire from a third party, January 2024.

market(s) 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.²⁸⁷

200. Market definition involves identifying the most significant competitive alternatives available to customers of the merger parties and includes the sources of competition to the merger parties that are the immediate determinants of the effects of the merger.²⁸⁸
201. While market definition can be an important part of the overall merger assessment process, the CMA's experience is that in most mergers, the evidence gathered as part of the competitive assessment, which will assess the potentially significant constraints on the merger parties' behaviour, captures the competitive dynamics more fully than formal market definition.²⁸⁹

5.2.1 Product scope

202. In cases involving differentiated products, such as this one, there is often no 'bright line' that can or should be drawn. Rather, it can be more helpful to describe the constraint posed by different categories of products or suppliers as sitting on a continuum between 'strong' and 'weak'.²⁹⁰ Accordingly, the CMA will generally not come to finely balanced judgements on what is 'inside' or 'outside' the market. In addition, not every firm 'in' a market will be equal, and the CMA will assess how closely the transacting parties compete, and the constraint posed by firms 'outside' the market will also be carefully considered.²⁹¹
203. The Parties overlap in the supply of retail mobile telecommunications services to end consumers and the supply of wholesale mobile services to MVNOs.

5.2.1.1 Retail mobile telecommunications services

204. The Parties submitted that – consistent with the approach followed by both the CMA and the European Commission (**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.²⁹²
205. In past decisions, the Commission has identified an overall retail market for mobile telecommunications services, distinct from retail fixed telecommunications

²⁸⁷ [CMA129](#), paragraph 9.1.

²⁸⁸ [CMA129](#), paragraph 9.2.

²⁸⁹ [CMA129](#), paragraph 9.2.

²⁹⁰ [CMA129](#), paragraph 9.4.

²⁹¹ [CMA129](#), paragraph 9.4.

²⁹² FMN, paragraphs 13.2-13.5.

services. The Commission 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 Commission has considered a number of possible segmentations of the overall retail market (pre-paid vs post-paid services; private customers 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.²⁹³

206. In line with the Commission's established decisional practice, the CMA found in *BT/EE* that there was a single 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, business 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.²⁹⁴
207. The CMA has not seen evidence that retail mobile telecommunications services should be segmented according to pre-paid vs post-paid services, SIMO vs handset subscriptions, fixed-mobile bundles vs stand-alone mobile services, distribution channels, high-value vs low-value customers, the type of service, or the type of network technology. However, the CMA notes that there is evidence that competitive constraints may vary to some degree across different types of mobile service (for example, pre-paid v. post-paid, SIMO v. handset, mobile bundles v. standalone). These differences are considered in the competitive assessment, where relevant.
208. The CMA also considered whether retail mobile telecommunication services should be segmented according to customer type, for example consumers and business customers, and by type of business customers (for example corporate customers vs SMEs). In this regard, the CMA notes 3UK's recent entry and rapid growth, in particular in the small office/home office (**SoHo**) and small to medium sized enterprise (**SME**) subsegments (as discussed in section 5.4.1.2.1).²⁹⁵

²⁹³ Case M.10515 – *ILIAD/UPC POLSKA*, recital 14; Case M. 8792 – *T-Mobile NL/Tele2 NL*, recitals 160, 197, 202, 206, 210, 214, 220.

²⁹⁴ [CMA final report on the anticipated acquisition by BT Group plc of EE Limited](#), paragraph 10.49.

²⁹⁵ The Parties consider that business customers can be categorised as: (i) SoHo / micro-business customers which employ 10 or fewer people, (ii) SME customers include small SMEs (ie businesses with 11 to 50 employees) and medium SMEs (businesses with 51 to 250 employees), (iii) beyond 250 employees, businesses are referred to as 'corporates' and (iv) government and public institutions irrespective of their size are referred to as 'public sector' customers (FMN, paragraph 15.317).

5.2.1.1.1 *Type of customer*

5.2.1.1.1.1 *Parties' submissions*

209. The Parties submitted that there should be no distinction between business customers and consumers.²⁹⁶ 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.²⁹⁷ 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.²⁹⁸
210. The Parties also noted 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.²⁹⁹

5.2.1.1.1.2 *CMA assessment*

211. In *BT/EE*, the CMA did not find it necessary to conclude 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.³⁰⁰
212. The Commission has previously considered that, in light of supply-side substitutability in particular, for the purpose of its decision in *T-Mobile NL/Tele2 NL* the relevant market was the overall retail market for the provision of mobile telecommunications services to all end consumers, including both private and business customers.³⁰¹
213. The available evidence indicates that there may be differences between the services provided depending on the type of customer.
- (a) In their internal documents, each of VUK and 3UK [§<].
 - (b) From a demand-side perspective, the Parties recognise that customer requirements vary along a spectrum of complexity with larger businesses (for

²⁹⁶ FMN, paragraph 13.6.

²⁹⁷ FMN, paragraph 13.11.

²⁹⁸ FMN, paragraph 15.357.

²⁹⁹ FMN, paragraph 13.11.

³⁰⁰ [CMA final report on the anticipated acquisition by BT Group plc of EE Limited](#), paragraph 10.29.

³⁰¹ Case M. 8792 – *T-Mobile NL/Tele2 NL*, recital 197.

example corporate and public sector customers) requiring additional services by comparison to smaller business customers or consumers.³⁰² This has been confirmed by third parties in the course of the CMA's merger investigation.³⁰³ 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.³⁰⁴ Some business customer respondents also indicated that their mobile requirements could be met by using consumer tariffs.³⁰⁵

- (c) From a supply-side perspective, the CMA's 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 strength across each segment. In particular, VUK's share of supply in the consumer retail segment by number of subscribers was [10-20]% as of Q3 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 section 5.4.1.2.1). 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 subsegment 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 the CMA's merger investigation (see section 5.4.2.1.4). Based on information provided by the Parties, the CMA also observes 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 5.4.1.2.1). This is consistent with third-party responses to the CMA's merger investigation.

214. Taking the available evidence in the round, the CMA believes that the appropriate frame of reference against which to assess the Merger is the overall supply of retail mobile telecommunications services to end consumers, including both consumers and business customers. The CMA notes, however, that competitive constraints may vary within certain subsegments, including in particular business vs consumer customers. Accordingly, all meaningful variations between customer

³⁰² FMN, paragraph 15.317.

³⁰³ Responses to the CMA competitor questionnaire from third parties, January 2024.

³⁰⁴ FMN, paragraph 15.359.

³⁰⁵ Responses to the CMA business customer questionnaire from third parties, January 2024.

groups that are relevant to the CMA's assessment, are considered in the competitive assessment below, where appropriate.

5.2.1.2 Wholesale mobile services

215. The Parties submitted that – consistent with the approach followed by both the CMA and Commission in previous cases – the relevant market is the wholesale supply of network access and call origination on public mobile telephone networks (ie the supply of wholesale mobile services).³⁰⁶
216. The Parties further submitted that 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.³⁰⁷
217. In past decisions, the 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.³⁰⁸
218. The Commission has previously acknowledged that services provided may vary by type of access seeker (ie between a full MVNO or light MVNO). However, it has concluded that different types of access imply only a different degree of participation 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.³⁰⁹
219. 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;³¹⁰ 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.³¹¹
220. The CMA has seen no evidence to suggest a different product frame of reference and therefore believes that the appropriate frame of reference against which to

³⁰⁶ FMN, paragraph 13.47.

³⁰⁷ FMN, paragraph 13.48.

³⁰⁸ Case M. 7018 – *Telefónica Deutschland/E-Plus*, recital 77.

³⁰⁹ Case M. 7612 *Hutchison 3G UK/Telefónica UK*, recital 299.

³¹⁰ [CMA final report on the anticipated joint venture between Liberty Global Plc and Telefónica SA](#), paragraph 9.19.

³¹¹ [CMA final report on the anticipated acquisition by BT Group plc of EE Limited](#), paragraph 13.10.

assess the Merger is the overall supply of wholesale mobile services, and that further sub-segmentations according to the access provided to different types of MVNOs, MVNEs and MVNAs, are not appropriate.

5.2.1.3 Conclusion on product scope

221. The CMA believes that the product frames of reference relevant to this investigation are:

- (a) the supply of retail mobile telecommunications services to end consumers, including both consumers and business customers; and
- (b) the supply of wholesale mobile services.

5.2.2 Geographic scope

5.2.2.1 Retail mobile telecommunications services

222. The Parties submitted that – consistent with the approach followed by both the CMA and Commission in previous cases – the relevant geographic market is the UK.³¹² 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.³¹³

223. In *BT/EE*, the CMA considered that it was not appropriate to define narrow geographic markets on the basis that the quality of an operator's service varies by geography. Notwithstanding this, the CMA took account of local quality variations (such as slower speeds caused by site congestion) and how this may affect the closeness of competition between operators at the national level within its competitive assessment.³¹⁴ In *Hutchison 3G UK/Telefónica UK*, the Commission found that the market for the retail supply of mobile telecommunications services was national in scope (ie limited to the UK) in line with previous decisions.³¹⁵

224. Evidence available to the CMA does not point towards a geographic frame of reference narrower than national. The CMA notes that despite some limited local differences in the Parties' (and other MNOs') mobile coverage³¹⁶ and retail footprint, both Parties and their main competitors are national, large-scale mobile

³¹² FMN, paragraphs 13.39-13.41.

³¹³ FMN, paragraph 13.42.

³¹⁴ [CMA final report on the anticipated acquisition by BT Group plc of EE Limited](#), paragraphs 10.47-10.48.

³¹⁵ Case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 289 and 293.

³¹⁶ See [Ofcom Connected Nations: UK Report 2023](#), December 2023, Figure 3.6 'Differences in 4G geographic coverage in England, Northern Ireland, Scotland and Wales'.

operators with nationally recognised brands, as well as integrated and centralised operations. Importantly, the Parties submitted that their prices are set [redacted].³¹⁷ [redacted], the Parties' sales, advertising and marketing strategies are determined [redacted].³¹⁸ The Parties' internal documents show that competitive performance is monitored [redacted].

225. Therefore, the CMA has assessed the effects of the Merger at a UK-wide level.

5.2.2.2 Wholesale supply of mobile services

226. The Parties submitted that – consistent with the approach followed by both the CMA and the Commission in previous cases – the relevant geographic market is the UK.³¹⁹

227. In *BT/EE*, the CMA considered that the relevant geographic market for the supply of wholesale mobile services is the UK.

228. The Commission previously found that due to regulatory barriers stemming from the fact that licences are granted to MNOs on a national basis, the relevant geographic market is national in scope. Moreover, the Commission found that 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.³²⁰

229. The CMA notes that there are some limited local differences in the Parties' (and other MNOs') mobile coverage³²¹ and it 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.³²² However, the CMA notes 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 within the UK and, in the case of 3UK's internal documents, refer to 3UK [redacted].³²³

230. Therefore, the CMA has assessed the effects of the Merger at a UK-wide level.

³¹⁷ FMN, paragraphs 15.186 and 15.197.

³¹⁸ FMN, paragraphs 15.155, 15.157, 15.167, 15.169, and 15.176.

³¹⁹ FMN, paragraph 13.52.

³²⁰ Case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 302 and 304.

³²¹ See paragraph 224 above.

³²² Third party submission to the CMA, November 2023.

³²³ For example, CK Hutchison Internal Documents CKH_00002246, page 21; CKH_0000185, page 12.

5.2.3 Conclusion on frames of reference

231. Consistent with previous cases, the CMA believes that there are two frames of reference relevant to this case:
- (a) the supply of retail mobile telecommunications services to end consumers in the UK, including both consumers and business customers; and
 - (b) the supply of wholesale mobile services in the UK.

5.3 Theories of harm

232. The CMA assesses the potential competitive effects of mergers by reference to theories of harm. Theories of harm provide a framework for assessing the effects of a merger and whether or not it could lead to an SLC relative to the counterfactual.³²⁴

233. In its investigation of this Merger, the CMA has considered the following theories of harm:

- (a) Horizontal unilateral effects in the supply of retail mobile telecommunications services to end consumers in the UK (**TOH 1**) (in this decision referred to for convenience as **the supply of retail mobile services**);
- (b) Horizontal unilateral effects in the supply of wholesale mobile services in the UK (**TOH 2**) (in this decision referred to for convenience as **the supply of wholesale mobile services**); and
- (c) The competitive impact of the Merged Entity's participation in both network sharing arrangements (**TOH 3**).

234. Each of these theories of harm is considered below.

5.4 TOH 1: Horizontal unilateral effects in the supply of retail mobile services

235. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged entity to profitably raise prices or to degrade quality on its own and without needing to coordinate with its rivals.³²⁵

³²⁴ [CMA129](#), paragraph 2.11.

³²⁵ [CMA129](#), paragraph 4.1.

236. The CMA's main consideration when considering horizontal unilateral effects is whether there are sufficient remaining good alternatives to constrain the merged entity post-merger. Where there are few 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.³²⁶
237. 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.³²⁷
238. 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.³²⁸
239. 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.³²⁹
240. Against this background, the concern under this theory of harm is that:
- (a) the Merger would result in the elimination of a competitive constraint by removing an alternative that customers could switch to;
 - (b) the Merged Entity would have lower incentives to compete aggressively compared to each Party on a standalone basis, and exert less of a constraint on other mobile operators; and

³²⁶ [CMA129](#), paragraph 4.3.

³²⁷ [CMA129](#), paragraph 4.8.

³²⁸ [CMA129](#), paragraph 4.9.

³²⁹ [CMA129](#), paragraph 4.10.

- (c) in turn, 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).

241. The CMA has assessed whether it is or may be the case that the Merger may be expected to result in an SLC as a result of horizontal unilateral effects in the supply of retail mobile services and considered the following, for the purpose of its assessment:

- (a) the Parties' competitive position;
- (b) the closeness of competition between the Parties and the competitive constraint from other MNOs and MVNOs; and
- (c) how any alternative competitive constraints may be impacted by the Merger.

242. At the outset, the CMA observes that:

- (a) As set out in section 5.1.3.2, the two key parameters of competition in the supply of retail mobile services are price and network quality. MVNOs – to a large extent – cannot determine network quality, a key parameter of competition that only MNOs fully compete on.³³⁰ MVNOs do, however, compete on price although the price that they can offer to end consumers is ultimately constrained by the wholesale access conditions granted by their host MNOs.
- (b) Due to their dependency on wholesale conditions, the ability of MVNOs to compete effectively in the supply of retail mobile services depends on competition between MNOs at the wholesale level.
- (c) Given sub-brands are controlled by an MNO, and as such are not independent market operators, the CMA has aggregated the sub-brands of each MNO with the MNO when assessing competitive constraints.³³¹ The CMA has adopted the same approach with regard to Superdrug on the basis that it is a sister company of 3UK and owned by CK Hutchison (see section 5.1.2.1.2).
- (d) Consistent with previous decisions,³³² the CMA considered in its competitive assessment of this theory of harm that VMO2 and Tesco Mobile may not operate fully independently on the market given VMO2's 50% stake in Tesco

³³⁰ As noted in section 5.1.2.2, full MVNOs may have their own core network, which may allow some element of differentiation on network quality. However, most MVNOs do not.

³³¹ This is also consistent with Case M.7612 *Hutchison 3G UK/Telefónica UK*, recital 113.

³³² [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.

Mobile and associated rights, and therefore aggregated Tesco Mobile's share of supply in retail mobile services with that of VMO2. Notwithstanding this, the CMA sought to reflect the evidence it gathered on the competitive constraint attributable to Tesco Mobile.

5.4.1 Parties' competitive position

243. The CMA has examined the Parties' current competitive position and how this may evolve in the near future, absent the Merger. Within this assessment, the CMA has considered:

- (a) the Parties' submissions;
- (b) the Parties' customer bases, including their shares of supply, gross adds, net adds and churn;
- (c) the Parties' competitive incentives and strategies; and
- (d) the Parties' competitive positioning on parameters of competition, including price and network quality.

5.4.1.1 Parties' submissions

244. The Parties submitted that 3UK is 'trapped in a circle' of low scale, low returns and under-investment with no share of supply growth.³³³ In particular:

- (a) 3UK continues to suffer from a poor network quality reputation.³³⁴ Certain areas of its network [redacted].³³⁵ While 3UK has recently made significant investments to improve network performance, the reputation of its network and brand remains poor, and it has not seen any resulting increase in share of supply.³³⁶ [redacted].³³⁷
- (b) 3UK's share of supply has stagnated with no growth in the six years to 2022,³³⁸ and 3UK continues to experience the highest churn of all MNOs.³³⁹

³³³ FMN, paragraphs 11.13, 11.29; Parties' response to the Issues Letter, 4 March 2024, paragraphs 2.7-2.8.

³³⁴ FMN, paragraphs 15.276-15.283.

³³⁵ FMN, paragraph 11.16.

³³⁶ FMN, paragraphs 11.13-11.20, 11.31-11.33.

³³⁷ FMN, paragraphs 15.293-15.295.

³³⁸ FMN, paragraph 15.290.

³³⁹ FMN, paragraphs 15.284-15.286.

(c) 3UK does not [X] in the supply of retail mobile services,³⁴⁰ and it is not, and will not be a significant competitive force.³⁴¹

245. In relation to VUK's competitive position, the Parties submitted [X].³⁴² [X].³⁴³ In addition, VUK's share of supply has remained flat over the last few years.³⁴⁴

5.4.1.2 Parties' customer bases

246. The CMA notes that all four MNOs, including both Parties, provide all main types of consumer tariff (ie PAYM SIMO, PAYM handset, PAYM data-only, PAYG, unlimited data) whereas nearly all of the main MVNOs have a more limited offering.

5.4.1.2.1 Shares of supply

247. As discussed in paragraph 242, 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. The CMA therefore calculated shares of supply at the network level by allocating to each MNO their own subscribers as well as the subscribers of the MVNOs hosted on their respective networks.³⁴⁵

248. Table 2 shows that the Merger would reduce the number of MNOs from four to three in the UK and create the largest mobile operator, at a network level, in terms of revenue, and the second largest in terms of subscribers. The Merged Entity and the MVNOs hosted on its network would have a combined share of supply by subscribers of [30-40]%, with an increment of [10-20]% brought about by the Merger, and a similar combined share of supply by revenue of [30-40]% with an increment of [10-20]%.

³⁴⁰ FMN, paragraphs 15.291-15.292.

³⁴¹ FMN, paragraph 15.296.

³⁴² FMN, paragraphs 15.297-15.298.

³⁴³ FMN, paragraphs 15.300-15.301; Parties' response to the Issues Letter, 4 March 2024, paragraph 3.12.

³⁴⁴ FMN, paragraphs 15.302-15.303.

³⁴⁵ In response to the Issues Letter, the Parties submitted that '[a]t paragraph 532, the Issues Letter acknowledges that shares of supply by hosted subscribers may not fully reflect the degree of competitive constraint that MNOs impose on one another' (Parties' response to the Issues letter, 4 March 2024, Annex ILR A, note 45). The CMA considers that the Parties are conflating shares of supply in wholesale mobile services (where MVNOs are solely customers and competition to win them takes place via tenders which could result in shares of supply changing significantly depending on who wins the tender and therefore not fully reflecting the degree of competition) with shares of supply in retail mobile services aggregated at the network level which provides an indication for competition in the supply of retail mobile services that occurs at the network level.

Table 2: Shares of supply in the overall retail supply of mobile services at network level (by subscribers and revenues)

MNO	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%
3UK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Combined	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%
VMO2	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
Other*	[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%

*Other 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.

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

249. The Parties provided estimates of shares of supply for the following segments: 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.³⁴⁶ The CMA also produced its own estimates of the shares of supply for these segments using the Parties' data, as well as subscriber and revenue data gathered directly from third parties.³⁴⁷
250. As set out in Table 3, the CMA estimated that the Merged Entity's share of supply in the overall supply of retail mobile services by subscribers at mobile operator level would be [30-40]%, with an increment of [10-20]% brought about by the Merger, and by revenue would be [30-40]%, with an increment of [10-20]%. This would also result in the Merged Entity being the largest mobile operator by revenue, and the second largest by subscribers. Between them, the four MNOs supply over 80% of retail mobile subscribers and generate over 90% of revenues. This is also the case for the consumer retail segment, as set out in Table 4.

Table 3: Shares of supply in the overall supply of retail mobile services at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[10-20]%	[10-20]%	[10-20]%	[20-30]%	[20-30]%	[20-30]%
Vodafone	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%	[20-30]%
Talk Mobile	[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]%
3UK	[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]%
SMARTY	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Combined	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%
VMO2 (incl. Tesco Mobile)	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
O2	*	*	*	*	*	*
Virgin Mobile	*	*	*	*	*	*
Giffgaff	[0-5]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Sky Mobile	[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]%
Lyca Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[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%

³⁴⁶ FMN, Annex 15.0001.

³⁴⁷ Responses to CMA request for information (RFI) from third parties, 10 January 2024.

*VMO2 provided figures for VMO2 overall and a breakdown for Giffgaff but could not provide a split for O2 and Virgin Mobile. Where these figures do appear later, it is because they are the Parties' estimates.

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

251. When considering the consumer retail segment, the CMA estimated that the Merged Entity's share of supply by subscribers is [20-30]% with an increment of [10-20]% brought about by the Merger, and the Merged Entity's share of supply by revenue is [30-40]%, with an increment of [10-20]%. Table 4 shows that the Merger would result in the Merged Entity being the largest mobile operator in the consumer retail segment by revenue, followed closely by VMO2 (including Tesco Mobile) and BTEE.

Table 4: Shares of supply in the consumer retail segment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%
Vodafone	[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]%
VOXI	[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]%
Three	[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]%
Combined	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[20-30]%	[20-30]%
VMO2 (inc. Tesco Mobile)	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
O2	*	*	*	*	*	*
Virgin Mobile	*	*	*	*	*	*
Giffgaff	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Sky Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

252. Table 5 sets out the CMA's estimates for shares of supply in the PAYM SIMO subsegment. As with the consumer retail segment, the Merged Entity would be the second largest mobile operator in this subsegment by subscribers, with a share of supply of [20-30]% with an increment of [10-20]% brought about by the Merger, and the largest mobile operator in this subsegment by revenue with a share of supply of [30-40]%, with an increment of [10-20]%. Currently BTEE and VMO2 (including Tesco Mobile) are the largest mobile operators in the PAYM SIMO subsegment by subscribers and revenue, but the Merger would result in three similarly sized large mobile operators.

Table 5: Shares of supply in the PAYM SIMO subsegment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%
Vodafone	[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]%
3UK	[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]%
Combined	[30-40]%	[30-40]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%
VMO2 (inc. Tesco Mobile)	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
O2	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[30-40]%
Virgin Mobile	[5-10]%	[0-5]%	[0-5]%	[5-10]%	[0-5]%	[0-5]%
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Sky Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[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%

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

253. Table 6 sets out the CMA's estimates for shares of supply in the PAYM handset subsegment. The Merged Entity would be the second largest mobile operator in this subsegment by subscribers and revenue, behind VMO2 on subscribers and BTEE on revenue. The CMA estimates that the Merged Entity would have a share of supply by subscribers of [20-30]% with an increment of [10-20]% brought about by the Merger, and a share of supply by revenue of [30-40]%, with an increment of [10-20]%.

Table 6: Shares of supply in the PAYM handset subsegment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%
Vodafone	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%
3UK	[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]%
Combined	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%
VMO2 (inc. Tesco Mobile)	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
O2	*	*	*	*	*	*
Virgin Mobile	*	*	*	*	*	*
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Sky Mobile	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Other	[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%

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

254. Table 7 sets out the CMA's estimates for shares of supply in the PAYM data-only subsegment. The CMA estimates that the Merged Entity's share of supply by subscribers would be [30-40]% with an increment of [10-20]% brought about by the Merger, and the Merged Entity's share of supply by revenue would be [30-40]%, with an increment of [10-20]%. Two mobile operators, the Merged Entity and BTEE, would supply over 80% of this subsegment (by subscribers and revenue), reaching over 95% if including VMO2.

Table 7: Shares of supply in the PAYM data-only subsegment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[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]%
3UK	[20-30]%	[20-30]%	[20-30]%	[10-20]%	[10-20]%	[10-20]%
Three	[20-30]%	[20-30]%	[20-30]%	[10-20]%	[10-20]%	[10-20]%
Combined	[40-50]%	[40-50]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[50-60]%
VMO2	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%
O2	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Virgin Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Sky Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[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%

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

255. Table 8 sets out the CMA's estimates for shares of supply in the pre-paid subsegment. The largest mobile operator in this segment is VMO2, in large part due to Giffgaff's strong presence. In contrast to other subsegments, MNO sub-brands VOXI and SMARTY, as well as MVNOs such as Lebara and Lyca Mobile all have non-negligible shares in the pre-paid subsegment. The CMA estimated that the Merged Entity's share of supply by subscribers would be [20-30]% with an increment of [10-20]% brought about by the Merger, with a similar share of supply of [20-30]% by revenue, with an increment of [10-20]%. This would result in the Merged Entity being the second largest mobile operator in this subsegment, behind VMO2.

Table 8: Shares of supply in the pre-paid retail subsegment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Vodafone	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[5-10]%
Talk Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VOXI	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%
3UK	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Three	[10-20]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%
SMARTY	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Combined	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%
BTEE	[10-20]%	[10-20]%	[5-10]%	[10-20]%	[10-20]%	[10-20]%
VMO2 (inc. Tesco Mobile)	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[40-50]%
O2	*	*	*	*	*	*
Virgin Mobile	*	*	*	*	*	*
Giffgaff	[10-20]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%
Lebara	[0-5]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[5-10]%
Lyca Mobile	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%
Other	[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%

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

256. Table 9 sets out the CMA's estimates for shares of supply in the business retail segment. The business retail segment is more concentrated than the consumer retail segment with only three MNOs (VUK, BTEE and VMO2) supplying over 90% of subscribers. The CMA estimated that the Merged Entity's share of supply by subscribers in this segment, largely driven by VUK, would be [40-50]%, with an

increment of [0-5]% brought about by the Merger, and by revenue would be [30-40]%, with an increment of [0-5]%.

257. In response to the Issues Letter, the Parties submitted that [redacted].³⁴⁸ The CMA considers that while 3UK's share of supply in the business retail segment remains small, it has been growing (from [0-5]% in 2018 to [0-5]% in 2022 by subscribers and [0-5]% to [0-5]% in the same period by revenue), and this growth has been particularly fast in the smaller subsegments. The CMA also reemphasises that the business retail segment is very concentrated and therefore the loss of any competition may be significant.

Table 9: Shares of supply in the business retail segment at mobile operator level (by subscribers and revenue)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[40-50]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
Vodafone	[40-50]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
3UK	[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]%
Combined	[40-50]%	[40-50]%	[40-50]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[30-40]%	[30-40]%	[30-40]%	[40-50]%	[40-50]%	[40-50]%
VMO2 (inc. Tesco Mobile)	[10-20]%	[20-30]%	[20-30]%	[10-20]%	[10-20]%	[20-30]%
O2	*	*	*	*	*	*
Virgin Mobile	*	*	*	*	*	*
Tesco Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

258. Table 10 sets out the Parties' estimates for shares of supply in the SoHo subsegment, as most third parties were not able to provide breakdowns of their business revenue or subscriber numbers for SoHo customers only. The only exception to this was Sky Mobile, who is not active in the SoHo subsegment. The Parties estimate that BTEE is [redacted] with a share of supply by subscribers of [40-50]% and a share of supply by revenues of [60-70]%, [redacted]. The Parties estimated that the Merged Entity's share of supply by subscribers would be [30-40]% with an increment of [10-20]% brought about by the Merger, and by revenue would be [20-30]%, with an increment of [5-10]%, making the Merged Entity [redacted].
259. These estimates show 3UK's growing presence in the SoHo subsegment since 2020, with its share of supply by revenue [redacted], and its share of supply by subscribers growing by a factor of [redacted] in the same period, largely at the expense of BTEE. VMO2 accounts for a much less significant proportion of this subsegment than some of the subsegments in the consumer retail segment discussed above, suggesting that BTEE's most prominent competitor (by share of supply) in the SoHo subsegment is currently VUK, with 3UK growing strongly.

³⁴⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 62, 102 and 104.

Independent MVNOs have a particularly small presence in the SoHo subsegment, making up only [0-5]% of share by subscribers and [0-5]% by revenue.³⁴⁹

Table 10: Shares of supply in the SoHo subsegment at mobile operator level (by subscribers and revenues)

Mobile operator	Subscribers			Revenues		
	2020	2021	2022	2020	2021	2022
VUK	[20-30]%	[20-30]%	[20-30]%	[10-20]%	[10-20]%	[10-20]%
Vodafone	[20-30]%	[20-30]%	[20-30]%	[10-20]%	[10-20]%	[10-20]%
3UK	[0-5]%	[5-10]%	[10-20]%	[0-5]%	[0-5]%	[5-10]%
Three	[0-5]%	[5-10]%	[10-20]%	[0-5]%	[0-5]%	[5-10]%
Combined	[20-30]%	[30-40]%	[30-40]%	[20-30]%	[20-30]%	[20-30]%
BTEE	[60-70]%	[50-60]%	[40-50]%	[70-80]%	[60-70]%	[60-70]%
VMO2 (inc. Tesco Mobile)	[10-20]%	[10-20]%	[10-20]%	[5-10]%	[10-20]%	[10-20]%
O2	[5-10]%	[10-20]%	[10-20]%	[5-10]%	[5-10]%	[5-10]%
Virgin Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Tesco Mobile	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Other	[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%

Source: CMA analysis of Parties' subscriber and revenue data, excluding Sky Mobile.

260. Overall, the CMA believes that the Merged Entity would be the largest mobile operator in the overall supply of retail mobile services by revenue, with a share of supply of [30-40]% and the second largest mobile operator by subscribers, with a share of supply of [30-40]%. This is sufficient to raise prima facie competition concerns. The Merged Entity would also have a particularly strong position in some of the subsegments discussed above. The CMA also notes that the Parties have been gaining shares of supply by revenue in both the overall supply of retail mobile services and the consumer retail segment in recent years, while both BTEE and VMO2 have been losing share.
261. Additionally, as discussed in paragraph 250, the supply of retail mobile services is very concentrated, with the four MNOs accounting for over 80% of subscribers and over 90% of revenue in both the overall supply of retail mobile services and in the consumer retail segment. Concentration levels are even higher in the business retail segment, with the four MNOs accounting for over 90% by both subscribers and revenue.

5.4.1.2.2 Gross adds/churn/net adds data

262. The CMA notes that shares of supply based on existing subscribers and revenue, although a useful indicator, only capture the current competitive strength of mobile operators to a certain degree. In particular, many customers are bound by long-

³⁴⁹ In response to the Issues Letter, the Parties submitted that MVNOs exert a strong competitive constraint in the SoHo subsegment and have a share of supply of [5-10]% by subscribers and [0-5]% by revenue with many smaller business customers switching to consumer tariffs offered by MVNOs (Parties' response to the Issues Letter, 4 March 2024, paragraph 3.21). The CMA notes that the Parties' estimates submitted to the CMA (FMN, Annex 15.0001) show that MVNOs have a share of supply of [0-5]% by subscribers and [0-5]% by revenues in Q3 2023. When only considering independent MVNOs, these shares fall to [0-5]% by subscribers and [0-5]% by revenues. Furthermore, the CMA notes that SoHo customers that are on consumer tariffs have already been accounted for in the consumer retail segment.

term contracts, which means that, at any given time, only a proportion of the total customer base is actually contestable. The CMA has therefore also considered gross adds, churn and net adds data which capture more recent competitive dynamics.

263. The CMA has considered gross adds, churn and net adds for the supply of retail mobile services to consumers excluding the pre-paid subsegment because the Parties are unable to provide data for these metrics for the pre-paid subsegment.³⁵⁰ However, the CMA considers that shares of supply by subscribers and revenue, as set out in Table 8 and paragraph 255, are likely to be a good reflection of the competitive strength in the pre-paid subsegment given there are no contracts and customers will have used services in the last 90 days.
264. The CMA defines 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).
265. Table 11 sets out the CMA's estimates of shares of supply by gross adds based on the Parties' and third parties' estimates.³⁵¹ These estimates show that 3UK has been performing more strongly than its shares of supply by subscribers suggest (ie [10-20]% vs [10-20]%). Similarly, Sky Mobile ([5-10]% vs [5-10]%) and Tesco Mobile ([5-10]% vs [5-10]%) also have higher shares of supply by gross adds, compared to by subscribers. As discussed in paragraph 262, shares of supply by gross adds are likely to be a better indicator of a mobile operator's current competitive constraint. In contrast, VMO2 and VUK have smaller shares of supply by gross adds while BTEE has very similar shares of supply by both gross adds and subscribers.
266. 3UK's share of supply by gross adds has consistently grown from [10-20]% in 2018 to [10-20]% in 2022. As discussed in section 5.4.1.3.1, this is consistent with the view that 3UK has an incentive to compete more aggressively than larger MNOs given its current smaller subscriber base while, as seen by their declining shares of supply by gross adds in this period, BTEE and VMO2 may have less of an incentive. Similarly to its growing share of supply by subscribers, Sky Mobile has also seen a growth in share of supply by gross adds. VUK's share of supply by gross adds has been more stable in this period, at [10-20]% in 2018 and [10-20]% in 2022.

³⁵⁰ The Parties were also unable to provide gross adds, churn and net adds data for the SoHo subsegment.

³⁵¹ Parties' response to CMA RFI dated 28 September 2024, Annex 4.001 (as updated on 12 March 2024). Responses to CMA RFI from third parties, 10 January 2024.

Table 11: Shares of supply in the consumer retail segment excluding pre-paid segment (by gross adds and subscribers)

Mobile operator	Gross Adds					Subscribers				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
VUK	[10-20]%	[10-20]%	[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]%	[10-20]%	[10-20]%
Combined	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%	[30-40]%	[20-30]%	[20-30]%	[20-30]%	[20-30]%
VMO2 (inc. Tesco Mobile)	[30-40]%	[30-40]%	[30-40]%	[20-30]%	[20-30]%	[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]%	[20-30]%	[20-30]%
Tesco Mobile	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%
Sky Mobile	[5-10]%	[5-10]%	[5-10]%	[10-20]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%	[5-10]%
Others	[5-10]%	[0-5]%	[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%	100.0%	100.0%

Source: CMA analysis of Parties' and third parties' gross adds data.

267. The CMA defines churn as disconnections (ie the number of subscribers lost in a given period) divided by a mobile operator's (closing) customer base.
268. Table 12 sets out the CMA's estimates of mobile operator churn, based on the Parties' and third parties' estimates.³⁵² These estimates show that Sky Mobile has had lower rates of churn than all of the MNOs and Tesco Mobile since mid-2021. VUK has had very stable rates of churn, which in Q2 2023 were markedly lower than the other MNOs, and the lowest of all MNOs since 2022. Of the MNOs, while 3UK has historically had the highest rates of churn, it has seen a decline [X]. BTEE has seen increasing rates of churn since mid-2021 and now has the highest levels of churn of the MNOs. VMO2 has also seen increasing rates of churn since mid-2021.
269. The CMA believes that historic churn rates may be of limited relevance in assessing 3UK's future churn rates. This is because:
- (a) third-party responses show that value for money and reliability of network are the most important factors in choosing/switching from a mobile operator (see paragraph 122);
 - (b) the CMA understands from third parties that there is a lag before changes in network quality translate into changes in network reputation and therefore lower churn rates,³⁵³ and

³⁵² Parties' response to RFI 5, Annex 4.001, 13 October 2023. Responses to RFI from third parties, 10 January 2024.

³⁵³ Responses to the CMA competitor questionnaire from third parties, January 2024.

(c) following on from the above, it may be expected that historic churn rates are not a good proxy for 3UK's churn rates in the future given that 3UK has been improving its network quality recently such that it has overtaken VMO2 (see section 5.4.1.4.2).

270. The CMA also notes that despite 3UK having consistently had a high churn rate, it has continued to successfully obtain gross adds, emphasising its ongoing competitive relevance.

Table 12: Churn rates in the consumer retail segment excluding pre-paid subsegment

Mobile operator	Churn 2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2
VUK	[2-3]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[2-3]%
3UK	[3-4]%	[3-4]%	[4-5]%	[4-5]%	[4-5]%	[4-5]%	[4-5]%	[4-5]%	[3-4]%
BTEE	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[4-5]%	[4-5]%	[4-5]%	[4-5]%
VMO2 (not including Tesco Mobile)	[2-3]%	[2-3]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%
Tesco Mobile	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[3-4]%	[2-3]%
Sky Mobile	[1-2]%	[1-2]%	[1-2]%	[2-3]%	[1-2]%	[2-3]%	[2-3]%	[2-3]%	[2-3]%

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

271. The CMA defines net adds as gross adds minus disconnections (as defined at paragraphs 264 and 267 above).

272. Table 13 sets out the CMA's estimates of net adds, based on the Parties' estimates and third parties' net adds data.³⁵⁴ These estimates show that Sky Mobile has had the strongest net growth since the start of 2022, and that Tesco Mobile has also had strong growth in this period. 3UK has had positive net adds for two thirds of the quarters in this period, comparable to VUK and VMO2,³⁵⁵ while BTEE has experienced consistent negative net adds between late-2022 and mid-2023.

Table 13: Net adds in the consumer retail segment excluding post-paid subsegment

Mobile operator	Net adds (000s) 2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 Q1	2023 Q2
VUK	[25-50]	[0-25]	[0-25]	[75-100]	[(50)-(25)]	[(50)-(25)]
3UK	[0-25]	[(50)-(25)]	[0-25]	[50-75]	[(25)-0]	[0-25]
BTEE	[0-25]	[0-25]	[(25)-0]	[(50)-(25)]	[(100)-(75)]	[(100)-(75)]
VMO2 (inc. Tesco Mobile)	[25-50]	[25-50]	[50-75]	[100-125]	[0-25]	[100-125]
VMO2	[(25)-0]	[(25)-0]	[25-50]	[50-75]	[(50)-(25)]	[0-25]
Tesco Mobile	[25-50]	[25-50]	[25-50]	[25-50]	[25-50]	[75-100]
Sky Mobile	[125-150]	[125-150]	[100-125]	[125-150]	[100-125]	[75-100]
Others	[0-25]	[0-25]	[25-50]	[25-50]	[(50)-(25)]	[(25)-0]

³⁵⁴ Parties' response to CMA RFI dated 28 September 2024, Annex 4.001 (as updated on 12 March 2024). Responses to CMA RFI from third parties, 10 January 2024.

³⁵⁵ The CMA notes that this applies to VMO2 not including Tesco Mobile. VMO2 including Tesco Mobile has consistently had positive net adds, significantly higher than 3UK's, largely driven by Tesco Mobile's strong growth.

273. The CMA has also seen supporting evidence from 3UK's internal documents regarding 3UK performing strongly with regards to net adds and gross adds. In particular, the CMA notes that:

(a) in its 2024 budget presentation [redacted];³⁵⁶ and

(b) according to an October 2023 [redacted].³⁵⁷

(i) [redacted];

(ii) [redacted];

(iii) [redacted].³⁵⁸

274. The shares of supply by gross adds, churn and net adds data provide insight into the current competitive conditions in the supply of retail mobile services. Based on these, the CMA believes that 3UK is currently performing more strongly than its shares of supply by revenue and subscribers suggest as it has high gross and net adds and falling churn. Broadly speaking, VUK and VMO2 have been performing similarly to each other across these metrics. BTEE appears to currently be performing more weakly than its shares of supply by subscribers and revenue indicate.³⁵⁹ Sky Mobile and Tesco Mobile perform strongly across the metrics, albeit from a low base.

5.4.1.3 Parties' competitive incentives and strategies

275. The CMA has assessed the closeness of the Parties' respective offerings in section 5.4.2.1. In the present section, the CMA has assessed the Parties' competitive incentives in the supply of retail mobile services and how any such incentives may have translated in terms of their competitive strategies to assess closeness.

³⁵⁶ CK Hutchison Internal Document, [redacted], page 5.

³⁵⁷ CK Hutchison Internal Document, CKH_00001231, pages 5 and 29.

³⁵⁸ The CMA notes that SoHo business customers accounted for [redacted] of 3UK's business revenue as of September 2023 (FMN, Figure 15.30). As such, the CMA expects that [redacted].

³⁵⁹ In response to the Issues Letter, the Parties submitted that 'BTEE's current net adds are in no way reflective of its long-term position of competitive strength, nor do they indicate that BTEE has in general a weaker incentive to compete.' (Parties' response to the Issues Letter, 4 March, 2024, Annex ILR A, note 52). The CMA notes that it has considered a range of evidence to substantiate this view, as set out at section 5.4.1.3.1, which is corroborated by estimates of net adds.

5.4.1.3.1 *Parties' competitive incentives*

276. As outlined in section 5.4.1.2.1, the Merged Entity would have a significantly larger customer base compared to each Party on a standalone basis. To understand the impact of this on its competitive incentives, the CMA considered how a mobile operator's competitive incentives are likely to be impacted by the size of its customer base.
277. The CMA believes that the cost structure of the industry may create strong incentives for smaller MNOs to adopt aggressive growth strategies and innovate to win subscribers:
- (a) The Parties and third parties have indicated that the UK mobile industry is characterised by high fixed costs and significant ongoing investment requirements.³⁶⁰ As well as investing to maintain their base of network infrastructure, MNOs also must invest to respond to technological developments and changing consumer needs, such as the increased demand for mobile data outlined in section 5.1.15.1.1.³⁶¹
 - (b) The CMA believes that this may mean smaller MNOs have stronger incentives to increase their revenue, either through competing aggressively to achieve subscriber growth or seeking to find additional revenue streams, including through innovation.
278. In response to the Issues Letter, the Parties submitted that:³⁶²
- (a) the CMA's view that smaller operators compete more aggressively is not consistent with the evidence that 3UK has failed to grow because [redacted], and as such it has not grown its share of supply since 2016.
 - (b) [redacted].
279. In relation to these submissions the CMA notes that competition is a process of rivalry between firms seeking to win customers business over time by offering them a better deal,³⁶³ and failure to achieve significant growth does not equate to 3UK not competing aggressively. Further, the available evidence shows that, in contrast to the Parties' submissions, 3UK's share of supply has grown since 2018, its churn has been falling and its network quality has improved since 2021 (as discussed in sections 5.4.1.2 and 5.4.1.4.2). Moreover, as outlined in section

³⁶⁰ FMN, paragraph 1.13 and responses to the CMA competitor questionnaire from third parties, January 2024.

³⁶¹ Some third parties have also submitted that certain market features, such as the presence of network sharing arrangements and the increasing use of passive infrastructure 'TowerCo' providers may act to ease an MNO's investment requirement.

³⁶² Parties' response to the Issues Letter, 4 March, 2024, Annex ILR A, note 86.

³⁶³ [CMA129](#), paragraph 2.2.

4.3.2.2, the CMA believes that 3UK will have the ability and incentive to continue to compete in broadly the same way as currently observed.

280. In contrast to small mobile operators, the CMA believes that mobile operators with large existing customer bases may have lower incentives to compete aggressively on price and that this is consistent with the evidence in sections 5.4.1.2.1 and 5.4.1.2.2:
- (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 than for its existing customers. However, in the medium-term, the mobile operator is likely to have to extend the same terms to its existing customers.
 - (b) 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.
 - (c) The CMA believes that the cost is likely to be greater for mobile operators with a larger existing base and that therefore mobile operators with larger existing customer bases may have lower incentives to compete aggressively on price. In contrast, a smaller mobile operator, in considering this trade-off, may have greater incentives to reduce prices in order to win subscribers from rivals to grow revenue and cover its fixed cost base.
 - (d) Moreover, the CMA considers that the fact that the industry is mature (ie growth is very low and mobile penetration is high) further limits the incentives of mobile operators with large existing bases to compete aggressively on price.
281. In response to the Issues Letter, the Parties submitted that in markets with highly differentiated products, multi-brand operators are able to price discriminate and compete for new customers by launching new tariffs or sub-brands. This means that operators do not face a simple trade-off between reducing prices to win new customers and losing margins on the existing subscriber base.³⁶⁴ Whilst MNOs could offer lower prices by launching new sub-brands, as the industry is mature and penetration is high, this would still increase the risk of cannibalisation of existing revenue streams.

³⁶⁴ Parties' response to the Issues Letter, 4 March, 2024, Annex ILR A, note 86.

282. The CMA notes that – as set out in Table 3 – 3UK and, to a somewhat lesser extent, VUK, currently have smaller customer bases than the other MNOs. The CMA believes that this may mean that they have relatively strong incentives to compete aggressively, including on price. The CMA notes that the Merged Entity would have a significantly larger customer base, which conversely means that it may have a lower incentives to compete aggressively compared to each Party (and in particular 3UK) on a standalone basis.

5.4.1.3.2 *Parties' competitive strategies and growth plans*

283. The CMA has considered how the Parties' overall competitive incentives – discussed above – have translated in terms of their competitive strategies and growth plans in the years leading to the Merger, focusing on their respective internal documents.

5.4.1.3.2.1 *3UK*

284. At the outset, the CMA notes that the Parties cautioned the CMA against a selective use of CK Hutchison's internal documents, insofar as they considered that the CMA relied in its Issues Letter on documents which present a '[redacted] view of 3UK's performance, prospects, and the nature of competition in the market'.³⁶⁵ The CMA has not taken a selective approach to internal documents. The CMA has reviewed a broad range of internal documents prepared for the board and senior management and has assessed these in the round in order to reach a view on 3UK's competitive strategies and growth plans. Moreover, the CMA considers that it is reasonable to expect that businesses will exercise a degree of care in preparing materials presented to their senior stakeholders and, absent evidence to the contrary, the CMA considers that it is reasonable to rely on the material in such documents as providing reasonably accurate information about the operation or views of the business.

285. Contrary to the Parties' submissions to the CMA about 3UK's future competitive viability and commercial trajectory (see section 5.4.1.1), the CMA has found evidence in 3UK's internal documents suggesting a strong commitment to long-term growth, along with a positive outlook on its ability to deliver against its strategic objectives and compete sustainably in the supply of retail mobile services.

(a) [redacted].³⁶⁶ [redacted].³⁶⁷

³⁶⁵ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, for example note 54.

³⁶⁶ CK Hutchison Confidential Annex CKH S109-1 8.013, page 4.

³⁶⁷ FMN, paragraph 11.29 and table 11.1.

(b) In its 2020 budget presentation [redacted].³⁶⁸ [redacted].³⁶⁹ [redacted].³⁷⁰

286. Based on 3UK's internal documents, the CMA has identified seven broad areas that have been central to its competitive strategy in the last three years, and which the CMA considers illustrate that 3UK competes aggressively in the supply of retail mobile services. These areas are [redacted]. The CMA discusses each of these in turn below.
287. As an overarching point, the CMA notes that 3UK's latest available results and budget illustrate its continued growth and improved performance across several metrics, as discussed at paragraph 273.³⁷¹ [redacted].³⁷² [redacted].³⁷³

5.4.1.3.2.1.1 Pricing strategy

288. In a document from January 2022, 3UK sets out the three pillars to its commercial strategy in the consumer retail segment, which include [redacted].³⁷⁴ Further in this presentation, 3UK elaborates on how it intends to become the fastest growing network [redacted].³⁷⁵ [redacted].³⁷⁶ [redacted],³⁷⁷ [redacted].³⁷⁸
289. Further, 3UK's internal documents suggest that its pricing is a key aspect of the competitive role that its two brands play in the supply of retail mobile services, with SMARTY offerings and 3UK's SIM offerings [redacted].³⁷⁹ This is supported by the CMA's analysis of the Pure Pricing data at section 5.4.1.4.1.
290. The CMA also found evidence in 3UK's internal documents that its pricing principles are primarily targeted at competing with MNOs, although it also benchmarks its pricing against that of [redacted]. For example, in a document dated [redacted], the document states that [redacted].³⁸⁰ In the same document, [redacted].³⁸¹
291. Finally, the CMA found a number of internal documents that [redacted].³⁸² For example:

³⁶⁸ CK Hutchison Confidential Annex CKH S109-1 8.013, pages 16 and 18.

³⁶⁹ CK Hutchison Confidential Annex CKH S109-1 8.015, pages 3 and 4.

³⁷⁰ CK Hutchison Internal Documents, CKH_000003815, pages 2-3; CKH_00000762, page 5; CKH_00001181, pages 6, 13-14, 19-20, 24.

³⁷¹ CK Hutchison Internal Documents, CKH_00000055, pages 6, 9, 10 and 12; [redacted], page 5.

³⁷² CK Hutchison Internal Document, [redacted], page 6.

³⁷³ CK Hutchison Internal Document, [redacted], pages 13, 25, 27 and 45.

³⁷⁴ CK Hutchison Internal Document, CKH_00003845, page 4.

³⁷⁵ CK Hutchison Internal Document, CKH_00003845, pages 22-23.

³⁷⁶ CK Hutchison Internal Document, CKH_00003987, page 3. Also, CK Hutchison Internal Document, CKH_00003212, pages 6, 8, 13, 15, and 18.

³⁷⁷ CK Hutchison Internal Document, CKH_00000802, page 3.

³⁷⁸ For example, CK Hutchison Internal Documents, CKH_00001181, page 56; and CKH_00004347.

³⁷⁹ CK Hutchison Internal Document, CKH_00003615, pages 2 and 4. Also, CK Hutchison Internal Documents, CKH_00003811, pages 4, 5 and 7 ; CKH_00004056, pages 6-8 ; and CKH_00004161, page 3.

³⁸⁰ CK Hutchison Internal Document, CKH_00004347, page 20.

³⁸¹ CK Hutchison Internal Document, CKH_00004347, page 25.

³⁸² [redacted].

(a) [REDACTED].³⁸³ [REDACTED];³⁸⁴

(b) [REDACTED];³⁸⁵ and

(c) [REDACTED].³⁸⁶

292. The Parties submitted that [REDACTED].³⁸⁷ The CMA considers that, in the round, 3UK's internal documents show that its pricing strategy is primarily aimed at competing with MNOs, [REDACTED].³⁸⁸

5.4.1.3.2.1.2 Business

293. The Parties explained that 3UK re-introduced a business offering in 2020, initially focusing on SoHo/micro businesses which accounts for approximately [REDACTED]% of its business revenues.³⁸⁹

294. The CMA found evidence in 3UK's internal documents of ambitious growth plans in the business retail segment, going [REDACTED]. For example:

(a) [REDACTED].³⁹⁰

(b) [REDACTED].³⁹¹

(c) [REDACTED].³⁹² [REDACTED].³⁹³

295. 3UK's growth plans in the [REDACTED] subsegment are further evidenced [REDACTED].³⁹⁴ [REDACTED].³⁹⁵

296. [REDACTED].³⁹⁶ [REDACTED].³⁹⁷

297. In response to the Issues Letter, the Parties reiterated that 3UK remains a small player in the retail business segment, [REDACTED].³⁹⁸ The CMA recognises that 3UK's share of supply in the retail business segment overall is small. However, the share of supply data also shows that 3UK's growth has been fast, in particular in certain

³⁸³ CK Hutchison Internal Document, CKH_00004347, page 20.

³⁸⁴ CK Hutchison Internal Document, CKH_00000801, page 3.

³⁸⁵ CK Hutchison Internal Document, CKH_00004161, page 3.

³⁸⁶ CK Hutchison Internal Document, CKH_00004161, page 13.

³⁸⁷ Parties' response to the Issues Letter, 4 March 2024, ILR Annex A, note 59.

³⁸⁸ CK Hutchison Internal Document, CKH_00004347, page 7.

³⁸⁹ FMN, paragraph 15.325.

³⁹⁰ CK Hutchison Internal Document, CKH_00000656, pages 8, 28, 33 and 35.

³⁹¹ CK Hutchison Internal Document, CKH_00000656, page 38.

³⁹² CK Hutchison Internal Document, CKH_00004003, pages 4 and 7.

³⁹³ CK Hutchison Internal Document, CKH_00004003, page 11.

³⁹⁴ CK Hutchison Internal Document, CKH_00000362, page 13.

³⁹⁵ CK Hutchison Internal Document, CKH_00000362, page 13. Also, CK Hutchison Internal Document, CKH_00004003, pages 13 and 22.

³⁹⁶ CK Hutchison Internal Document, [REDACTED], pages 69-71.

³⁹⁷ CK Hutchison Internal Document, [REDACTED], page 76. Also, CK Hutchison Internal Document, CKH_00000761, page 10.

³⁹⁸ Parties' response to the Issues Letter, 4 March 2024, ILR Annex A, notes 60-62.

subsegments (discussed in section 5.4.1.2.15.4.1.2.1) and its internal documents (discussed further in section 5.4.2.1.5.2.1) show that it projecting future growth. This is against the background of a concentrated market in which MVNOs have a very limited presence (see section 5.4.1.2.1).

5.4.1.3.2.1.3 SMARTY

298. In August 2017, 3UK launched a digital sub-brand, SMARTY, which offers hybrid pre-paid services and had approximately [REDACTED] subscribers as of September 2023.³⁹⁹
299. In 3UK's recent internal documents, the SMARTY brand is identified as an area of [REDACTED].⁴⁰⁰ [REDACTED].⁴⁰¹
300. Other internal documents are consistent with SMARTY being a brand through which 3UK [REDACTED]. For example:
- (a) A business update from February 2022 sets out 3UK's plans to launch a new promotion 'to recapture lost market share' and put 3UK 'ahead of the competition'. In this document, [REDACTED].⁴⁰²
 - (b) In a January 2022 document, 3UK identifies establishing and growing the SMARTY brand as one of the 3UK strategies it will implement to [REDACTED].⁴⁰³ To reach its objective of growing SMARTY, [REDACTED].⁴⁰⁴
301. The [REDACTED] role of SMARTY in 3UK's competitive strategy is further emphasised [REDACTED]⁴⁰⁵ [REDACTED].⁴⁰⁶

5.4.1.3.2.1.4 FWA

302. The Parties submitted that 3UK's FWA offering is unlikely to be able to compete more strongly with fixed home broadband since [REDACTED] relies on the quality, capacity and coverage of the underlying 5G network, [REDACTED].⁴⁰⁷
303. In contrast, the CMA identified in internal documents that FWA has been another strong area of growth for 3UK in recent years [REDACTED]. In its internal documents and

³⁹⁹ FMN, paragraph 15.28.

⁴⁰⁰ For example, CK Hutchison Internal Document, [REDACTED], page 4.

⁴⁰¹ CK Hutchison Internal Document, CKH_00000761, page 12. Also, CK Hutchison Internal Document, CKH_00000055, page 9.

⁴⁰² CK Hutchison Internal Document, CKH_00000074, pages 8 and 9.

⁴⁰³ CK Hutchison Internal Document, CKH_00003845, pages 6 and 7.

⁴⁰⁴ CK Hutchison Internal Document, CKH_00003845, page 22.

⁴⁰⁵ FMN, paragraph 15.263(i).

⁴⁰⁶ CK Hutchison Internal Document, CKH_00000069, pages 41-44.

⁴⁰⁷ FMN, paragraph 15.27 and footnote 265.

the public domain, 3UK uses the terms ‘Home Broadband’ and ‘Business Broadband’ to refer to its FWA offering to consumers and business customers, respectively.

(a) [REDACTED].⁴⁰⁸ [REDACTED].⁴⁰⁹

(b) [REDACTED].⁴¹⁰

304. 3UK’s internal documents indicate that [REDACTED] has continued to be a strong focus throughout [REDACTED]. For example:

(a) [REDACTED],⁴¹¹ [REDACTED].⁴¹²

(b) [REDACTED]⁴¹³ [REDACTED].⁴¹⁴

305. [REDACTED].⁴¹⁵

5.4.1.3.2.1.5 Network enhancements (incl. NSA 5G roll-out)

306. As discussed in more detail in section 4.3.2.1, 3UK has spent considerable resources in recent years to improve its network – and customers’ perception of it – including to roll out NSA 5G at pace in certain areas. This is supported by a large number of 3UK’s internal documents provided to the CMA.⁴¹⁶

5.4.1.3.2.1.6 Customer experience

307. The CMA also found evidence in 3UK’s internal documents that improvements to customer experience has been another area of focus [REDACTED].⁴¹⁷

308. [REDACTED].⁴¹⁸

309. In their submissions to the CMA, [REDACTED].⁴¹⁹

⁴⁰⁸ CK Hutchison Internal Document, CKH_00000546, pages 2, 13, 26-27, 29-34, 46, and 54.

⁴⁰⁹ CK Hutchison Internal Document, CKH_00000546, pages 4-5, 16, 18, and 57.

⁴¹⁰ CK Hutchison Internal Document, CKH_00000540, page 35.

⁴¹¹ [REDACTED] (CK Hutchison Internal Document, CKH_00000609, page 16).

⁴¹² CK Hutchison Internal Document, CKH_00000609, pages 16, 18, 22, 23, and 28.

⁴¹³ The CMA understands this refers to FWA using an outdoor CPE ie a weatherproof wireless networking device installed outside the home or facility to provide connectivity.

⁴¹⁴ CK Hutchison Internal Document, CKH_00004412, pages 17-26.

⁴¹⁵ CK Hutchison Internal Document, CKH_00000055, page 12.

⁴¹⁶ For example, CK Hutchison Internal Documents, CKH_00000656; CKH_00003146; CKH_00002902; CKH_00000055; CKH_00000761, page 15; CKH_00001181, pages 6, 51 and 55; and CK Hutchison response to s109(1) notice dated 13 July 2023, annexes CKH S109-1 8.013, page 85 and CKH S109-1 8.019.

⁴¹⁷ For example, CK Hutchison Internal Documents, CKH_00003071; CKH_00000801, page 25; CKH_00000064, page 43; CKH_00000068, page 39 and CK Hutchison Confidential Annex CKH S109-1 5.019, page 15.

⁴¹⁸ CK Hutchison Internal Document, [REDACTED], page 53.

⁴¹⁹ FMN, paragraph 15.267.

5.4.1.3.2.1.7 *Brand reputation*

310. The CMA notes that the Parties acknowledged in their submissions that all mobile operators compete on branding, undertaking considerable investments to support their brands and presence in the supply of retail mobile services, and gave the example of 3UK sponsoring Gogglebox.⁴²⁰ [REDACTED].⁴²¹
311. More generally, 3UK's most recent internal documents support the view that 3UK is committed to improving the perception and reputation of its brand and is making significant progress in this direction. For example:
- (a) [REDACTED].⁴²² [REDACTED].⁴²³
 - (b) [REDACTED].⁴²⁴ [REDACTED].⁴²⁵

5.4.1.3.2.2 *VUK*

312. In the paragraphs below, the CMA provides a high-level overview of VUK's internal documents discussing its competitive strategies and growth plans, which the CMA considers illustrate that VUK competes [REDACTED] in the supply of retail mobile services, [REDACTED].
313. [REDACTED].⁴²⁶ [REDACTED].⁴²⁷ [REDACTED].⁴²⁸ [REDACTED].⁴²⁹ [REDACTED].⁴³⁰ [REDACTED].⁴³¹
314. [REDACTED].⁴³² [REDACTED].⁴³³
315. A number of VUK'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.

⁴²⁰ FMN, paragraph 15.152.

⁴²¹ CK Hutchison Internal Document, CKH_00005711, page 3.

⁴²² CK Hutchison Internal Document, [REDACTED], page 50.

⁴²³ CK Hutchison Internal Document, [REDACTED], pages 69 and 72.

⁴²⁴ CK Hutchison Internal Document, CKH_00005818, page 3.

⁴²⁵ CK Hutchison Internal Document, CKH_00005771, page 12.

⁴²⁶ Vodafone Internal Document, VF_00000501_001, pages 78-79 and 83. Also, Vodafone Internal Document, VF_00004673_001, pages 7 and 12.

⁴²⁷ Vodafone Internal Document, VF_00000501_001, pages 77 and 80.

⁴²⁸ Vodafone Internal Document, VF_00000501_001, page 81.

⁴²⁹ Vodafone Internal Document, VF_00000501_001, page 82.

⁴³⁰ Vodafone Internal Document, VF_00000501_001, page 86.

⁴³¹ Vodafone Internal Document, VF_00000501_001, page 87. Also, Vodafone Internal Document, VF_00004673_001, pages 2 and 11.

⁴³² Vodafone Internal Document, VF_00004673_001, page 10.

⁴³³ Vodafone Internal Document, VF_00004673_001, page 14.

- (a) [REDACTED].⁴³⁴ [REDACTED].⁴³⁵ [REDACTED].⁴³⁶
- (b) [REDACTED].⁴³⁷
- (c) In their submissions to the CMA, the Parties acknowledged that VUK has a broad offering to business customers, comprising mobile services, fixed services (including multi-play offers), security functionalities and other specific enterprise add-ons, enabling it to meet the needs of larger business customers (public sector, corporate and medium SMEs).⁴³⁸ [REDACTED].⁴³⁹ [REDACTED],⁴⁴⁰ [REDACTED].⁴⁴¹
- (d) [REDACTED].⁴⁴² [REDACTED].⁴⁴³

5.4.1.4 Parties' competitive position on parameters of competition

316. The CMA has assessed the Parties' competitive positioning with respect to pricing, network quality, brand and customer satisfaction which, as discussed in section 5.1.3, are key parameters of competition.

5.4.1.4.1 Pricing

317. The CMA 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.⁴⁴⁴

⁴³⁴ For example, Vodafone Internal Documents, VF_00009359_001, page 31; VF_00002340_001, page 1; VF_00001646_001, page 2; VF_00000220_001, page 14.

⁴³⁵ For example, Vodafone Internal Document, VF_00001646_001, page 2.

⁴³⁶ Vodafone Internal Document, VF_000002340_001, page 1.

⁴³⁷ Vodafone Internal Documents, VF_000001371_001, pages 27-28; VF_00000479_001, pages 5-6 and 8; VF_00002818_001, pages 3-4; VF_00000212_001, page 4; VF_00000187_001, page 2.

⁴³⁸ FMN, paragraph 15.322.

⁴³⁹ For example, Vodafone Internal Documents, VF_00009359_001, page 45; VF_00004673_001, pages 55, 58-59, 64, 74, and 76; and VF_00000488_001, pages 2, 4, 17.

⁴⁴⁰ [REDACTED].

⁴⁴¹ Vodafone Internal Documents, VF_00004673_001, page 69; and VF_00000488_001, pages 4, 14, 16, 23, 28, 31 and 50.

⁴⁴² Vodafone Internal Documents, VF_000004673_001, pages 81-82, and 85; VF_00000951_001, pages 1-2; VF_00004767_001, pages 5-6; VF_00000898_001, page 6; and VF_00004795_001, page 12.

⁴⁴³ Vodafone Confidential Annex VF RFI-7 4.001; Vodafone Internal Document, VF_00036616_001, page 8; and see also '[VUK launches 5G Ultra, the UK's first 5G Standalone mobile network for consumers](#)', 23 June 2023.

⁴⁴⁴ Pure Pricing sources information from mobile operators' publicly facing pricing touchpoints, 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.

However, to analyse pricing on recently available tariffs, the CMA primarily focused on data from July to December 2023.⁴⁴⁵

318. This dataset contains information on all publicly available tariffs offered by VMO2 (under the O2 and Giffgaff brands), 3UK (under the Three and SMARTY brands), VUK (under the Vodafone and VOXI brands), as well as BTEE, Sky Mobile, Tesco Mobile and iD Mobile. In the rest of this section, the CMA refers to mobile operators' sub-brands by their brand names: (i) O2 and Giffgaff for VMO2, (ii) Three and SMARTY for 3UK, (iii) Vodafone and VOXI for VUK.
319. 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.⁴⁴⁶ This is particularly true for post-paid tariffs (ie PAYM SIMO and PAYM handset).
320. 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. The CMA's 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.⁴⁴⁷ This therefore makes it easier to compare pre-paid tariffs on a like-for-like basis than post-paid tariffs.
321. To understand pricing among pre-paid tariffs, the CMA first compared the effective monthly prices across different capped data allowances (ie excluding unlimited data tariffs) for the period July to December 2023.⁴⁴⁸ Effective monthly prices reflect the advertised monthly price of a tariff net of any promotions or discounts averaged over the length of the contract.⁴⁴⁹ Pre-paid tariffs accounted for 20.6% of

⁴⁴⁵ The CMA understands 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 during the most recent period before the Parties formally notified the Merger to the CMA; and (b) were offered by the set of mobile operators currently active in the market. In this regard, the CMA notes 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.

⁴⁴⁶ The CMA notes 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.

⁴⁴⁷ 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.

⁴⁴⁸ 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.

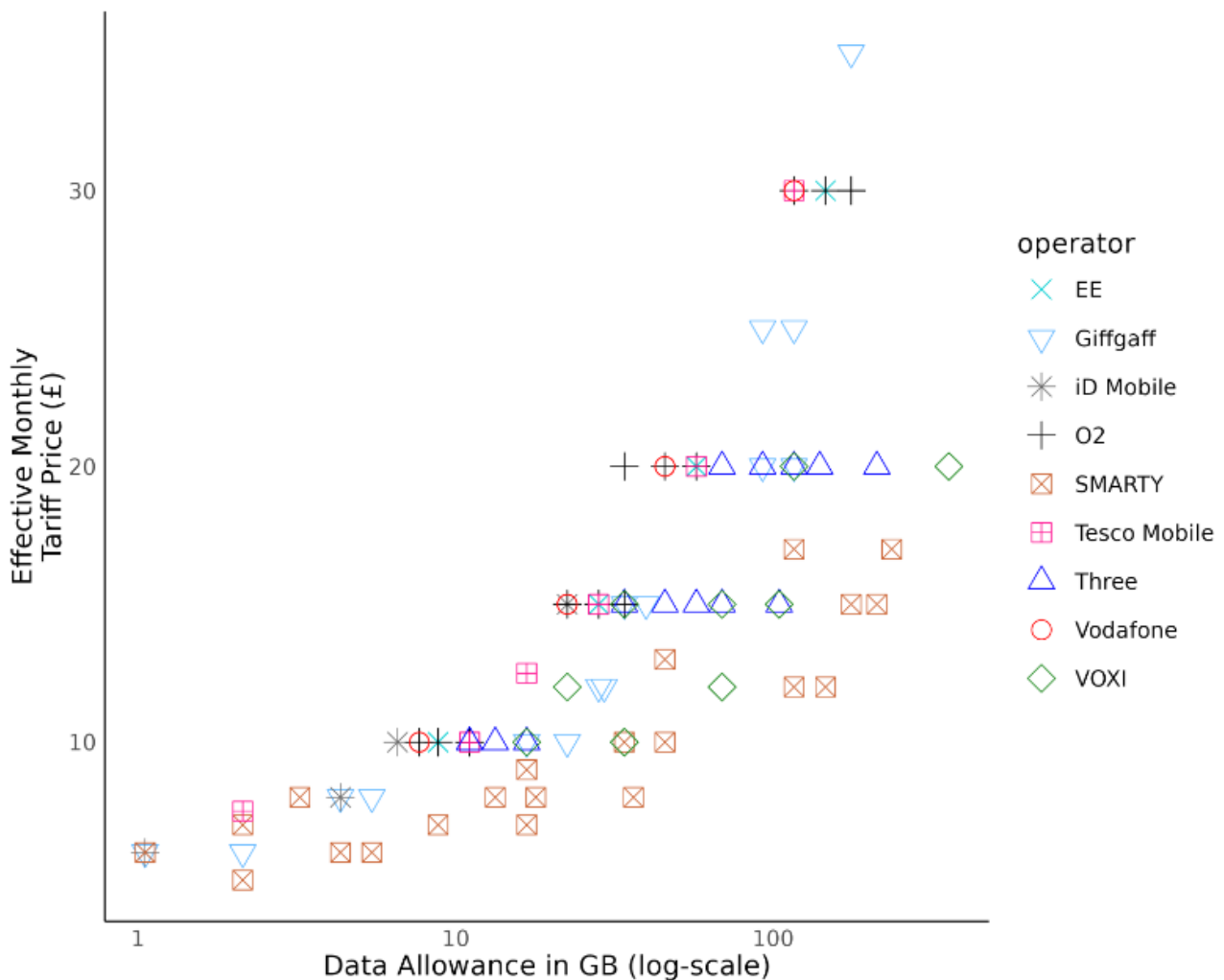
⁴⁴⁹ To calculate the 'effective price', the CMA has subtracted the value of any discount or promotion from the advertised monthly tariff price. For pre-paid tariffs, these types of discounts and promotions are less common than PAYM SIMO tariffs. Where they are offered, discounts and promotions are typically 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 the CMA cannot know whether the

VUK's customer base and 25.8% of 3UK's in 2023. As shown in Figure 6, this analysis shows that:

- (a) MNOs' main brands typically offered pre-paid tariffs at the same price points (eg £10, £15, £20, and £30).
- (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.

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, the CMA has 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.

Figure 6: Pre-paid tariff prices across capped data allowances, by brand Q3 and Q4 2023



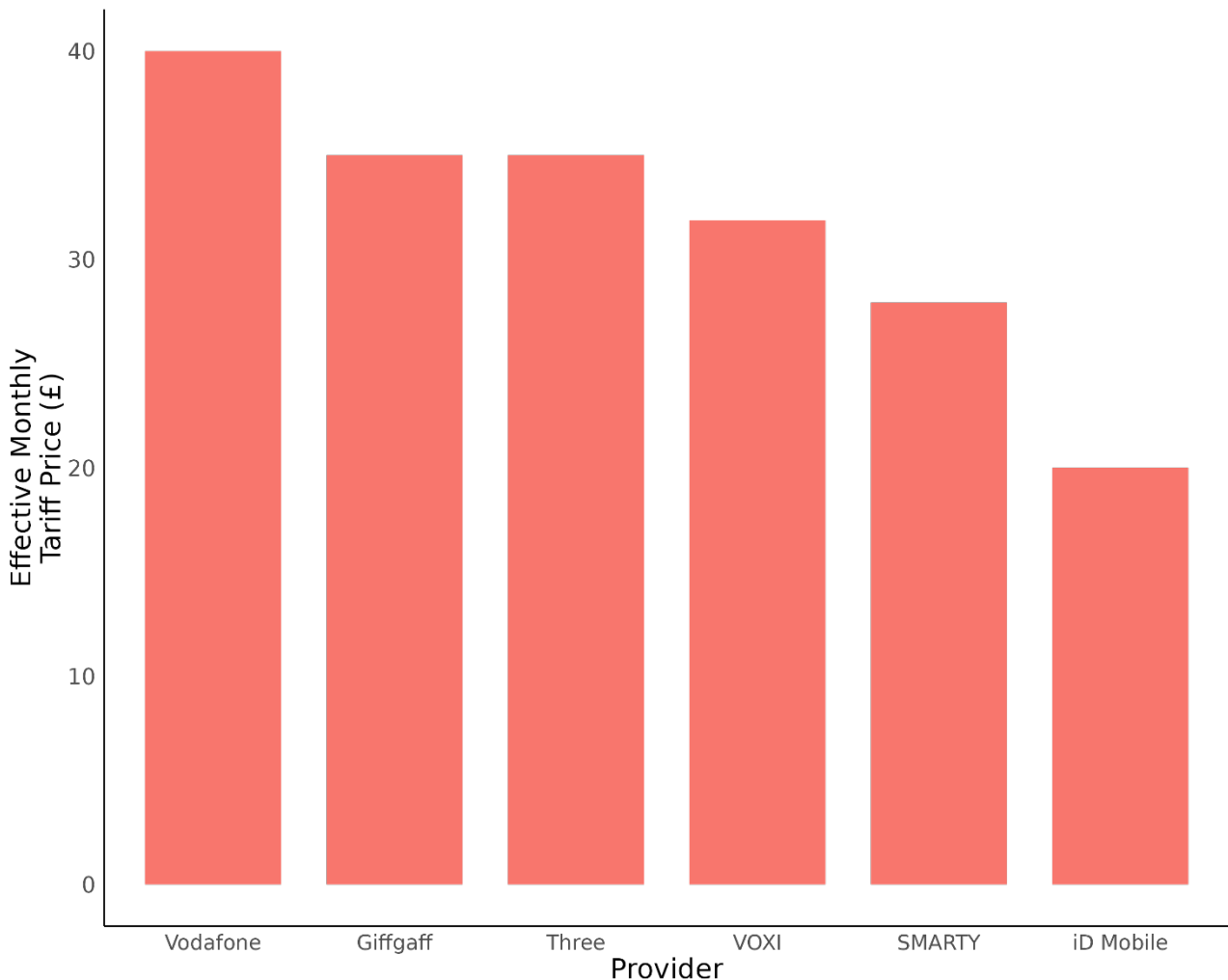
322. Second, the CMA compared mobile operators' unlimited pre-paid tariffs for the same period. Customers on unlimited pre-paid tariffs cannot run out of data within the period the tariff covers (typically one month). For the mobile operators who offer them, Figure 7 shows the average effective monthly price of an unlimited data pre-paid tariff across those operators between July and December 2023, showing that:⁴⁵⁰

- (a) the cheapest provider was iD Mobile, which was also the only MVNO in the Pure Pricing data to offer unlimited pre-paid tariffs;

⁴⁵⁰ As was the case with capped pre-paid tariffs, see Figure 6 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.

- (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.

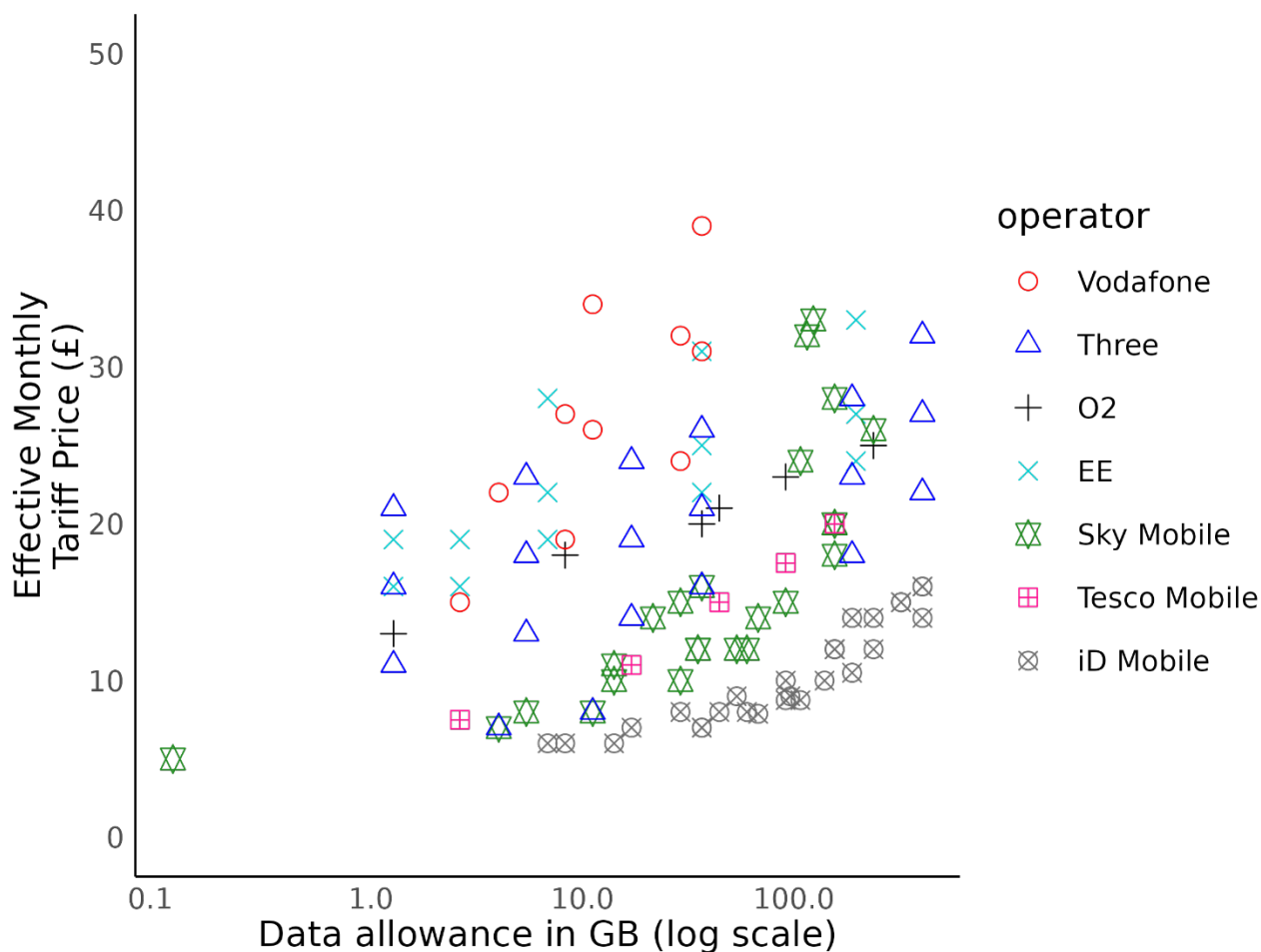
Figure 7: Unlimited data pre-paid tariff prices, by brand Q3 and Q4 2023



323. Third, the CMA compared operators' PAYM SIMO tariffs. As noted in paragraph 319, it is significantly more difficult to compare PAYM SIMO tariffs between mobile operators on a like-for-like basis than it is to do so for pre-paid tariffs. The CMA segmented its 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, the CMA considers 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.

324. In the Pure Pricing data, PAYM SIMO contracts are one, 12, 18, or 24 months. The CMA's analysis of mobile operators' PAYM SIMO pricing focuses on the two most popular contract lengths, 12 and 24 months.
325. Figure 8 shows mobile operators' effective monthly prices for PAYM SIMO 12-month tariffs with capped data allowances. Overall, the picture is mixed. In broad terms, Figure 8 shows that:
- (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. The CMA notes 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: 12-month PAYM SIMO tariff prices across capped data allowances, by brand Q3 and Q4 2024



326. For each mobile operator that offered unlimited data PAYM SIMO 12-month tariffs in Q3 and Q4 2023, Figure 9 shows the average (mean, indicated by the dots) and range (the grey bars) of their effective monthly prices.⁴⁵¹

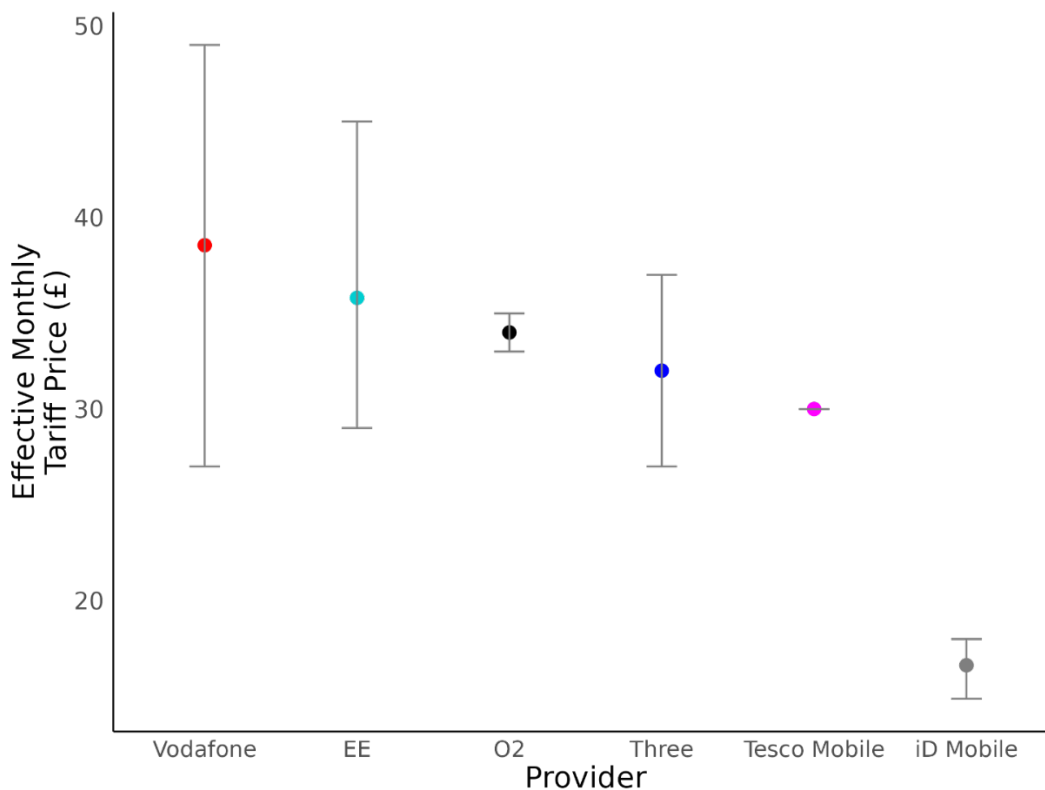
- (a) The cheapest tariffs were offered by iD Mobile by a significant margin.
- (b) On average, Vodafone had the most expensive tariffs, followed by EE, O2, Three, and then Tesco Mobile. However, Vodafone, EE, and to a lesser extent Three, have a wide range of prices – in particular, despite having the highest price on average, Vodafone offered the cheapest unlimited data tariff among MNOs (alongside Three).⁴⁵²

⁴⁵¹ 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 is why they have multiple tariffs. Tesco Mobile does not have range bars because it only has one unlimited data. The CMA provides 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.

⁴⁵² The CMA notes that the cheapest Vodafone tariff was available only in July 2023.

- (c) As was the case with capped data tariffs (Figure 8), 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 9: Unlimited data 12-month PAYM SIMO tariff prices, by brand Q3 and Q4 2023



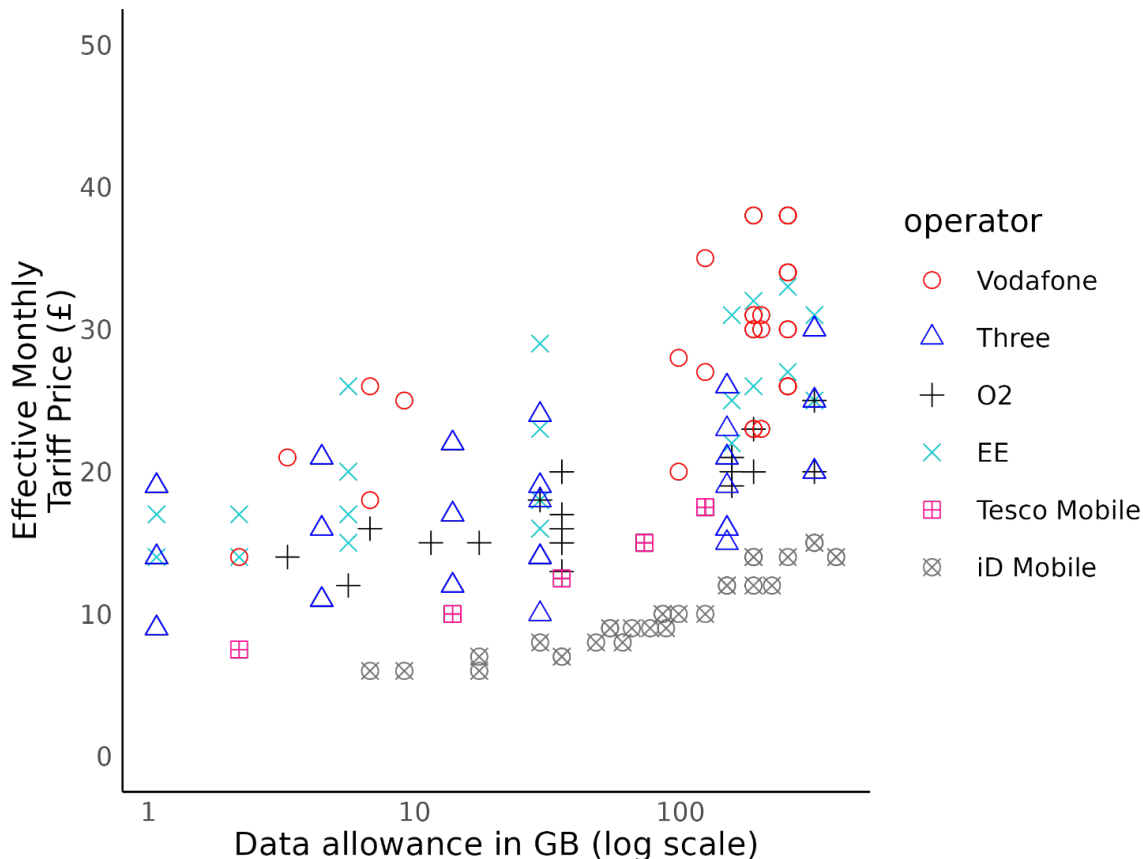
327. Next, the CMA analysed mobile operators' prices for PAYM SIMO 24-month contracts with capped data allowances.⁴⁵³ Figure 10 below plots the effective monthly price against the (logarithm of) data allowance in GB for these longer contracts, and shows that:

- (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 MNO's 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

⁴⁵³ 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 326).

- (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 above), where it only offered tariffs at or below 25 GB.⁴⁵⁴

Figure 10: 24-month PAYM SIMO tariff prices across capped data allowances, by provider Q3 and Q4 2024



328. In the response to the Issues Letter, the Parties submitted that the CMA’s analysis of Pure Pricing data has several limitations: (i) the analysis fails to account for a range of differentiating factors across tariffs and perceived quality, (ii) the data does not contain information on “below the line” offers which are a key feature of how MNOs and MVNOs attract and retain customers, and (iii) the analysis of pricing presented does not control for pricing trends over time.⁴⁵⁵ The CMA recognises these limitations and has reflected them appropriately, for example see paragraph 323 and accompanying footnote 444. Notwithstanding this, the CMA considers that its analysis provides an insight into how mobile operators, including VUK and 3UK priced their tariffs across data allowances and contract lengths.

⁴⁵⁴ 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.

⁴⁵⁵ Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, notes 76-78.

329. Overall, the CMA believes that its 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.⁴⁵⁶ In particular the Parties both operated low-price sub-brands, offered tariffs 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 section 5.4.1.3.2.1.1 and is supported by third-party views.⁴⁵⁷
 - (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.

5.4.1.4.2 *Network quality*

330. The CMA has considered the Parties' competitive positions in relation to network quality. As a starting point, the CMA notes that network quality has different dimensions, including coverage, average speeds, and congestion. Network capacity is a key determinant of network quality and this, in turn, is largely determined by the amount of spectrum each MNO has, the efficiency with which it is used and the density of the network (ie the number of radio base stations in a given area). There is thus a strong link between investment levels and quality outcomes. As outlined in section 5.1.3.3, whilst there is no clear industry consensus on measures of network quality, there are some external measures that are helpful to compare network quality between MNOs.
331. The CMA firstly considered the Umlaut benchmarking results, which the Parties track on a regular basis. The Parties' internal documents reveal that:⁴⁵⁸

⁴⁵⁶ In the response to the Issues Letter, the Parties submitted the similarity in pricing was not unique to the VUK and 3UK and for example also apply to VMO2 (Parties' response to the Issues Letter, 4 March 2024, ILR Annex A, note 78). We note as in paragraph 237 the Parties do not need to each other's closest competitors for horizontal unilateral effects to arise as a result of the Merger.

⁴⁵⁷ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁴⁵⁸ CK Hutchison Internal Documents, CKH_00001186, page 44; CKH_00000064, page 46.

- (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 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.

332. 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.⁴⁵⁹

333. The CMA also considered the relative rankings of each MNO by '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 2023.⁴⁶⁰ The same document shows that VMO2 had the slowest speed, with BTEE in third place.

334. Based on the available evidence, the CMA believes that:

- (a) 3UK has seen improvements in its network quality. Where it has rolled it out, its NSA 5G outperforms others' and it currently has the fastest 5G speeds. A number of 3UK's competitors stated that its 5G speeds and network capacity were particular strengths.⁴⁶¹ [3<]. On a number of measures, and according to competitor views, VMO2 now has the lowest network quality of the UK MNOs.⁴⁶²
- (b) VUK's network quality has been consistently high and remains just behind BTEE's network quality. BTEE, on different measures and according to competitors, is regarded as having the strongest overall network quality.⁴⁶³

⁴⁵⁹ See Rootmetrics [UK RootScore Report 2nd Half 2023](#).

⁴⁶⁰ CK Hutchison Internal Document, [3<], page 80.

⁴⁶¹ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁴⁶² Responses to the CMA competitor questionnaire from third parties, January 2024.

⁴⁶³ Responses to the CMA competitor questionnaire from third parties, January 2024.

5.4.1.4.3 *Brand*

335. The CMA has considered the Parties' competitive positions in relation to brand by considering how the Parties assess the strength of their brands in their internal documents.
336. 3UK provided 'Brand Health KPI Reports' for both the Three and SMARTY brands covering the three years up to December 2023.⁴⁶⁴ [REDACTED].⁴⁶⁵ [REDACTED].⁴⁶⁶
337. [REDACTED].⁴⁶⁷ [REDACTED].⁴⁶⁸
338. Regarding VUK's brands, a presentation [REDACTED]⁴⁶⁹ [REDACTED] shows that:
- (a) [REDACTED].
 - (b) [REDACTED].⁴⁷⁰
339. The CMA believes 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 this has been improving.

5.4.1.4.4 *Customer satisfaction*

340. The CMA has 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 second quarter of 2023, BTEE and VMO2 both received the most complaints (10 and 13 complaints per 100,000 subscribers respectively, consolidating all complaints across brands). By contrast, 3UK and VUK received comparably fewer (4 and 3 complaints per 100,000 subscribers, respectively) and were close to the industry average of 3 complaints per 100,000 subscribers. This indicates that, overall, the customer satisfaction of the Parties is better than the other MNOs.⁴⁷¹

5.4.1.5 *Conclusion on the Parties' competitive position*

341. For the reasons set out above, the CMA believes that both Parties, and 3UK in particular, have strong incentives to compete aggressively due to their relatively smaller scale and exert a strong competitive constraint on other mobile operators

⁴⁶⁴ FMN, paragraph 15.151.

⁴⁶⁵ CK Hutchison Internal Document, CKH_00005818, page 2.

⁴⁶⁶ CK Hutchison Internal Document, CKH_00005771, page 12.

⁴⁶⁷ CK Hutchison Internal Document, CKH_00005803, page 3.

⁴⁶⁸ CK Hutchison Internal Document, CKH_00005803, pages 6-7. [REDACTED].

⁴⁶⁹ [REDACTED].

⁴⁷⁰ Vodafone Internal Document, VF_00002572_001, page 4.

⁴⁷¹ Ofcom, [Report: Complaints about broadband, Landline, mobile and pay-TV services](#), January 2024.

in the supply of retail mobile services.⁴⁷² The CMA believes that they are acting on these incentives through their competitive strategies and growth plans. In particular:

- (a) 3UK is the cheapest MNO. Although its network quality and brand reputation were historically below that of the other MNOs, they have both been improving, and [REDACTED]. As discussed at sections 4.3.2.1 and 5.4.1.3.2.1.5, [REDACTED]. 3UK has increased its share of supply by revenue, has falling churn and material net adds. [REDACTED].
- (b) VUK is actively seeking to position itself as the UK's [REDACTED]. Its network quality has consistently been high, and it has sustained network ambitions, including in relation to [REDACTED]. VUK's share of supply by revenue has been growing (as seen in section 5.4.1.2.1) and it has had consistently low churn.

342. As outlined in section 4.4, the CMA believes that both 3UK and VUK will continue to have the ability and incentive to continue to compete – in broadly the same way as currently observed – in the future.

343. The Merged Entity would have a share of [30-40]% by revenue and [30-40]% by subscribers in the overall supply of retail mobile services. The CMA believes that, as it would have a significantly larger customer base, the Merged Entity may also have lower incentives to compete aggressively, including on price, compared to each Party – and in particular 3UK – on a standalone basis. This means that the Merged Entity may have greater incentives to increase prices or degrade non-price aspects of its offer. This may also reduce the competitive pressure faced by other mobile operators in the supply of retail mobile services who, in turn, may also have greater incentives to increase their prices or degrade non-price aspects of their offers.

5.4.2 Competitive constraints

5.4.2.1 Closeness of competition between the Parties

344. The CMA has assessed the extent to which VUK and 3UK compete closely and, in doing so, considered:

- (a) the Parties' submissions;
- (b) the Parties' competitive strategies and position;

⁴⁷² The CMA observes that the Parties have consistently submitted that both 3UK and VUK are "sub-scale" in comparison to the other MNOs.

- (c) evidence of customers' switching;
- (d) third-party views; and
- (e) evidence from the Parties' internal documents.

5.4.2.1.1 *Parties' submissions*

345. The Parties submitted that no competition concerns arise on the basis of closeness of competition in the supply of retail mobile services as:

- (a) the 'diversion ratios' between the Parties do not indicate any closeness between them.⁴⁷³ Both Parties' consumer retail customers [redacted]. This also holds true in the pre-paid and unlimited PAYM SIMO subsegments;⁴⁷⁴
- (b) there are material differences in the competitive positioning of the Parties.⁴⁷⁵ [redacted];⁴⁷⁶
- (c) there is only limited competitive interaction between the Parties in terms of market initiatives and reactions;⁴⁷⁷ and
- (d) [redacted].⁴⁷⁸

5.4.2.1.2 *Parties' competitive strategies and position*

346. As set out in section 5.4.1.2.1, the Parties are the third and fourth largest mobile operators in the supply of retail mobile services by subscribers and revenue. They have both been gaining share by revenue and have relatively stable shares by subscribers. However, in some subsegments such as PAYM data-only and pre-paid, the Parties are the second and third largest mobile operators and, in the SoHo subsegment, the Parties are the second and fourth largest mobile operators. 3UK particularly has gained share in the SoHo subsegment, increasing its share between 2020 and 2022 from [0-5]% to [10-20]% by subscribers and [0-5]% to [5-10]% by revenue.

347. Based on evidence from the Parties' internal documents on their respective competitive strategies and growth plans set out in section 5.4.1.3.2, as well as

⁴⁷³ FMN, paragraphs 15.200(va) and 15.233-12.251.

⁴⁷⁴ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 107.

⁴⁷⁵ FMN, paragraphs 15.200(vb) and 15.233-12.251.

⁴⁷⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 107.

⁴⁷⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 107.

⁴⁷⁸ FMN, paragraphs 15.316(iii)(b) and 15.362-15.368; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 62 and 104.

sections 5.4.1.4.1 and 5.4.1.4.2 above, the CMA has identified the following trends in their competitive strategies and positioning:

- (a) [redacted];
- (b) 3UK and VUK both operate low-price sub-brands, [redacted]; and
- (c) [redacted].

5.4.2.1.3 Evidence of customers' switching

348. The CMA considered whether customers typically switch to the other Party or to other mobile operators. In doing so, it has considered two sources of evidence of customers switching away from the Parties.⁴⁷⁹

- (a) Mobile Number Portability (**MNP**) data; and
- (b) GfK survey data submitted by the Parties.

349. 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, whereas [redacted], particularly if recall is inaccurate. 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).⁴⁸⁰

350. [redacted].⁴⁸¹ [redacted].⁴⁸²

351. Switching ratios can be calculated at a network or an operator level. In response to the Issues Letter, the Parties submitted that calculating switching ratios at a network level does not appropriately account for the number of relevant competitors and alternatives to consumer (notably MVNOs), and therefore overstates the extent of switching between the Parties.⁴⁸³

352. The CMA considers 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. In particular, as set out in

⁴⁷⁹ According to the available evidence, switching providers of retail mobile services is easy (see paragraph 124). This paragraph also includes a summary of the key reasons consumers typically switch providers of retail mobile services.

⁴⁸⁰ The Parties estimate that the MNP data captures between [redacted]% of PAYM customers based on churn and [redacted]% of PAYM customers based on gross adds and [0-5]% of pre-paid customers (FMN, Table 25).

⁴⁸¹ The CMA considers that the information provided by the Parties about [redacted], nor does it give sufficient information about sources of recruitment and the recruitment methodology to assess potential bias for the current purpose.

⁴⁸² [redacted].

⁴⁸³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 93.

paragraph 242, the CMA considers that the ability of MVNOs to compete effectively in the supply of retail mobile services strongly depends on competition between MNOs given that (i) investment in network quality is primarily determined by competition between the MNOs and (ii) price competition is, to some extent, also driven by the MNOs given the dependency of MVNOs on the terms in their wholesale contract with their host MNO. On the other hand, switching ratios calculated at the network level are likely to overstate the closeness of competition by excluding some of the competitive pressure from MVNOs hosted on the Parties' networks. The CMA has therefore calculated and presented switching ratios at both a network and an operator level.

353. The CMA notes that, in relation to the Parties' submission in paragraph 345(a), switching ratios to the other Party do not need to be the highest to indicate that the Parties are close competitors. This is particularly true if competition mainly takes place among few firms, as is the case in the supply of retail mobile services.
354. Table 14 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 (using MNP and GfK data). At a consumer retail level, the two data sources show a relatively similar picture with [30-40]% (MNP data) and [20-30]% (GfK data) of 3UK's customers having switched to VUK. A [30-40]% proportion ([30-40]%) of 3UK's business customers also switched to VUK.

Table 14: 3UK retail switching ratios at a network level, FY2023⁴⁸⁴

MNO	Consumer retail		Business retail
	MNP data (%)	GfK data (%)	MNP data (%)
BTEE	[10-20]	[20-30]	[30-40]
VMO2 (including Tesco Mobile)	[40-50]	[40-50]	[30-40]
VUK	[30-40]	[20-30]	[30-40]
Total	100	100	100

Source: CMA analysis of the Parties' MNP data and GfK data from Figure 15.15 of the FMN.

355. Table 15 sets out the proportion of 3UK's customers that switched to other mobile operators (ie switching at an operator level) in FY2023 using MNP and GfK data.⁴⁸⁵ At a consumer retail level,⁴⁸⁶ the two data sources show a relatively similar picture with [20-30]% (MNP data) and [10-20]% (GfK data) of 3UK's customers having switched to VUK. At a business retail level, a [30-40] ([20-30]%) of 3UK's customers switched to VUK.

⁴⁸⁴ The CMA excluded the 'other' figures from Table 14 and iD Mobile given it is hosted by 3UK.

⁴⁸⁵ As a sensitivity check, the CMA also calculated switching ratios for the calendar year 2022 and similar switching ratios were obtained.

⁴⁸⁶ The CMA also considered the following subsegments and similar switching ratios to VUK were observed in each (i) PAYM SIMO ([10-20]%), (ii) PAYM handset ([20-30]%) and (iii) pre-paid ([20-30]%).

Table 15: 3UK retail switching ratios at an operator level, FY2023

Mobile operator	Consumer retail		Business retail
	MNP data (%)	GfK data (%)	MNP data (%)
Asda Mobile	[0-5]	[0-5]	[0-5]
BTEE	[10-20]	[20-30]	[30-40]
iD Mobile	[5-10]	[0-5]	[0-5]
Lebara	[5-10]	[5-10]	[0-5]
Lyca Mobile	[0-5]	[0-5]	[0-5]
Other	[0-5]	[0-5]	[5-10]
Sky Mobile	[5-10]	[5-10]	[0-5]
VMO2 (including Tesco Mobile)	[30-40]	[40-50]	[20-30]
VUK	[20-30]	[10-20]	[20-30]
Total	100	100	100

Source: CMA analysis of the Parties' MNP data and GfK data from Figure 15.15 of the FMN.

356. Table 16 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 (using MNP and GfK data). At a consumer retail level, the two data sources show that [20-30]% (MNP data) and [10-20]% (GfK data) of VUK's customers switched to 3UK. A lower proportion ([10-20]%) of VUK's business customers switched to 3UK.

Table 16: VUK retail switching ratios at a network level, FY2023⁴⁸⁷

MNO	Consumer retail		Business retail (SoHo only)
	MNP data (%)	GfK data	MNP data (%)
BTEE	[10-20]	[30-40]	[30-40]
3UK	[20-30]	[10-20]	[10-20]
VMO2 (including Tesco Mobile)	[50-60]	[50-60]	[40-50]
Total	100	100	100

Source: CMA analysis of the Parties' MNP data and GfK data from FMN, Figure 15.14.

357. Table 17 sets out the proportion of VUK's customers that switched to another mobile operator (ie switching at an operator level) in FY2023 using MNP and GfK data.⁴⁸⁸ At a consumer retail level,⁴⁸⁹ the two data sources show a relatively similar picture with [10-20]% (MNP data) and [10-20]% (GfK data) of VUK's customers having switched to 3UK. At a business retail level, a slightly lower proportion ([10-20]%) of VUK's SoHo customers switched to 3UK.

⁴⁸⁷ The CMA excluded 'other' from Table 16.

⁴⁸⁸ As a sensitivity check, the CMA has also calculated switching ratios for the calendar year 2022 and similar switching ratios were obtained.

⁴⁸⁹ The CMA has also considered the following subsegments and similar switching ratios to 3UK UK were observed in each of (i) PAYM SIMO ([10-20]%), (ii) PAYM handset ([10-20]%) and (iii) pre-paid ([20-30]%).

Table 17: VUK retail switching ratios at an operator level, FY2023

Mobile operator	Consumer retail MNP data (%)	GfK data	Business retail (SoHo only) MNP data (%)
Asda Mobile	[><]	0	[><]
BTEE	[10-20]	[20-30]	[30-40]
iD Mobile	[5-10]	[0-5]	[0-5]
Lebara	[><]	[0-5]	[><]
Lyca Mobile	[0-5]	[0-5]	[0-5]
Other	[0-5]	[0-5]	[5-10]
Sky Mobile	[10-20]	[5-10]	[5-10]
VMO2	[40-50]	[40-50]	[30-40]
3UK	[10-20]	[10-20]	[10-20]
Total	100	100	100

Source: CMA analysis of the Parties' MNP data and GfK data from Figure 15.14 of the FMN.

[><] Asda Mobile and Lebara currently use VUK's network (FMN, footnote 692).

5.4.2.1.4 Third-party views

358. All third-party competitors that responded to the CMA's merger investigation consider that the Parties are competitors in the consumer retail segment. In particular, the CMA asked competitors to list who they believe are VUK and 3UK's competitors in retail mobile services to consumers in the UK 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 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.

359. 3UK and VUK are recognised by third parties as:

- (a) being particularly close competitors in the unlimited data segment;⁴⁹⁰
- (b) having sub-brands, SMARTY and VOXI, which directly compete in the pre-paid subsegment; and

⁴⁹⁰ In response to the Issues Letter, the Parties submitted that several MVNOs offer unlimited tariffs and that 'Three's tariffs were similar to Giffgaff's tariffs, whilst Vodafone's tariffs were the most expensive' (Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 105). The CMA notes that this section (i) only considers third party views and (ii) Figure 6 shows that the Parties' sub-brands SMARTY and VOXI are the cheapest two sub-brands of the MNOs.

- (c) having similar products, along with contract types and customer demographics.⁴⁹¹

360. 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 are seen as competing less closely for larger businesses. In particular:⁴⁹²

- (a) all (four) competitors consider that VUK and 3UK currently compete very closely/closely in the SoHo segment while 75% of competitors also consider that VUK and 3UK currently compete very closely/closely in the small SME segment;
- (b) half of competitors consider that VUK and 3UK neither compete closely nor not closely in the medium SME segment, while the other half consider they don't compete closely; and
- (c) all competitors consider that VUK and 3UK currently don't compete closely in the corporate segment and 75% of competitors also consider that they don't compete closely in the public sector with the other 25% saying neither closely nor not closely.

361. The CMA asked business competitors to list who they believe are VUK and 3UK's competitors in the business retail segment and to indicate on a scale of 1 to 5 (where 1 is very weak and 5 is very strong) how strongly each competitor listed competes with VUK and 3UK. The CMA received responses from competitors which accounted for a share of supply of around 95% (including the Parties) of the business retail segment by revenue and subscribers. Most respondents listed VUK and 3UK as competitors:

- (a) one competitor rated 3UK as very strong compared to VUK in the SoHo, small SME and medium SME subsegments but as weak for the corporate and public sector subsegments. 3UK's strengths are higher data allowances and simplicity of pricing but 3UK's network coverage, international roaming and competitive pricing are seen as weaknesses;⁴⁹³

⁴⁹¹ Responses to the CMA competitor questionnaire from third parties, January 2024. In response to the Issues Letter, the Parties submitted that their customer bases differ materially and 3UK's customers tend to be more data-intensive users, opting for larger data allowances compared to VUK's customers (Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 105). The CMA considers that (i) this section only considers third party views and (ii) while Figure 15.21 in the FMN shows that 3UK has the highest proportion of its customers on unlimited tariffs, VUK has the second highest proportion of its customers on unlimited tariffs and notably more than BTEE and VMO2.

⁴⁹² CMA analysis of responses to the CMA competitor questionnaire from third parties, January 2024.

⁴⁹³ Response to the CMA competitor questionnaire from a third party, January 2024.

- (b) one competitor indicated that 3UK is a weak constraint on VUK except in the SoHo subsegment given many SoHo businesses buy and consume services in the same way as private consumers. The competitor noted that over the past two years 3UK has expanded its presence in the SME subsegment via very commercially aggressive digital offerings and aggressive offers into indirect channel partners but that 3UK is not currently effective in the corporate and public sector subsegments. In contrast, VUK is a very strong constraint on 3UK in the business retail segment given its history in supplying business services;⁴⁹⁴ and
- (c) one competitor noted that 3UK is neither a strong nor weak competitor compared to VUK in this segment. 3UK's strength is its value for money and unlimited/data bundle offers however this benefit is offset by its limited portfolio breadth. In comparison, VUK is a slightly stronger constraint on 3UK given its network coverage, brand and breadth of product portfolio beyond mobile.⁴⁹⁵

362. The CMA also asked business competitors whether they expect VUK and 3UK's position in each of the business retail subsegments to change in the near future (ie in the next 2-3 years):

- (a) In the SoHo subsegment:
 - (i) All (four) competitor respondents expect 3UK to continue to grow and strengthen its position; and
 - (ii) two competitors also expect VUK to grow, one expects VUK to maintain/decline, and one did not refer to VUK in the SoHo subsegment.
- (b) In the SME subsegment:
 - (i) all competitor respondents expect 3UK to continue to grow and strengthen its position; and
 - (ii) one competitor expects VUK to maintain its position, one competitor expects VUK to grow in the SME subsegments, one competitor expects VUK to maintain/decline in small SME subsegment and maintain its position in medium SME, and one competitor noted that an aggressive 3UK approach, especially as 3UK's 5G advantage becomes ever more

⁴⁹⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

⁴⁹⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

apparent, may threaten VUK's position to some extent in the SME subsegments.

(c) In the corporate and public sector subsegments:

- (i) one competitor expects 3UK to improve its position, one competitor expects 3UK to continue to target business retail subsegments, moving up to larger corporates, one competitor expects 3UK to maintain its position in the corporate subsegment and have no material presence in the public sector subsegment, and one noted that 3UK does not currently effectively address the support demands of the corporate and public sector however it would expect 3UK to actively seek to change this position in the near future.
- (ii) one competitor expects VUK to maintain its position, one expects VUK to remain competitive and continue to grow, one competitor expects VUK to grow in the corporate subsegment and maintain its position in the public sector, and one competitor expects VUK to maintain its strong position in the corporate and public sector subsegments.⁴⁹⁶

363. The CMA sent a questionnaire to 89 business customers of the Parties. 50 of which were 3UK customers (10 SoHo, 20 SME, 10 corporate and 10 public sector) and 39 VUK customers (10 SoHo, 10 SME, 9 corporate and 10 public sector). The CMA received 20 responses – 14 (3 SME, 8 corporate and 3 public sector) VUK customers and 6 (3 SME and 3 corporate) 3UK customers. The CMA therefore notes that (i) only one small SME VUK customer responded and (ii) 70% of total respondents were corporate (>250 employees) or public sector customers where the evidence above suggests that 3UK and VUK are not currently particularly close competitors.

364. The CMA asked third-party business customers of the Parties to list all the mobile operators they had either considered or approached when they most recently considered their options. VUK was mentioned by 18 respondents while 3UK was mentioned by 6 respondents.⁴⁹⁷ The CMA notes that 3UK was not listed by any VUK customer.

⁴⁹⁶ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁴⁹⁷ The CMA notes that some respondents did not list their current mobile operator despite this being specified in the question. The number of mentions have therefore been amended to correct for this.

5.4.2.1.5 Evidence from internal documents

5.4.2.1.5.1 Parties' submissions

365. In the FMN, the Parties provided limited documentary evidence capturing closeness of competition and alternative competitive constraints. Notwithstanding, they submitted that:

- (a) The internal documents show that the Parties do not consider each other as close competitors, [REDACTED] and [REDACTED].⁴⁹⁸
- (b) [REDACTED].⁴⁹⁹
 - (i) [REDACTED];
 - (ii) [REDACTED]; and
 - (iii) [REDACTED].
- (c) [REDACTED].⁵⁰⁰
- (d) 3UK's internal documents show that it considers MVNOs ([REDACTED]) to be important competitors.⁵⁰¹

366. In response to the Issues Letter, the Parties reiterated that internal documents evidence that the Parties are not close competitors – suggesting that this is because 3UK and VUK do not solely focus on each other in their documents – and consider MVNOs to be important competitors.⁵⁰²

5.4.2.1.5.2 CMA assessment

367. At the outset, the CMA notes that its ability to attach weight to different pieces of evidence – both quantitative and qualitative – will depend on the relative quality of such evidence.⁵⁰³ When considering the weight to place on internal document evidence, the CMA will consider that evidence alongside all of the other evidence that it has, in the round.⁵⁰⁴

⁴⁹⁸ FMN, paragraphs 15.239-15.240.

⁴⁹⁹ FMN, paragraphs 15.257-15.258 and Annex VF S109 2-9.0001.

⁵⁰⁰ FMN, paragraph 15.260.

⁵⁰¹ FMN, paragraph 15.216(ii).

⁵⁰² Parties' response to the Issues Letter, 4 March 2024, paragraphs 3.22, 3.26(c) and 3.31-3.33; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 97-104 and 118-123.

⁵⁰³ [CMA129](#), paragraph 2.25.

⁵⁰⁴ [CMA129](#), paragraph 2.30.

368. In their submissions, the Parties pointed the CMA towards [redacted] (discussed at paragraph 365) as a particularly relevant source of evidence of how they monitor their competitive positioning and that of their competitors in the consumer retail segment.⁵⁰⁵ However, based on information provided by the Parties at the CMA's request⁵⁰⁶ and its own extensive and systematic review of internal documents, the CMA identified a variety of forums and documents in which competition is monitored and assessed, some of which the CMA considered may provide a more holistic view of how the Parties perceive their competition [redacted] they emphasised in their submissions. This is because [redacted].
369. In the context of a highly differentiated market, with a wide and complex range of tariffs, competitors' strengths, strategies and customer focuses varying from one segment to another, and being discussed in multiple different forums, the CMA considers 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 the CMA has gathered in the course of its phase 1 investigation.
370. The CMA has 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 (set out at sections 5.4.2.2.5 and 5.4.2.3.5).
371. Regarding closeness of competition, the CMA disagrees with the Parties' position that a claimed lack of focus on the other Party alone in internal documents demonstrates a lack of closeness of competition and that there is limited competitive interaction between the Parties. If the CMA were to follow this logic, neither BTEE nor VMO2 – who are consistently discussed together alongside the Parties for competitive monitoring purposes in their internal documents – would be considered close competitors to VUK or 3UK and it would further ensue that the Parties do not compete closely with any mobile operators in the UK based on the internal documents the CMA has seen.
372. The CMA sets out in turn below an overview of the evidence from a range of 3UK and VUK's internal documents which the CMA considers to be, in the round, inconsistent with the Parties' submission that they are not close competitors.

⁵⁰⁵ FMN, paragraphs 15.252 and 15.263; Parties' response to the Issues Letter, 4 March 2024, paragraphs 3.31-3.32.

⁵⁰⁶ Vodafone response to s109 notice issued 12 September 2023, Annex VF S109 2-2.0001 and CK Hutchison response to s109 notice issued 12 September 2023, Annex CKH S109-2 2.001.

5.4.2.1.5.2.1 Evidence from 3UK's internal documents

373. The CMA carried out a systematic review of 3UK's [REDACTED],⁵⁰⁷ [REDACTED].⁵⁰⁸ The CMA also observed this in another category of competitive monitoring documents produced by 3UK, [REDACTED].⁵⁰⁹
374. In section 5.4.1.3.2.1.1, the CMA identified several instances of [REDACTED]. The CMA considers that this constitutes important evidence of 3UK exerting a competitive constraint on VUK, and by extension of the Parties being close competitors. Conversely, the CMA also found evidence in 3UK's internal documents [REDACTED].⁵¹⁰ Further:
- (a) [REDACTED].⁵¹¹
 - (b) [REDACTED].⁵¹²
375. In addition, the CMA found some evidence of 3UK having particular regard to the competitive impact of its new market initiatives, [REDACTED]. For example, [REDACTED].⁵¹³ [REDACTED].⁵¹⁴ [REDACTED].⁵¹⁵
376. In relation to how closely the Parties compete in the business retail segment, the CMA found limited evidence of 3UK targeting specific competitors, [REDACTED]. However, there is consistent evidence that 3UK only monitors the performance and activities of the other three MNOs in this segment and the CMA found no mention of MVNOs in this context.⁵¹⁶
377. The CMA also considered whether the Parties would become closer competitors in the business retail segment going forward, absent the Merger. Internal documents suggest that gaining ground in this segment [REDACTED] (as discussed at section 5.4.1.3.2.1.2). Internal documents also suggest that 3UK expects this growth to continue. Notably, in its 2024 budget presentation [REDACTED]:

⁵⁰⁷ [REDACTED].

⁵⁰⁸ For example, CK Hutchison Internal Documents, CKH_00000064, page 46; CKH_00000065, page 23; CKH_00000069, pages 29 and 44; and CKH_00000070, page 34.

⁵⁰⁹ For example, CK Hutchison Internal Documents, CKH_00000600, pages 13 and 32; CKH_00000596, pages 20, 23, 31 and 38; CKH_00000599, pages 16 and 29; and CKH_00000598, pages 14, 21, and 31-32.

⁵¹⁰ For example, CK Hutchison Internal Documents, CKH_00003364, page 21; CKH_00004056, page 6; and CKH_00004161, pages 11 and 13.

⁵¹¹ CK Hutchison Internal Document, CKH_00000801, page 16.

⁵¹² CK Hutchison Internal Document, CKH_00000801, page 17.

⁵¹³ FMN, paragraph 15.267 and CK Hutchison response to CMA RFI dated 12 September 2023, Annex CKH RFI-7 4.001.

⁵¹⁴ CK Hutchison Internal Document, CKH_00005622, pages 30, 47 and 56.

⁵¹⁵ CK Hutchison Internal Document, CKH_00005622, page 48. See further paragraph 291 which contains [REDACTED].

⁵¹⁶ For example, CK Hutchison Internal Documents, CKH_00004478, page 16-17; CKH_00003101, page 8; and CKH_00004003, page 11. As set out in footnote 349, the CMA acknowledges that some SoHo customers choose consumer tariffs and are therefore classified as in the consumer retail segment, where MVNOs are present, rather than the business retail segment.

- (a) [REDACTED].⁵¹⁷
- (b) [REDACTED].⁵¹⁸
- (c) [REDACTED].⁵¹⁹ [REDACTED].

5.4.2.1.5.2.2 Evidence from VUK's internal documents

378. The CMA carried out a systematic review of [REDACTED].⁵²⁰ [REDACTED]⁵²¹ [REDACTED].⁵²²

379. Similarly, the CMA carried out a systematic review of all [REDACTED]:

- (a) [REDACTED].⁵²³
- (b) [REDACTED].⁵²⁴
- (c) [REDACTED].⁵²⁵

380. The extent of the competitive constraint exercised by 3UK [REDACTED]:

- (a) [REDACTED].⁵²⁶
- (b) [REDACTED].⁵²⁷
- (c) [REDACTED].⁵²⁸
- (d) [REDACTED].⁵²⁹ [REDACTED].⁵³⁰ and
- (e) [REDACTED].⁵³¹

⁵¹⁷ CK Hutchison Internal Document, [REDACTED], pages 32 and 76.

⁵¹⁸ CK Hutchison Internal Document, [REDACTED], page 39.

⁵¹⁹ CK Hutchison Internal Document, [REDACTED], page 75.

⁵²⁰ [REDACTED].

⁵²¹ Vodafone Internal Documents, VF_00033070_00001, pages 5, 9, 14-15; VF_00023319_00001, pages 5, 9, 14; and VF_00028880_00001, page 16.

⁵²² Vodafone Internal Documents, VF_00033070_00001, page 22 and VF_00023319_00001, page 22.

⁵²³ For example, Vodafone Internal Documents, VF_00000220_001, pages 14-15; VF_00000115_001, pages 22-23; and VF_00004810_012, page 21.

⁵²⁴ For example, Vodafone Internal Documents, VF_00000220_001, page 15; VF_00000230_001, page 27; and VF_00000289_001, page 16.

⁵²⁵ Vodafone Internal Document, VF_00004809_001, page 68.

⁵²⁶ For example, Vodafone Internal Documents, VF_00000534_001, page 38 and VF_00001412_001, page 80.

⁵²⁷ Vodafone Internal Document, VF_00001412_001, page 80.

⁵²⁸ Vodafone Internal Document, VF_00001438_001, page 59.

⁵²⁹ Vodafone Internal Document, VF_00001489_001, page 90.

⁵³⁰ Vodafone Internal Document, VF_00001530_001, page 73.

⁵³¹ For example, Vodafone Internal Documents, VF_00022801_001, pages 20-26; VF_00001604_001, pages 91-97; and VF_00000534_001, pages 39-46.

381. The CMA also found evidence of closeness of competition between the Parties in other VUK documents beyond the specific categories identified above. For example:

(a) [REDACTED].⁵³² [REDACTED].⁵³³

(b) [REDACTED].⁵³⁴

(c) [REDACTED].⁵³⁵

(d) [REDACTED].⁵³⁶

382. In light of 3UK's sustained growth in the business retail segment in the last two years, the CMA also reviewed VUK's internal documents with a view to assessing to what extent the Parties compete closely today in this segment, and whether they would become closer competitors going forward, absent the Merger.

(a) With regard to current competition, the CMA has found several references in VUK's internal documents to [REDACTED].⁵³⁷ [REDACTED].⁵³⁸ [REDACTED].⁵³⁹ In response to the Issues Letter, the Parties submitted that any [REDACTED] on the part of 3UK would not necessarily translate into a higher share as there are other key factors that influence competitiveness in the business retail segment, including the credibility of a mobile operator through its network quality.⁵⁴⁰ The CMA notes that 3UK's share of supply, in particular in the SoHo subsegment has grown materially as shown in Table 10, [REDACTED]. Regarding the Parties' point relating to 3UK's network quality, this is discussed in the counterfactual and at section 5.4.1.4.2.

(b) Internal documents also suggest that VUK perceives 3UK as a meaningful challenger in the SME subsegment. For example, [REDACTED].⁵⁴¹ [REDACTED].⁵⁴² [REDACTED].⁵⁴³ [REDACTED].⁵⁴⁴

⁵³² Vodafone Internal Document, VF_00000170_001, pages 2, 5, 8-11.

⁵³³ Vodafone Internal Document, VF_00000170_001, page 17.

⁵³⁴ Vodafone Internal Document, VF_00000187_001, page 5.

⁵³⁵ Vodafone Internal Document, VF_00002338_001, page 1.

⁵³⁶ Vodafone Internal Document, VF_00001092_001, page 2.

⁵³⁷ Vodafone Internal Documents, VF_00000722_001, page 20; VF_00000488_001, page 28; and VF_00002818_001 page 7.

⁵³⁸ Vodafone Internal Document, VF_00000415_001, page 3.

⁵³⁹ Vodafone Internal Document, VF_00019601_00001, page 6.

⁵⁴⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 104.

⁵⁴¹ Vodafone Internal Document, VF_00000488_001, page 28.

⁵⁴² Vodafone Internal Document, VF_00000488_001, page 31.

⁵⁴³ Vodafone Internal Document, VF_00000610_001, page 5.

⁵⁴⁴ Vodafone Internal Document, VF_00019670_00001, page 5.

- (c) More recent internal documents do not suggest that the intensity of the competitive pressure from 3UK in the business retail segment is diminishing, and in fact may suggest the contrary. For example, [X].⁵⁴⁵ [X].⁵⁴⁶
- (d) The CMA found some infrequent references in VUK's internal documents to 3UK entering the corporate and public sector subsegments. [X].⁵⁴⁷ [X].⁵⁴⁸

5.4.2.1.5.3 *Conclusion on evidence from internal documents*

383. The available evidence from the Parties' internal documents is consistent with other evidence gathered in the course of the merger investigation and points to the Parties competing closely in the supply of retail mobile services as well as showing signs of them competing more closely in the retail business segment in the near future, and in particular the SME subsegments, absent the Merger.

5.4.2.1.6 *Conclusion on closeness of competition*

384. For the reasons set out above, the CMA believes that the Parties compete closely in the supply of retail mobile services and expects this to continue in the future. In particular, the CMA believes that:

- (a) most competitors consider each Party to be a strong/very strong competitor to the other;
- (b) the Parties compete particularly closely in some subsegments, including in the unlimited data, pre-paid and SoHo subsegments;
- (c) there is a material level of switching between the Parties;
- (d) there is evidence that 3UK may become a closer competitor to VUK in the business retail segment in the near future, including through continuing to compete and expand in the SME subsegments absent the Merger; and
- (e) 3UK has been building up its capabilities to meet the requirements of larger businesses (eg through Three Business Adapt) and is already indirectly serving public sector customers through Gamma. In line with [X] growth strategy, in particular in the business retail segment, it is plausible that 3UK would attempt to also grow in the corporate and public sector subsegments absent the Merger.

⁵⁴⁵ Vodafone Internal Document, VF_00029244_00001, pages 4 and 6.

⁵⁴⁶ Vodafone Internal Document, VF_00027300_00001, page 6.

⁵⁴⁷ Vodafone Internal Document, VF_00002990_001, page 22.

⁵⁴⁸ Vodafone Internal Document, VF_00000722_001, page 76.

5.4.2.2 *Competitive constraint from MNOs*

385. The CMA has assessed the extent to which BTEE and VMO2 would continue to provide a competitive constraint on the Merged Entity and, in doing so, considered:

- (a) the Parties' submissions;
- (b) MNOs' competitive strategies and position;
- (c) evidence of customers' switching;
- (d) third-party views; and
- (e) evidence from the Parties' internal documents.

5.4.2.2.1 *Parties' submissions*

386. The Parties submitted that the Merged Entity would continue to face strong competition from BTEE and VMO2. In particular, the Parties noted that:

- (a) BTEE has the largest fixed network in the UK and is the MNO with the best network reputation in the UK.⁵⁴⁹ BTEE can (and will) continue to leverage its significant customer base and converged offers to be a powerful competitive constraint on the Merged Entity;⁵⁵⁰ and
- (b) VMO2 has become the largest MNO in the consumer retail segment and continues to enjoy a reputation for having a strong network.⁵⁵¹ In addition to its mobile network services, VMO2 supplies home and business broadband and has the potential to be an even stronger competitive constraint as a converged operator with the ability to cross-sell mobile and fixed services across a large customer base.⁵⁵²

5.4.2.2.2 *MNOs' competitive strategies and position*

387. As set out in the section on the Parties' competitive position:

- (a) BTEE and VMO2 are the two largest mobile operators in the overall supply of retail mobile services. However, their shares of supply by both revenue and subscribers have been decreasing and BTEE's churn has been increasing.

⁵⁴⁹ FMN, paragraph 15.205.

⁵⁵⁰ FMN, paragraph 15.209.

⁵⁵¹ FMN, paragraph 15.210.

⁵⁵² FMN, paragraph 15.212.

- (b) VMO2's ([40-50]% share by subscribers and [40-50]% share by revenue) is particularly strong in the pre-paid subsegment with BTEE's ([5-10]% by subscribers and [10-15]% by revenue) being notably weaker. In contrast, VMO2 is relatively weaker in the PAYM data-only ([10-20]% by subscribers and [10-20]% by revenue) and SoHo ([10-20]% by subscribers and [10-20]% by revenue) subsegments compared to its overall position.
- (c) BTEE, on a range of different measures and according to competitors, has the strongest overall network quality while VMO2 has the lowest network quality of the UK MNOs (see section 5.4.1.4.2).⁵⁵³

388. In terms of their competitive strategies:

- (a) BTEE told the CMA that [redacted]. Unlike all of the other MNOs, BTEE does not have a sub-brand [redacted].⁵⁵⁴
- (b) VMO2 told the CMA that [redacted].⁵⁵⁵

389. This is broadly consistent with evidence from the Parties' internal documents. For example:

- (a) a January 2022 VUK presentation on price increases places BTEE and VMO2 towards the [redacted];⁵⁵⁶ and
- (b) another document provided by Vodafone refers to BTEE's [redacted], and VMO2's [redacted].⁵⁵⁷

5.4.2.2.3 Evidence of customers' switching

390. As set out in Table 15, in FY2023, at an operator level the majority ([50-60]% (MNP data) and [60-70]% (GfK data)) of 3UK's consumer retail customers, and [50-60]% of 3UK's business customers switched to either BTEE or VMO2. VMO2 is the largest switching destination for 3UK's consumer retail customers irrespective of the data used. In the business retail segment, BTEE receives a [redacted] proportion of 3UK's business switchers ([30-40]%) compared to VMO2 ([20-30]%).

391. As set out in Table 17, in FY2023, at an operator level the majority ([50-60]% (MNP data) and [60-70]% (GfK data)) of VUK's consumer retail customers, and [60-70]% of VUK's business customers switched to either BTEE or VMO2. VMO2 is the largest switching destination for VUK's consumer retail customers

⁵⁵³ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁵⁴ Note of call with a third party, October 2023.

⁵⁵⁵ Note of call with a third party, October 2023.

⁵⁵⁶ Vodafone Internal Document, VF_00028047_00001, page 5.

⁵⁵⁷ Vodafone Internal Document, VF_00006761_001, page 9.

irrespective of the data used. In the business retail segment, BTEE receives a [X] proportion of VUK's SoHo switchers ([30-40]%) compared to VMO2 ([30-40]%).

5.4.2.2.4 *Third-party views*

392. All third-party competitors that responded to the CMA's merger investigation consider that BTEE and VMO2 are competitors to the Parties in the consumer retail segment. In particular, the CMA 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,⁵⁵⁸ and
 - (b) All competitors stated that VMO2 is a strong/very strong competitor to 3UK,⁵⁵⁹ 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.
393. Table 18 sets out third-party competitor views of the strengths and weaknesses of BTEE and VMO2. Both MNOs are recognised as having a large presence in the consumer retail segment and strong brand reputation. However, both MNOs are also perceived as being expensive and slow to change/innovate. BTEE is 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, is recognised as having the lowest ranked network quality but offering better prices through its sub-brand Giffgaff.

Table 18: Third-party competitor views of strengths and weaknesses of BTEE and VMO2

MNO	Strengths	Weaknesses
BTEE	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

⁵⁵⁸ 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.

⁵⁵⁹ 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.

VMO2	<p>Strong consumer brand recognition</p> <p>Strong rewards programme: O2 Priority</p> <p>Free EU roaming</p> <p>Handset innovation heritage</p> <p>Cross-sell O2 mobile to Virgin broadband base</p> <p>Ability to attract different customer segments through sub-brand MVNO – Giffgaff which is a digital first business and offers better prices</p> <p>Flexible tariffs</p>	<p>Perceived as expensive</p> <p>Lowest ranked network quality</p> <p>Less innovative than EE and VUK</p> <p>Similar pricing to VUK and EE</p> <p>Outperformed in a number of network performance metrics (voice, data and crowdsourcing)</p> <p>Lowest mobile spectrum share</p> <p>No speed tiering capability</p>
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Source: CMA analysis of third-party responses to the CMA's merger investigation.

394. The CMA also asked business customers of the Parties to list all of the mobile operators they had either considered or approached when they most recently considered their options. The other MNOs were mentioned the most frequently – BTEE by most respondents, and VMO2 by nearly half of respondents.⁵⁶⁰ BTEE appears to be a particularly strong constraint on VUK in offering services to corporate and public sector customers.

5.4.2.2.5 Evidence from internal documents

395. The CMA refers to the Parties' submissions and the CMA's general assessment of their internal documents set out in section 5.4.2.1.5.

396. In relation to competitive constraints from MNOs, the evidence from the Parties' internal documents is consistent with the other evidence gathered by the CMA that both BTEE and VMO2 exercise a constraint on the Parties. For example:

- (a) The price positioning of the other MNOs (including BTEE and VMO2) plays a critical role in terms of [REDACTED].⁵⁶¹
- (b) The Parties consistently monitor the other MNOs regarding a wide range of other performance metrics [REDACTED] they use for benchmarking purposes.⁵⁶²

⁵⁶⁰ Responses to the CMA business customer questionnaire from third parties, January 2024.

⁵⁶¹ For example, Vodafone Internal Documents, VF_00002340_001, pages 1, 4-5, 10; VF_00001847_001, page 1; VF_00002876_001, page 3; VF_00000534_001, pages 24-26 and 39-48; VF_00000220_001, pages 14-15; VF_00000115_001, pages 20 and 22-23; VF_00000230_001, pages 26-29; CK Hutchison Internal Documents, CKH_00003811, pages 5-6, and 8; CKH_00003987, pages 6-10; CKH_00004161, page 13; and CKH_00004347, pages 8, 11-14 and 20-25.

⁵⁶² For example, Vodafone Internal Documents, VF_00033070_001; VF_00023319_001; VF_00028880_00001; VF_00000220_001, page 10; VF_00002726_001, page 11; VF_00001481_001, pages 2-3; CK Hutchison Internal Documents, [REDACTED], page 5; CKH_00000060, page 3; CKH_00000943, page 6; CKH_00000761, page 9; CKH_00000055, page 9; CKH_00000542, pages 5-8; and CKH RFI-3 21.090, pages 13, 21, 23, 25, 27, 29, 32, 47-48.

- (c) In relation to the business retail segment, VUK's internal documents contain references to BTEE being [REDACTED] important competitor. For example, [REDACTED].⁵⁶³ [REDACTED].⁵⁶⁴ [REDACTED].⁵⁶⁵ [REDACTED].⁵⁶⁶

5.4.2.2.6 Conclusion on the competitive constraint from MNOs

397. For the reasons set out above, the CMA believes that both BTEE and VMO2 have strong brands with a large presence in the supply of retail mobile services and the ability to cross-sell to large, fixed customer bases. As a result, the CMA believes that both currently exercise a constraint on the Parties, and that this would likely continue in the future, absent the Merger.
398. However, the CMA believes that BTEE and VMO2 compete less aggressively than 3UK and, in some respects, VUK. BTEE and VMO2 position themselves towards the premium end of the market, third parties see them as more expensive and less innovative/slower to change than the Parties, and VMO2 has the lowest ranked network quality. They 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.

5.4.2.3 Competitive constraint from MVNOs

399. The CMA has assessed the competitive constraint from MVNOs together with the extent to which they would continue to provide a competitive constraint on the Merged Entity, individually or in aggregate and, in doing so, considered:
- (a) the Parties' submissions;
 - (b) the MVNOs' competitive strategies and position;
 - (c) evidence of customers' switching; and
 - (d) third-party views; and
 - (e) evidence from the Parties' internal documents.

⁵⁶³ Vodafone Internal Document, VF_00002818_001, page 31.

⁵⁶⁴ Vodafone Internal Document, VF_00000278_001, pages 41-45.

⁵⁶⁵ For example, Vodafone Internal Documents, VF_00004972_001, page 36; VF_0004971_001, page 29; VF_0000178_001, page 39; VF_00004970_001, page 13; VF_00002750_001, page 58; VF_00000734_001, pages 2-4; VF_0000108_001, page 32; VF_00000485_001, page 4; VF_00000488_001, pages 29-30; VF_0000722_001, page 20; VF_00001438_001, page 48; VF_00021393_001, pages 33 and 44; VF_00002845_001, page 10; VF_00019670_00001, page 5; VF_00019601_00001, page 6; and VF_00034429_00001, page 18.

⁵⁶⁶ Vodafone Internal Document, VF_00002977_001, page 33.

5.4.2.3.1 *Parties' submissions*

400. The Parties submitted that:

- (a) the industry is characterised by vigorous retail competition from MVNOs (in particular, Sky Mobile, Tesco Mobile and Lebara) and others.⁵⁶⁷ Sky Mobile provides an especially strong competitive constraint, as it competes on the basis of a strong brand and the ability to cross-sell attractive media content and fixed broadband. Lebara has grown significantly, consistently expanding its subscriber base on a quarterly basis from approximately 700,000 subscribers in September 2020 to more than [redacted] subscribers in September 2023. Tesco Mobile is a commercial independent competitor;⁵⁶⁸
- (b) despite having relatively small shares of supply individually, MVNOs exert significant and growing competitive pressure in the supply of retail mobile services.⁵⁶⁹ In particular, MVNOs as a group have grown materially in recent years. Between 2021 and Q3 2023, MVNOs increased their share of supply from [redacted] by revenues and from [redacted] by subscribers;⁵⁷⁰ and
- (c) the Parties lose a significant number of customers to MVNOs. Porting data for FY 2023 shows that [redacted], [redacted].⁵⁷¹

5.4.2.3.2 *MVNOs' competitive strategies and position*

401. MVNOs – to a large extent – cannot determine network quality which is a key parameter of competition that only MNOs fully compete on (see paragraph 242(a)).

402. As set out at section 5.4.1.2.1, independent MVNOs only account for [5-10]% (by revenue) and [10-20]% (by subscribers) in the overall supply of retail mobile services meaning that over 85% of supply is accounted for by the MNOs.

403. Further, MVNOs are differentiated, each having different strategies and consumer focuses meaning that no MVNO competes across all subsegments. For example:⁵⁷²

- (a) Despite Sky Mobile having strong net adds, it does not offer pre-paid, unlimited data or business tariffs. Sky Mobile's growth has been driven by the

⁵⁶⁷ FMN, paragraph 15.30.

⁵⁶⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 112.

⁵⁶⁹ FMN, paragraph 15.31.

⁵⁷⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 112.

⁵⁷¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 124.

⁵⁷² CMA analysis based on responses to RFI from third-parties, 10 January 2024, and responses to the CMA competitor questionnaire from third-parties, January 2024.

PAYM handset and PAYM SIMO subsegments. Between 2018 and 2022, Sky Mobile's subscriber numbers and revenue in the PAYM handset subsegment have quadrupled, and in the PAYM SIMO subsegment have more than tripled.

- (b) Lebara does not offer PAYM SIMO, PAYM handset, PAYM data-only or business tariffs. Lebara's growth has come from the pre-paid subsegment where, from 2019 to 2022, [redacted], according to the Parties' estimates.⁵⁷³
- (c) Tesco Mobile (which the CMA considers may not operate fully independently from VMO2) does not offer PAYM data-only or non-SoHo business tariffs. Between 2018 and 2022, Tesco Mobile has grown steadily in both the PAYM SIMO subsegment and the PAYM handset subsegment. Since its entry in 2020, the Parties' estimates show that Tesco Mobile has also grown rapidly in the SoHo subsegment, albeit it still has a very small presence in this subsegment, as set out in Table 10.

404. In a differentiated product market, comparing shares of supply of one operator with the aggregated share of a large number of operators can be misleading and is likely to overstate the competitive pressure that MVNOs are exerting. MVNOs only compete in some subsegments and generally appear to cater more towards cost-sensitive consumers, which is supported by the CMA's analysis of Pure Pricing data set out at section 5.4.1.4.1. This is also demonstrated by MVNOs having higher shares in the pre-paid subsegment ([10-20]% by revenue and [10-20]% by subscriber).

405. As part of its merger investigation, the CMA spoke to some of the largest MVNOs. This confirmed the CMA's finding that these MVNOs tend to target specific subsets of consumers, and that many are primarily competing in the value segments. In particular:

- (a) One MVNO told the CMA that its strategy revolves around consumer-focused propositions which offer more freedom, fairness and flexibility than others offer. This MVNO noted that it is unable to compete with MNO offerings for approximately 25% of the market including, in particular, for plans with 75GB of data or above (including unlimited) due to the pricing structure of its wholesale contract.⁵⁷⁴
- (b) Another MVNO told the CMA that it has a strategy of providing low-cost services with an increasing focus on high quality. Its customer base is

⁵⁷³ FMN, Annex 15.00001.

⁵⁷⁴ Note of a call with a third party, October 2023.

primarily those seeking value or those without a pre-existing relationship with a brand in the market (eg students);⁵⁷⁵ and

- (c) Another MVNO told the CMA that it has repositioned itself in the last few years to provide a 'value' proposition with around two-thirds of its customer base on SIM only repeat subscriptions (pre-paid segment) and that it offers flexible plans in the £5-10 per month range with no commitments or credit checks.⁵⁷⁶

5.4.2.3.3 *Evidence of customers' switching*

- 406. As set out in Table 15, in FY2023, [20-30]% (MNP data) and [10-20]% (GfK data) of 3UK's consumer retail customers, and [10-20]% of 3UK's business customers switched to a MVNO.
- 407. As set out in Table 17, in FY2023, [20-30]% (MNP data) and [10-20]% (GfK data) of VUK's consumer retail customers, and [10-20]% of VUK's business customers switched to a MVNO.

5.4.2.3.4 *Third-party views*

- 408. Several competitors indicated that MVNOs, and MNO sub-brands, typically target different customer bases to the main MNO brands. For example:
 - (a) one MVNO noted that it considers the supply of retail mobile services to be split between mobile operators attempting to maintain low prices and those increasing prices linked to the consumer price index (**CPI**) or the retail price index (**RPI**). It believes there is a clear segmentation in the market and the main brands are not constrained by itself and other smaller operators;⁵⁷⁷
 - (b) another MVNO noted that Lebara, Lyca Mobile and iD Mobile have no frills offerings and typically focus on different groups: some on heavy data users, some with international calls included, some with inclusive roaming;⁵⁷⁸ and
 - (c) one MNO noted that its sub-brand was established with the purpose of allowing it to serve a different set of customers to its main brand.⁵⁷⁹
- 409. One MVNO told the CMA that, of the independent MVNOs, it considers Sky Mobile and Lebara to be the key players.⁵⁸⁰ Another MVNO similarly referred to Sky

⁵⁷⁵ Note of a call with a third party, December 2023.

⁵⁷⁶ Note of a call with a third party, September 2023.

⁵⁷⁷ Note of a call with a third party, December 2023.

⁵⁷⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

⁵⁷⁹ Note of a call VMO2, October 2023, paragraph 13.

⁵⁸⁰ Note of a call with a third party, September 2023.

Mobile and Lebara and said that it considers that Sky Mobile is the only independent scale MVNO that is capable of effectively constraining the MNOs given that while Lebara has at times shown indications of growth, it is typically not sustained.⁵⁸¹

410. Third-party competitors that responded to the CMA's merger investigation identified several MVNOs as competitors to the Parties in the consumer retail segment. 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. The CMA notes that Tesco Mobile was mentioned by two thirds of respondents.⁵⁸² Of the competitors mentioned:
- (a) No MVNO was considered a very strong competitor to VUK. Sky Mobile was considered a strong competitor by four competitors,⁵⁸³ Lebara was considered strong by two competitors,⁵⁸⁴ while Tesco Mobile and Lyca Mobile were considered strong by only one competitor.⁵⁸⁵ Sky Mobile was considered a weak competitor by one competitor and Lebara and Lyca Mobile were considered very weak by one competitor.⁵⁸⁶
 - (b) Only Sky Mobile was considered a very strong competitor to 3UK by one competitor. In addition, it was considered a strong competitor by four other competitors.⁵⁸⁷ Tesco Mobile, Lyca Mobile and iD Mobile were generally seen as slightly stronger competitors to 3UK than they were to VUK with two competitors considering Tesco Mobile as strong, and one competitor considering Lyca Mobile and iD Mobile as strong.⁵⁸⁸
411. MVNOs that responded to the CMA's merger investigation 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. In line with the evidence set out in paragraph 255, half of MVNOs consider themselves very strong competitors to both VUK and 3UK in the pre-paid subsegment. In comparison:⁵⁸⁹

⁵⁸¹ Note of a call with a third party, October 2023.

⁵⁸² As set out in paragraph 242, despite the fact that the CMA considers that VMO2 and Tesco Mobile may not operate fully independently on the market, the CMA reflected third party views on Tesco Mobile throughout this section.

⁵⁸³ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁸⁴ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁸⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁵⁸⁶ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁸⁷ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁸⁸ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁵⁸⁹ CMA analysis of responses to the CMA competitor questionnaire from third parties, January 2024.

- (a) in the PAYM handset subsegment, only one MVNO considers itself a strong competitor to VUK. One MVNO considers itself as a strong competitor to 3UK and one MVNO considers itself a very strong competitor 3UK;
- (b) in the PAYM data-only subsegment, no MVNOs consider themselves strong competitors to either of the Parties;
- (c) in the PAYM SIMO subsegment, only one MVNO considers itself a strong competitor to both of the Parties and one MVNO considers itself a very strong competitor to both of the Parties; and
- (d) in the unlimited data subsegment, two MVNOs, consider themselves a strong competitor to VUK and one MVNO considers itself a very strong competitor to VUK. One MVNO considers itself a strong competitor to 3UK and one MVNO considers itself a very strong competitor to 3UK.⁵⁹⁰

412. The CMA also asked business customers of the Parties to list all of the mobile operators they had either considered or approached when they most recently considered their options. Apart from the MNOs, only four other competitors (OneCom, Manx Telecom, Eircom and Fluidone) were mentioned by one customer each.⁵⁹¹

5.4.2.3.5 *Evidence from internal documents*

413. The CMA refers to the Parties' submissions and the CMA's general assessment of their internal documents set out in section 5.4.2.1.5.

414. Regarding the competitive constraints from MVNOs, the CMA recognises that the Parties' internal documents [§<] discuss and monitor competition from MVNOs – [§<].

415. However, the Parties' internal documents also indicate that MVNOs are differentiated and that MVNOs do not compete across all subsegments in the supply of retail mobile services on a like-for-like basis with the MNOs. For example:

- (a) The Parties' internal documents relating to the business retail segment do not feature MVNOs as part of the competitive landscape, in line with the feedback received from third parties (see section 5.4.2.2.5).
- (b) In relation to VUK's consumer trading reports, the CMA notes that the analysis carried out by Vodafone's economic advisors of these reports for

⁵⁹⁰ The CMA notes that several MVNOs only offer unlimited data as part of their PAYG offerings.

⁵⁹¹ Responses to the CMA business customer questionnaire from third parties, January 2024.

2022 show that VUK does not target MVNOs to any meaningful extent through its market initiatives and that any targeting varies materially from one segment to another. For example, the analysis shows that while VUK targets Tesco Mobile and iD Mobile with market initiatives in SIMO (albeit to a limited extent), there are no such occurrences in handset.⁵⁹²

- (c) 'Pricing Tables' typically included in VUK's quarterly presentation to its board titled 'CFO IR Backup' do not feature any offers from Sky Mobile in 'long tenure' SIMO plans or in PAYG (as opposed to 3UK, BTEE and VMO2), and the quarterly summary to these tables also suggest that any Sky Mobile initiatives in SIMO are of limited relevance for VUK.⁵⁹³ Sky Mobile's more limited presence in SIMO is also reflected in 3UK's internal documents.⁵⁹⁴

5.4.2.3.6 Conclusion on competitive constraints from MVNOs

416. The CMA believes that while the Parties have lost customers to various MVNOs, with the exception of Sky Mobile, MVNOs currently exercise a very limited constraint on the Parties and the other MNOs, and that this would continue in the future absent the Merger given:

- (a) their limited ability to compete on network quality (one of the key parameters of competition);
- (b) their dependence on wholesale contracts to compete on price (the other key parameter of competition);
- (c) MVNOs typically only compete in some segments and generally appear to cater more towards cost-sensitive consumers;
- (d) most MVNOs are not considered to be a strong/very strong competitor to the Parties; and
- (e) all independent MVNOs have a very small share of supply of less than 5% by subscribers and by revenue in 2022.

417. The CMA believes that Sky Mobile exerts some constraint on the Parties given that it benefits from a strong brand, the ability to cross-sell to its large, fixed customer base and strong growth. Notwithstanding this, the CMA believes that Sky Mobile still faces the same limitations as other MVNOs in terms of – to a large extent – not being able to compete on network quality and ultimately being

⁵⁹² Vodafone Confidential Annex VF S109 2-9.0001.

⁵⁹³ For example, Vodafone Internal Documents, VF_00022801_00017, pages 17-26; and VF_00001604_001, pages 88-97.

⁵⁹⁴ For example, CK Hutchison Internal Documents, CKH_00004155, page 4; CKH_00004347.

dependent on its wholesale contract terms with regards to its ability to compete on price (albeit the CMA notes that Sky Mobile's status provides it with significantly more leverage in negotiations than other MVNOs). Its share of supply in the overall retail segment is very small ([0-5]% by subscribers and [0-5]% by revenue) and it does not offer pre-paid, business or unlimited tariffs, all of which are subsegments in which the Parties appear to compete particularly closely.

5.4.2.4 *Third-party views on the impact of the Merger in the supply of retail mobile services*

418. The CMA 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.⁵⁹⁵ In particular, competitors said that:⁵⁹⁶

- (a) it is a 4 to 3 merger;
- (b) the Merger creates a 'giant MNO that becomes even more isolated from MVNO demands in consumer interests';
- (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';
- (d) the Merger is likely to lead to a reduction in choice;
- (e) 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; and
- (f) 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 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.

419. Only a couple of competitor respondents expect the Merger to improve competition. One noted that cost savings on fixed services and teams could be

⁵⁹⁵ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

⁵⁹⁶ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

invested and passed through in pricing.⁵⁹⁷ 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.⁵⁹⁸

420. The CMA 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, the CMA notes that a material number of business customer respondents, including SMEs, expect competition to worsen as a result of the Merger.⁵⁹⁹

421. The CMA has also received views from a third party expressing concerns about the impact of the Merger on the provision of C2 links to remotely-piloted aircraft systems (**RPAs**).⁶⁰⁰ According to this third party, although there are other operators who could provide these C2 links,⁶⁰¹ they will be of less use due to the cost and very localised and limited coverage, which means that C2 links would be mainly provided by MNOs. According to this third party, if the Merger takes place, RPAs would have less choice and ‘and in some locations it might mean only Vodafone and Three are available today, hence post-[M]erger there would be no competition and potentially no choice for path diversity, particularly if the post-[M]erger business rationalises its network operations’.⁶⁰²

5.4.2.5 Conclusion on competitive constraints

422. For the reasons set out above, the CMA believes that:

- (a) 3UK and VUK are close competitors, and the Merger will eliminate the competitive constraint which VUK and 3UK currently place on each other;
- (b) the other MNOs provide a competitive constraint but appear to compete less aggressively than 3UK and, in some respects, VUK;
- (c) The constraint from MVNOs, other than Sky Mobile, is very limited; and
- (d) Sky Mobile provides some constraint. Whilst benefitting from having the ability to cross-sell to a large fixed customer base, it still faces the same limitation as other MVNOs in terms of – to a large extent – not being able to compete on network quality and ultimately being dependent on its wholesale contract terms with regards to its ability to compete on price (albeit the CMA

⁵⁹⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

⁵⁹⁸ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁵⁹⁹ Responses to the CMA business customer questionnaire from third-parties, January 2024.

⁶⁰⁰ A C2 link is the means by which the RPA pilot communicates with and commands the RPA and receives information from it, such as key flight parameters and status information.

⁶⁰¹ These are SATCOM in the L-band and mesh radio in the C-band.

⁶⁰² Note of a call with a third party, February 2024.

notes that Sky Mobile's status provides it with significantly more leverage in negotiations than other MVNOs). Further, its share of supply in the overall retail segment is very small ([0-5]% by subscribers and [0-5]% by revenue) and it doesn't offer pre-paid, business or unlimited tariffs, all of which are segments where the Parties appear to compete particularly closely.

423. As a result of (a) to (d), the CMA believes the elimination of 3UK and VUK as close competitors may lead to higher prices and/or lower investment in network quality in the supply of retail mobile services.

5.4.3 Impact of the Merger on alternative competitive constraints

424. The CMA has considered how any alternative competitive constraints may be impacted by the Merger and, in particular:

- (a) the post-Merger constraint from MNOs; and
- (b) the post-Merger constraint from MVNOs.

5.4.3.1 Post-Merger competitive constraint from the other MNOs

425. The CMA has considered how the constraint from other MNOs may change as a result of the Merger, and in particular:

- (a) the post-Merger competitive incentives of MNOs;
- (b) how the Merged Entity's participation in MBNL could impact the constraint which BTEE is able to exert post-Merger; and
- (c) how the Merged Entity's participation in Beacon could impact the constraint which VMO2 is able to exert post-Merger.

5.4.3.1.1 Post-Merger competitive incentives of MNOs

5.4.3.1.1.1 Parties' submissions

426. The Parties submitted that:

- (a) it is wrong to characterise the supply of retail mobile services as oligopolistic because it does not reflect:
 - (i) the large number of MVNOs that together have materially more subscribers than 3UK; and

- (ii) the significant growth of MVNOs such as Sky Mobile,⁶⁰³
- (b) the Merger will stimulate further competition from BTEE and VMO2. In particular, BTEE and VMO2, as the market leaders, do not face a scale network competitor currently, and so are not incentivised to invest fully in mobile.⁶⁰⁴ However, the Merger will stimulate greater competition to BTEE and VMO2 than either Party is capable of exerting today. The Merged Entity's increased capacity will unlock a high-competition, high-investment equilibrium, stimulating a pro-competitive response from BTEE and VMO2 boosting dynamic competition,⁶⁰⁵ and
- (c) it is very unlikely that the Merged Entity would be incentivised to increase prices given the Merged Entity's higher-capacity network will effectively face near zero costs of incremental capacity expansion for congestion relief, and will therefore have both the ability and incentive to attract and retain customers to the network by offering more generous data allowances at the same price point, representing an effective price decrease.⁶⁰⁶ Furthermore, if it did increase prices, the Merged Entity should not expect that BTEE and VMO2 would follow any unilateral price increases it pursues.⁶⁰⁷

5.4.3.1.1.2 CMA assessment

427. As a starting point, the CMA notes that the supply of retail mobile services is oligopolistic in nature given it is highly concentrated (as set out at section 5.4.1.2.1), there are barriers to entry (as explained at section 6.1.2), and MNOs closely monitor and react to each other's behaviour.⁶⁰⁸ The CMA also notes that oligopolistic markets can, and often do, include a fringe of smaller firms in addition to a few large firms.
428. Generally, 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.
429. In response to the Parties' submission at paragraph 426(a)(i), the CMA notes that:
- (a) the competitiveness of MVNOs is strongly influenced by the terms they can secure from their host MNO (which may worsen as a result of the Merger),

⁶⁰³ Parties' response to the Issues Letter, 4 March 2024, ILR Annex A, note 127.

⁶⁰⁴ Parties' response to the Issues Letter, 4 March 2024, paragraph 3.24.

⁶⁰⁵ Parties' response to the Issues Letter, 4 March 2024, paragraph 3.25.

⁶⁰⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 129.

⁶⁰⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 130.

⁶⁰⁸ For example, Vodafone Internal Documents, VF_00022801_00001, page 17 and 30; and VF_00002528_001. CK Hutchison Internal Document, CKH_00000583, pages 3 and 5.

and so it is largely the competitive interaction between the MNOs rather than MVNOs that drives market outcomes in the supply of retail mobile services;

- (b) as set out in paragraphs 401-404, as MVNOs are diverse, with different strengths and weaknesses, and in some cases focusing on different segments of the supply of retail mobile services, the CMA disagrees with the Parties that the sum of their shares being greater than the share of 3UK demonstrates that they are a stronger constraint than 3UK; and
- (c) in any case, as explained at paragraph 242(d), the CMA considers Tesco Mobile may not operate fully independently from VMO2, and without this operator, independent MVNOs account for only [5-10]% of revenue and 10-20]% of subscribers in the overall supply of retail mobile services. This is smaller than 3UK's share of supply on these metrics ([10-20]% by revenue and [10-20]% by subscribers).

430. In response to the Parties' submission summarised at paragraph 426(a)(ii), the CMA notes that, despite Sky Mobile's strong growth (as discussed at paragraphs 265 and 272):

- (a) Sky Mobile's share of supply in the overall supply of retail mobile services is still very small ([0-5]% by subscribers and [0-5]% by revenue in 2022);
- (b) it faces the same limitations as the other MVNOs of ultimately being dependent on the wholesale contract terms negotiated with MNOs (albeit having more leverage in negotiations than other MVNOs) and being unable – to a large extent – to influence network quality, which the Parties argue is a critical parameter of competition; and
- (c) Sky Mobile does not operate across all subsegments within the supply of retail mobile services (eg it does not offer pre-paid, unlimited tariffs and it is not active in the business retail segment) and therefore is not able to compete on a like-for-like basis with the MNOs.

431. While the CMA therefore recognises that Sky Mobile exerts some constraint on the MNOs, in this section, the CMA has focused on how the Merged Entity's main competitors (VMO2 and BTEE) may respond to a price rise by the Merged Entity, and how this would impact the constraint they exert on the Merged Entity.

432. In this respect, the CMA believes that:

- (a) The Merger will lead to the removal of the constraint which the Parties currently exert on each other, which may increase the Merged Entity's incentives to raise prices. In addition, as explained at section 5.4.1.3.1, due to its significantly increased customer base, the Merged Entity may also have

lower incentives to compete aggressively compared to each Party (and in particular 3UK) on a standalone basis.

- (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 prices. BTEE and VMO2, in particular, may respond to this weakening of competitive pressure by increasing their own prices given that:
- (i) they both have large customer bases and are mainly focused on value generation rather than achieving subscriber growth (as evidenced by their declining shares of supply by gross adds, and their respective commercial strategies as set out in paragraph 388). 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,⁶⁰⁹ and
 - (ii) VMO2 currently has the lowest mobile spectrum share and the lowest network quality of the four MNOs. Faced with an increase in demand, VMO2 may therefore be particularly incentivised to respond by increasing prices rather than trying to accommodate that demand at the prevailing prices.
- (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. This is in line with the reasoning in previous telecommunications mergers,⁶¹⁰ and bearing in mind the highly concentrated nature of the sector post-Merger.
- (d) Even if the Merged Entity increased prices due solely to the removal of the constraint the Parties currently exert on each other (described in paragraph 432(a)) 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.⁶¹¹ This is because the Merged Entity would face weaker constraints, both due

⁶⁰⁹ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁶¹⁰ Case M. 7612 *Hutchison 3G UK/Telefónica UK*, recital 885.

⁶¹¹ This effect is the consequence of the "strategic complementarity" of prices, and is a general characteristic of standard price-setting models of oligopoly competition.

to the loss of competition between the Parties as well as the weakening of the constraint from BTEE and VMO2.

433. For the reasons set out above, the CMA believes 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.
434. The nature of the strategic price interactions between the MNOs can be illustrated by the introduction by BTEE – for the first time in September 2020 – of an inflation-linked price rise of CPI+3.9% which was over time followed by the other MNOs raising their prices in a similar fashion and by adding the exact same margin on the top of the selected measure of inflation (like BTEE, VUK and 3UK introduced CPI+3.9% while VMO2 introduced RPI+3.9%).⁶¹²
435. The CMA considers that this evidence of pricing behaviour is particularly significant as it occurred in the current market structure (with four MNOs including an aggressive competitor like 3UK); this suggests that the reaction of the MNOs may be even more accommodating if there was less competitive pressure on them.
436. In response to the Issues Letter, the Parties challenged the CMA’s interpretation of the price parallelism, stating that those annual inflation-linked price increases have not translated in an increase in market ARPUs due to the prevalence of discounts and the role of MVNOs which did not follow these price increases.⁶¹³
437. However, the CMA does not use this example to establish the competitiveness or otherwise of the prevailing prices in the supply of retail mobile services, but rather to illustrate the oligopolistic nature of the sector, where the MNOs monitor and follow each other, and are less concerned about the MVNOs of which only few imposed the equivalent mid-contract price increase.^{614,615}
438. In response to the Issues Letter, the Parties also submitted that the CMA failed to recognise the importance of quality competition, and that the Merger would lead to a lower quality-adjusted price and likely force rivals to cut their prices.⁶¹⁶ This is largely based on the arguments in Frontier Economics’ detailed efficiencies paper submitted on behalf of the Parties on 15 February 2024 and titled ‘The pro-

⁶¹² See [Ofcom ‘Prohibiting inflation-linked price rises’](#), December 2023, paragraph 2.9.

⁶¹³ Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, note 131.

⁶¹⁴ [Which networks don’t have mid-contract price rises and which do? \(4g.co.uk\)](#), as referenced by the Parties (FMN, paragraph 15.227) shows that Sky Mobile, Asda Mobile, Lyca Mobile and Lebara do not typically have mid-contract price rises. [Ofcom ‘Prohibiting inflation-linked price rises’](#), December 2023, paragraph 2.9 also corroborates this.

⁶¹⁵ For example, Vodafone Internal Documents, VF_00002340_001, pages 1 and 4; VF_00001796_001, page 2; and CK Hutchison Internal Document, CKH_00000478, page 14.

⁶¹⁶ Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, note 128.

competitive effects of the Vodafone/Three merger' which are discussed in section 6.2.2.1.1. By way of summary, however, the CMA has assessed the Parties' efficiencies claims and underlying modelling within the time constraints of a phase 1 investigation and has identified a number of potential issues which it considers limit the extent to which the CMA can rely on the modelling to substantiate the claims made, particularly in a phase 1 context.

439. In any case, even if the CMA accepted that there would be a timely improvement in the quality of the Merged Entity's network from the combination of the two networks and their spectrum, the CMA may still be concerned that a loss of rivalry between the Parties could result in less investment (and, in turn, poorer network quality) in the long-term relative to the counterfactual (in particular bearing in mind that only MNOs not MVNOs can fully compete on network quality), and that this may more than offset any improvement in quality over the short-term.
440. Furthermore, in the short term, as explained at paragraph 432, the CMA believes that the Merged Entity may have the incentive to raise prices due to (i) the loss of rivalry between the Parties; and (ii) a significant increase in its customer base leading to a less aggressive pricing strategy (especially relative to 3UK). The CMA has not seen convincing evidence that the impact on consumers of any such price increases would be lower than the impact on consumers of any quality increases so that the Merger would result in lower, rather than higher, quality-adjusted prices.
441. The CMA also notes that the impact on the rivals of the Merged Entity increasing both price and quality would depend on the relative strengths of consumer preferences over price and quality. If consumers reacted more strongly to changes in price than to changes in quality (ie the cross-price effect was stronger than cross-quality effect), BTEE and VMO2 may respond to an increase in both price and quality by the Merged Entity by increasing their quality-adjusted prices (as their demand would increase rather than decrease).
442. The Parties also raised a prospect of a competitive supply-side response by their rivals (eg launching new products as sub-brands to target the price sensitive customers).⁶¹⁷ The CMA considers it unlikely that, in response to the weakening of the pricing constraint from the Merged Entity, the Parties' MNO rivals would have an incentive to launch cheaper sub-brands, especially since both BTEE and VMO2 have recently decided to retire their sub-brands which were historically positioned more towards the price sensitive segments of the market (PlusNet in case of BTEE, and Virgin in case of VMO2) than is the case with their main MNO brands.

⁶¹⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 129.

443. As noted above, the Parties also submitted that the Merged Entity would face near zero costs of incremental capacity expansion for congestion relief, and would therefore have both the ability and incentive to attract and retain customers to its network by offering more generous data allowances at the same price point.⁶¹⁸
444. The extent to which the CMA is able to verify and take into account an increase in capacity from the Merger, and its impact on the incremental costs of accommodating more data usage, is assessed in section 6.2.3. However, the same considerations as those set out in paragraph 438 also apply here.
445. In this section, however, the CMA notes that, in principle and even if the Parties' claims were accepted, having spare capacity provides MNOs with different strategic options of which providing generous data allowances to win/retain customers is just one possible strategy. The CMA believes that the Merged Entity may not have the incentive to adopt this particular strategy, because other factors may impact its incentives, including expectations of future demand growth (see paragraph 837) which may provide an incentive to preserve this capacity without materially changing its commercial offer to protect its long term commercial position, and because of the prospect of a rival reacting aggressively to any increases in data allowances.

5.4.3.1.2 Merger impact on the constraint exerted by BTEE through the Merged Entity's participation in MBNL

446. The CMA has considered:
- (a) whether, following the Merger, the Merged Entity would have the ability to use its participation in MBNL to disrupt the effective functioning of the network sharing arrangement;
 - (b) whether the Merged Entity would have the incentive to do so; and
 - (c) whether the disruption to the effective functioning of MBNL would have the effect of limiting the constraint exerted by BTEE.

5.4.3.1.2.1 Ability

447. The CMA has considered a range of potential mechanisms through which the Merged Entity could disrupt the effective functioning of MBNL ('mechanisms for harm').

⁶¹⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 128.

448. In assessing mechanisms for harm, the CMA has not attempted to predict the precise actions the Merged Entity would take. Rather the CMA's focus has been to understand if there are potential mechanisms for harm through which the Merged Entity could disrupt the effective functioning of the network sharing arrangement.

5.4.3.1.2.1.1 *Parties' submissions*

449. The Parties submitted that BTEE is not reliant on 3UK's cooperation for the development of its network; the scope of the activities covered by MBNL is limited; [redacted].⁶¹⁹ The Parties also submitted that [redacted].⁶²⁰

450. With regards to BTEE and 3UK's commitment to fund MBNL, the Parties also submitted that [redacted].⁶²¹

451. The Parties also submitted that the governance arrangements and protections in the MBNL agreements are robust and unambiguous.⁶²²

5.4.3.1.2.1.2 *CMA assessment*

452. As set out in section 5.1.7.2, MBNL is a joint venture network sharing arrangement between 3UK and BTEE. The scope of MBNL's activities has reduced over time so that MBNL is no longer involved in functions including new site acquisition and site build.⁶²³ However MBNL is still responsible for maintaining existing shared passive infrastructure, and the [redacted].⁶²⁴

453. The CMA also understands that there is significant participation from both shareholders in MBNL. [redacted].⁶²⁵ [redacted].⁶²⁶ [redacted].⁶²⁷

454. The CMA recognises that the MBNL contractual arrangements set out certain governance arrangements as well as responsibilities of the shareholders to one another and to MBNL. However, the CMA believes that, in practice, the Merged Entity's behaviour may be influenced by its incentives and the competitive conditions in the market. For the purposes of determining the Merged Entity's ability to harm the effective functioning of MBNL and thereby limit the constraint from BTEE, the CMA does not believe that material weight should be placed on protections available to BTEE under these contracts, in line with the approach set

⁶¹⁹ FMN, paragraph 15.620; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 137-138.

⁶²⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 134.

⁶²¹ FMN, paragraph 15.572. Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 137.

⁶²² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 136.

⁶²³ MBNL Presentation, 19 December 2023, page 6.

⁶²⁴ Note of call with Parties on 19 December 2023.

⁶²⁵ FMN, paragraph 15.590.

⁶²⁶ Response to CMA question on MBNL Committees, 13 December 2023; and CK Hutchison Confidential Annex CKH S109-1 6.000, paragraph 11.3.

⁶²⁷ MBNL Presentation, 19 December 2023, page 12.

out in the CMA's Merger Assessment Guidelines.⁶²⁸ There are several reasons for this:

- (a) In practice, the contracts may not completely remove the Merged Entity's ability to limit the constraint from BTEE, given that the contracts may not protect against all the mechanisms through which MBNL's effective functioning could be harmed. For example, the Merged Entity could refuse to agree to future changes to [REDACTED].
- (b) The contracts may be renegotiated. Telecommunications networks, and the services and features provided by MNOs, are complex and subject to technological change. Given this, it may be necessary for BTEE and 3UK to renegotiate the contracts to accommodate for changes in the purpose and scope of the network sharing arrangement. [REDACTED].⁶²⁹
- (c) Additionally, contractual enforcement is often expensive and time-consuming – as such, it may not be worthwhile for BTEE to take on the risk of enforcing the MBNL contractual arrangements. BTEE will remain reliant on 3UK's co-operation in MBNL through the life of the network sharing arrangement, which may act as an additional disincentive to enforce.
- (d) In any event, the CMA notes that contract terms can be interpreted in different ways, and that 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.

455. Given 3UK's significant participation in MBNL, and the [REDACTED], the CMA believes that there are several potential mechanisms for harm. In particular:

- (a) the Merged Entity could limit or block the funding of MBNL; and
- (b) the Merged Entity could block and/or delay upgrades via MBNL.

5.4.3.1.2.1.2.1 *The Merged Entity could limit or block the funding of MBNL*

456. As set out in section 5.1.7.3, [REDACTED].⁶³⁰ [REDACTED].⁶³¹

457. The Parties submitted that [REDACTED]. In particular the Parties submitted that [REDACTED].⁶³² However, the CMA notes that [REDACTED]. This has limited the weight that the CMA can

⁶²⁸ [CMA129](#), paragraph 7.15

⁶²⁹ FMN, paragraphs 15.554 and 15.557.

⁶³⁰ FMN, paragraph 15.572.

⁶³¹ CK Hutchison Confidential Annex S109-1 6.001, clause 9.5.

⁶³² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 137.

place on the Parties' submissions, as it has been unable to review the contractual terms and analyse the impact that they would have on the Merged Entity's ability to engage in the mechanisms for harm.

458. The CMA believes that the Merged Entity could reduce its funding of MBNL by:

- (a) refusing to fund MBNL [REDACTED]. An example of [REDACTED] the Merged Entity could decide not to fund post-Merger, [REDACTED];⁶³³ or
- (b) refusing to agree the same level of spending post-Merger in decisions [REDACTED]. For example, the Merged Entity could refuse to fund certain new activities that require spending that have not previously been anticipated or agreed between the parties.

5.4.3.1.2.1.2.2 *The Merged Entity could block and/or delay upgrades via MBNL*

459. [REDACTED], the Parties submitted that:

- (a) [REDACTED].⁶³⁴
- (b) [REDACTED].⁶³⁵
- (c) [REDACTED].⁶³⁶
- (d) [REDACTED].⁶³⁷
- (e) [REDACTED].⁶³⁸

460. With regards to the Merged Entity's ability to unilaterally block BTEE's unilateral deployments on MBNL sites, the Parties submitted that:

- (a) [REDACTED].⁶³⁹ [REDACTED].⁶⁴⁰ [REDACTED].⁶⁴¹
- (b) [REDACTED].⁶⁴²

⁶³³ FMN, paragraph 15.555.

⁶³⁴ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 132.

⁶³⁵ MBNL Presentation, 19 December 2023, page 15.

⁶³⁶ FMN, paragraph 15.601.

⁶³⁷ MBNL Presentation, 19 December 2023, page 15.

⁶³⁸ MBNL Presentation, 19 December 2023, page 15. Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 133.

⁶³⁹ FMN, paragraph 15.612.

⁶⁴⁰ Strategic Decisions are defined in Schedule 7 of the Cooperation Agreement.

⁶⁴¹ Email from Freshfields Bruckhaus Deringer LLP to the CMA on 26 January 2024, 23:47.

⁶⁴² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 138.

461. The CMA believes that the Merged Entity could frustrate BTEE's network roll-out via its participation in MBNL.
462. Post-Merger, the Merged Entity's presence in both network sharing arrangements may impact its development plans and commercial priorities. As a result, the Merged Entity may, for example, [X], either deliberately, or as a result of shifting its attention and investment towards a competing commercial priority, [X]. The CMA understands that the process of [X] may itself delay and disrupt BTEE's network roll-out.
463. The CMA also believes that there are several potential mechanisms through which the Merged Entity may be able to further block or substantially delay the processing of overtake requests. For example:
- (a) The CMA understands that [X]. For example, [X].
 - (b) [X].⁶⁴³ [X], the CMA believes that this may further contribute to blocking or delaying [X]. For the same reasons set out at paragraph 454(c), this may not be feasible for BTEE.
464. The CMA also believes that the Merged Entity may be able to block or substantially delay new deployment programmes (for example, relating to new technology launches) and decisions to replace shared contracts or infrastructure in other ways. As set out above, the Merged Entity could do this through [X]. [X] may provide a further avenue for blocking or delaying such decisions.
465. In light of the above, the CMA believes that there may be a range of potential mechanisms through which the Merged Entity could disrupt the effective functioning of MBNL.

5.4.3.1.2.1.3 *Conclusion on ability*

466. For the reasons set out above, and considering the available evidence taken in the round, the CMA believes that the Merged Entity may have the ability to use its participation in MBNL to disrupt the effective functioning of the network sharing arrangement. The views of third-parties also support the CMA's position.

5.4.3.1.2.2 *Incentive*

467. The CMA has undertaken one common assessment of incentives across the different potential mechanisms for harm, focusing on the worst-case scenario for BTEE. This assessment assumes that the Merged Entity remains in MBNL, but

⁶⁴³ MBNL Presentation, 19 December 2023, page 16.

[X]. Although this may not be the course of action the Merged Entity would adopt, [X].

468. For the avoidance of doubt – where the CMA has referred to the incentive of the Merged Entity to use its participation in MBNL to disrupt the effective functioning of the network sharing arrangement, it is referring to an incentive both to disrupt deliberately, and to disrupt inadvertently, that arrangement. The CMA believes that the Merged Entity could be incentivised to deliberately use its participation in MBNL for this purpose. However, the CMA also recognises that the Merger could alter the incentives of the Merged Entity in other ways.
469. Specifically, the CMA believes that the commercial priorities of the Merged Entity, and its reliance on MBNL, may shift post-Merger such that it could be incentivised to take actions which inadvertently disrupt MBNL. For example, as mentioned above, it may be commercially sensible post-Merger for the Merged Entity to divert substantial time, resources, and investment away from MBNL and towards [X], even if it did not specifically intend to disrupt MBNL in doing so.
470. The assessment of incentives typically involves a combination of qualitative and quantitative evidence, though the balance will vary between cases.⁶⁴⁴ In this case, where the relationships between competitors is complex, a more qualitative approach is appropriate.
471. Nevertheless, the CMA has collected various data to support its assessment, for example on the direct financial savings to the Merged Entity which would result from a reduction in the funding of MBNL.
472. The CMA's assessment of incentives is structured as follows:
- (a) Benefits: the CMA has assessed the potential financial and competitive benefits for the Merged Entity of disrupting the effective functioning of the network sharing arrangement (including financial savings and benefits to the Merged Entity's competitive position in the supply of retail mobile services and wholesale mobile services).
 - (b) Costs: the CMA has assessed the potential financial and competitive costs to the Merged Entity of disruption (including potential damages claims from BTEE, and harms to the Merged Entity's competitive position).
473. The Parties submitted that the MBNL shareholders are strongly incentivised to comply with the MBNL governance arrangements and contractual obligations/protections as they have been mutually agreed and updated over the

⁶⁴⁴ [CMA129](#), paragraphs 2.25-2.26.

years.⁶⁴⁵ The CMA believes that the fact that the MBNL agreements have been mutually agreed and updated prior to the Merger does not guarantee that the Merged Entity will be incentivised to comply with them. Rather the CMA believes that the Merged Entity may consider the costs and benefits of doing so in light of the changed market structure and commercial conditions that will result.

5.4.3.1.2.2.1 *Parties' submissions*

474. The Parties submitted that the Merged Entity will [X].⁶⁴⁶
475. The Parties submitted that 3UK will not have an incentive to [X] because [X]⁶⁴⁷ [X].⁶⁴⁸
476. The Parties submitted that [X].⁶⁴⁹
477. The Parties submitted that [X], the Parties submitted that [X].⁶⁵⁰
478. The Parties submitted that BTEE's [X] intervention in *Hutchison 3G UK/Telefónica UK* indicates that litigation and regulatory costs are not a concern to BTEE and that it could be expected to pursue contractual enforcement.⁶⁵¹

5.4.3.1.2.2.2 *Impact of symmetry on incentives*

479. The MBNL network sharing arrangement relies on a degree of symmetry between BTEE and 3UK – that symmetry currently incentivises both parties to co-operate. The parties to a network sharing arrangement can be symmetric in relation to:
- (a) factors affecting capacity (eg sites, spectrum);
 - (b) outside options (including access to other sites); and
 - (c) wider business strategy (for example, 5G roll-out strategy).
480. Although MBNL is a passive network sharing arrangement only,⁶⁵² the spectrum holdings of the parties can also affect their incentives to co-operate. An MNO with a larger spectrum holding which wants to add capacity to its network can choose to do so by either adding sites or deploying more spectrum on its existing site

⁶⁴⁵ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 136.

⁶⁴⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILRA, notes 142 and 144.

⁶⁴⁷ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.9.

⁶⁴⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 136.

⁶⁴⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 141.

⁶⁵⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 133 and 138.

⁶⁵¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 136.

⁶⁵² With the exception of limited active sharing described in paragraph 179(a).

portfolio. This means that it is less reliant on the sites shared via MBNL for its network quality than an MNO with a smaller spectrum holding.

481. BTEE and 3UK are [redacted], which incentivises them to continue to cooperate within MBNL. Sites shared with 3UK make up a significant proportion of BTEE's sites ([70-80]% of BTEE's sites) and [redacted]% of 3UK's sites. The parties are asymmetric in other ways, such as their spectrum holdings, but the CMA understands that the combined extent of this asymmetry is not currently sufficient to offset their incentives to co-operate.
482. The Merged Entity, in contrast, [redacted], resulting from the fact that it would also have access to VUK's sites. This would result in asymmetry of the parties' site portfolio, making the Merged Entity less reliant on sites shared via MBNL.
483. BTEE's greater reliance on MBNL could be further exacerbated by asymmetries in the parties' spectrum holdings. As set out in section 5.1.2.1.5, 3UK already has by far the most C-Band spectrum of the four MNOs and post-Merger this would be nearly three times the amount of C-Band spectrum held by BTEE. The Merged Entity would also have 1.5 times as much spectrum overall as BTEE.
484. The balance of costs and benefits may be affected by the Merger. For example, the fact that the Merged Entity would likely have access to a greater number of sites [redacted] may reduce the likelihood that it will lose customers to competitors if the quality of the MBNL infrastructure is degraded or if its ability to deploy new technology on MBNL sites is delayed. The Merged Entity may also be incentivised to divert its time, resources and investment away from MBNL and towards its competing priorities.
485. The CMA also notes that there is uncertainty regarding the JBP and JNP in terms of both the level of detail about the Parties' plans set out in the JBP and JNP and uncertainty that the Parties will action the JBP/JNP as set out, discussed further at section 6.2.3. The CMA notes that changes to this plan could change the Merged Entity's incentive to engage in the potential mechanisms for harm. [redacted].

5.4.3.1.2.2.3 *Assessment of benefits*

486. As set out above, the CMA has assessed incentives against the scenario in which the Merged Entity remains in MBNL, at least until 2031, but relies primarily on Beacon sites. Although, as noted, this outcome cannot be assumed, [redacted].⁶⁵³

⁶⁵³ FMN, paragraph 16.628(i) and Table 15.40.

487. Regarding [redacted], the CMA places limited weight on these. Based on the previous information submitted by the Parties, [redacted].⁶⁵⁴ Therefore, even if the Merged Entity only partially reduced its funding of MBNL, the CMA believes it could make significant financial savings. Alternatively, the Merged Entity could avoid any risk of contract breach while making financial savings by refusing to any future additions to MBNL funding.
488. As discussed above, the Merged Entity may have an additional incentive to seek these savings, or to otherwise reduce the time or resources that it invests in MBNL, in order to redirect this time, resource and investment towards alternative post-Merger commercial priorities.
489. The CMA believes that there may be wider competitive benefits for the Merged Entity should it disrupt the effective functioning of MBNL. Given the role of shareholders in the funding process, BTEE may not be able to make up for any reduction in funding. This, combined with the impact of the disruption on BTEE's unilateral deployments and the replacement of shared infrastructure, could result in a reduction in the quality of BTEE's network.
490. As set out in sections 5.1.3, 5.1.6 and 5.1.3.2, the CMA believes that quality is an important parameter of competition in the supply of retail mobile services and of wholesale mobile services, alongside other factors including price. A degradation in the quality of BTEE's network, resulting from disruption to the effective functioning of the MBNL network sharing arrangement, could therefore lead to a reduction in the competitive constraint exerted by BTEE and a proportion of BTEE's customers switching to the Merged Entity, particularly if the Merged Entity's network was of significantly higher quality. The Merged Entity may recapture more customers because of its greater retail presence.

5.4.3.1.2.2.4 *Assessment of costs*

491. As set out above, the CMA believes that the Merged Entity could disrupt the effective functioning of MBNL whilst meeting its contractual obligations, in which case the financial costs may be limited. For example, it could [redacted] which require additional funding.
492. As noted above, even if the Merged Entity were to engage in breach of contract, BTEE may not have an incentive to claim damages. This is because although there is a system in place, as mentioned above, the process to do so would be

⁶⁵⁴ CK Hutchison Confidential Annex CKH RFI-7 20.001, tab 'CKH RFI-3 47.001'.

costly, time consuming and risky, especially given that BTEE will remain reliant on the Merged Entity for ongoing participation in MBNL.

493. Moreover, as set out in paragraph 476, 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 number of sites. The CMA believes that the Merged Entity could still have the ability and incentive to disrupt MBNL without breaching this contractual obligation, for example the Merged Entity could degrade the quality of MBNL sites whilst meeting its contractual obligations to Cellnex.
494. The CMA recognises, however, that there could be competitive costs to the Merged Entity arising from the fact that a degradation in the quality of the MBNL network would also impact the Merged Entity's network quality. There is also the possibility that BTEE could retaliate by engaging in behaviour of blocking and/or delaying upgrades to the shared infrastructure. This could lead to switching from the Merged Entity to its competitors. However, the CMA believes that these competitive costs may be limited given, based on the JBP and JNP, [redacted].

5.4.3.1.2.2.5 *Conclusion on incentive*

495. Based on the available evidence taken in the round, the CMA believes that the Merged Entity may have an incentive to use its participation in MBNL to deliberately or inadvertently disrupt the effective functioning of the network sharing arrangement, as the expected benefits from doing so may outweigh the expected costs. The Merged Entity's incentive may flow from the competitive benefits that would accrue to it by limiting the competitive constraint exerted by BTEE, from the direct financial benefits which it could achieve by reducing its funding of MBNL, and from its ability to redirect time, investment and resources towards alternative commercial priorities. The Merged Entity's scale suggests that it could recapture a significant number of BTEE's customers even if the part of its network shared with BTEE is degraded, limiting the costs of disruption. The views of third-parties also support the CMA's position.

5.4.3.1.2.3 *Effect*

496. The CMA has considered the cumulative effect of the mechanisms for harm on the effective functioning of MBNL, and thereby the competitive constraint from BTEE.

5.4.3.1.2.3.1 *Parties' submissions*

497. The Parties submitted that there could be no reduction of competition due to any adverse effects of the Merger on BTEE because:

(a) [redacted];

- (b) [REDACTED];
- (c) [REDACTED]; and
- (d) [REDACTED].⁶⁵⁵

498. The Parties submitted that [REDACTED].⁶⁵⁶

499. The Parties submitted that [REDACTED].⁶⁵⁷ As a result of the Merger, [REDACTED].⁶⁵⁸

5.4.3.1.2.3.2 CMA assessment

500. Whilst the CMA believes that the Merged Entity could use its participation in MBNL to disrupt the effective functioning of the network sharing arrangement, the extent to which this could thereby limit the competitive constraint from BTEE depends on the extent to which (a) MBNL plays an important role in determining BTEE's network quality and (b) BTEE has alternatives to an effectively functioning MBNL which could offset the impact of any disruption.

501. Although the CMA understands that the scope of MBNL has narrowed over time, as set out in section 5.1.7.2, based on the available evidence taken in the round, the CMA nonetheless believes that MBNL plays an important role in determining BTEE's overall network quality:

- (a) MBNL is currently responsible for more than [REDACTED] sites which are shared by 3UK and BTEE.⁶⁵⁹ This represents the vast majority [70-80%] of BTEE's sites.⁶⁶⁰
- (b) MBNL is responsible for maintaining the quality of the existing sites, including by [REDACTED].⁶⁶¹
- (c) Upgrades to passive infrastructure required for 5G roll-out, [REDACTED].⁶⁶²

502. In relation to the impact of the specific mechanisms for harm outlined above,

- (a) The Parties submitted that 3UK expected to contribute between [REDACTED] to MBNL's opex funding, and between [REDACTED] to MBNL's capex funding, each year

⁶⁵⁵ FMN, paragraph 15.620; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 138.

⁶⁵⁶ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.7.

⁶⁵⁷ FMN, paragraph 15.621.

⁶⁵⁸ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.4.

⁶⁵⁹ FMN, Confidential Annex CKH 15.007, page 1, Table 42.1.

⁶⁶⁰ Call with a third-party, October 2023.

⁶⁶¹ MBNL Presentation, 19 December 2023, page 6.

⁶⁶² MBNL Presentation, 19 December 2023, page 15.

between 2024 and 2031. This amounts to approximately [10-20]% of 3UK's total network opex and [0-5]% of its total network capex spend.^{663, 664}

- (b) [redacted].⁶⁶⁵ [redacted].⁶⁶⁶ However, the CMA notes that in light of the changed market structure and commercial incentives (whereby there is less alignment between the parties to MBNL), this number could increase post-Merger if the Merged Entity does engage in the mechanisms for harm described above.

503. The CMA believes that BTEE has some alternatives which could offset the impact of any disruption to the effective functioning of MBNL, but that these may be costly and/or time-consuming. For example:

- (a) BTEE may be able to make up for some of the shortfall in funding at its own expense (but may be limited in some key aspects by needing 3UK's approval for spend on shared assets); and
- (b) BTEE could build its own unilateral sites and/or deploy on existing third-party owned infrastructure (however there is a long lead time associated with acquiring, planning and building new RAN sites).

5.4.3.1.2.3.3 *Conclusion on effect*

504. Although its scope has reduced, MBNL still undertakes significant activities on behalf of its shareholders and accounts for a material proportion of BTEE's network spend. While BTEE has some alternatives to avoid the impact of the disruption to the network sharing arrangement, these may be costly and/or time-consuming. The effect may be a lessening of BTEE's ability to maintain/improve its network quality in the future and/or BTEE may face higher costs. This may lead to a reduction in BTEE's future competitiveness relative to the counterfactual. As set out in sections 5.1.3 and 5.1.6, the CMA believes that quality is an important parameter of competition in the supply of retail mobile services and of wholesale mobile services, alongside other factors including price. Further, the Parties submitted that quality is a critically important parameter of competition in their claims about the efficiencies and customer benefits they submit will result from the Merger. In the context of a concentrated post-Merger market structure with only three MNOs able to fully compete on network quality, the significance of this reduction in competitiveness is heightened, particularly in light of the evidence the CMA has observed about the significance of BTEE's network quality to its competitive positioning.

⁶⁶³ The CMA notes this is [redacted].

⁶⁶⁴ FMN, Confidential Annex CKH 15.007, page 12, question 21; CK Hutchison Confidential Annex CKH RFI-7 20.001.

⁶⁶⁵ [redacted] are explained above at paragraph 459.

⁶⁶⁶ Email from Freshfields Bruckhaus Deringer LLP to the CMA on 26 January 2024, 23:47.

505. Based on the available evidence in the round, the CMA believes that the combined effect of the mechanisms could therefore lead to a reduction in BTEE's ability to exert a competitive constraint post-Merger, in particular through a potential reduction in the network quality it offers to its customers. The views of third-parties also support the CMA's position.

5.4.3.1.2.4 Merger impact on the constraint exerted by BTEE through the Merged Entity's participation in MBNL

506. For the reasons set out above and considering the available evidence in the round, the CMA believes that the Merged Entity may have the ability and incentive to use its participation in MBNL to disrupt the effective functioning of the network sharing arrangement.

5.4.3.1.3 Merger impact on the constraint exerted by VMO2 through the Merged Entity's participation in CTIL/Beacon

507. The CMA has considered:

- (a) whether, following the Merger, the Merged Entity would have the ability to disrupt the effective functioning of the CTIL/Beacon network sharing arrangements;
- (b) whether the Merged Entity would have the incentive to do so; and
- (c) whether the disruption to the effective functioning of the CTIL/Beacon network sharing agreements would have the effect of limiting the constraint exerted by VMO2.

508. As set out in section 5.1.7.3, [REDACTED]:

- (a) [REDACTED];⁶⁶⁷
- (b) [REDACTED];⁶⁶⁸ and
- (c) [REDACTED].⁶⁶⁹

⁶⁶⁷ [REDACTED].
⁶⁶⁸ [REDACTED].
⁶⁶⁹ [REDACTED].

509. [REDACTED],⁶⁷⁰ [REDACTED].⁶⁷¹ The Parties submitted that [REDACTED].⁶⁷² The Parties submitted that [REDACTED].⁶⁷³ On the basis that [REDACTED],⁶⁷⁴ and in line with the phase 1 standard, the CMA believes that there is a realistic prospect that [REDACTED] and has therefore carried out its analysis on that basis.

5.4.3.1.3.1 *Ability*

510. The CMA has considered a range of potential mechanisms through which the Merged Entity could potentially disrupt the effective functioning of CTIL/Beacon.

511. In assessing mechanisms for harm, the CMA has not sought to predict the precise actions the Merged Entity could take. Rather the CMA's focus has been to understand if there are potential mechanisms through which the Merged Entity could disrupt the effective functioning of the network sharing arrangement. In doing so, the CMA has focused on the harm to VMO2 via the Beacon network sharing arrangement. For the avoidance of doubt, where the CMA has specified mechanisms for harm via the Beacon network sharing arrangement, this does not preclude that there may also be potential mechanisms for harm to VMO2 via the CTIL network sharing agreement.

5.4.3.1.3.1.1 *Parties' submissions*

512. In relation to the Merged Entity's ability to disrupt VMO2's network roll-out the Parties submitted:

(a) [REDACTED].⁶⁷⁵

(b) [REDACTED].⁶⁷⁶

(c) [REDACTED].⁶⁷⁷

513. The Parties also submitted that [REDACTED].⁶⁷⁸

5.4.3.1.3.1.2 *CMA assessment*

514. As set out in the section 5.1.7.3, VUK is responsible for the West of the UK and VMO2 currently uses approximately [REDACTED] sites hosted by VUK in the West, which is

⁶⁷⁰ Email from Slaughter and May to the CMA on 12 March 2024, 12:30.

⁶⁷¹ [REDACTED].

⁶⁷² [REDACTED].

⁶⁷³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 148.

⁶⁷⁴ Email from Slaughter and May to the CMA on 13 February 2024, 17:45.

⁶⁷⁵ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 150.

⁶⁷⁶ FMN, paragraph 15.495; Parties' response to the Issues Letter, Annex ILR A, note 150.

⁶⁷⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 157.

⁶⁷⁸ FMN, paragraph 15.477.

[30-40]% of VMO2's total sites.⁶⁷⁹ The CMA believes 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, [REDACTED].

515. The CMA therefore believes that there are several potential mechanisms for harm. For example, the Merged Entity could disrupt VMO2's network roll-out by frustrating its unilateral deployments in the West.⁶⁸⁰ It could do this, for example, by:

- (a) providing VMO2 with a plan for deployment which has protracted delivery timescales;
- (b) failing to meet agreed timescales; and/or
- (c) increasing the price charged for unilateral deployments.

516. [REDACTED].⁶⁸¹ Post-Merger, given its increased spectrum holdings and larger site portfolio (because it has access to MBNL sites), the Merged Entity may also have a reduced need for shared deployments within Beacon, leaving VMO2 more reliant on unilateral deployments post-Merger, which could be frustrated by the Merged Entity.

517. For the same reasons set out in paragraph 454 above regarding the limited protections offered by the MBNL contracts and in line with the CMA's Merger Assessment Guidelines,⁶⁸² the CMA believes that the protection offered to VMO2 from the Beacon contractual arrangements [REDACTED] is similarly limited.

518. The CMA notes that while there is [REDACTED],⁶⁸³ post-Merger VMO2 may have reduced bargaining power and therefore may be incentivised [REDACTED] than in the counterfactual. [REDACTED], the CMA understands that [REDACTED].⁶⁸⁴

5.4.3.1.3.1.3 *Conclusion on ability*

519. For the reasons set out above, and considering the available evidence taken in the round, the CMA believes that the Merged Entity may have the ability to use its participation in Beacon to disrupt the effective functioning of the network sharing arrangement. The views of third-parties also support the CMA's position.

⁶⁷⁹ FMN, Table 15.33.

⁶⁸⁰ Although the demand is 'unilateral' ie not shared with VUK, VUK is still responsible for VMO2's deployment in West MORAN areas.

⁶⁸¹ FMN, Table 15.37.

⁶⁸² [CMA129](#), paragraph 7.15.

⁶⁸³ FMN, paragraph 15.497.

⁶⁸⁴ Vodafone Confidential Annex VGP S109 1-7.0001, Appendix B.

5.4.3.1.3.2 *Incentive*

520. The CMA has undertaken one common assessment of incentives. This assessment assumes that the Merged Entity remains in the CTIL and Beacon network sharing arrangements, but that the level of symmetry between the Merged Entity and VMO2 is affected as a result of the Merger.
521. For the same reasons set out above in paragraph 468, where the CMA has referred to the incentive of the Merged Entity to use its participation in the network sharing arrangement to disrupt its effective functioning, it is referring to an incentive both to disrupt deliberately, and to disrupt inadvertently, that arrangement.
522. The CMA's assessment of incentives is structured as follows:
- (a) Benefits: the CMA has assessed the potential financial and competitive benefits for the Merged Entity of disrupting the effective functioning of the network sharing arrangement (including financial savings and benefits to the Merged Entity's competitive position in the supply of retail mobile services and of wholesale mobile services).
 - (b) Costs: the CMA has assessed the potential financial and competitive costs to the Merged Entity of disruption (including potential damages claims from VMO2, and harms to the Merged Entity's competitive position).

5.4.3.1.3.2.1 *Parties' submissions*

523. The Parties submitted that [redacted].⁶⁸⁵
524. The Parties submitted that the CMA needs to take into account the degree of mutual dependence between network sharing parties when determining whether the Merged Entity would be incentivised to try and disrupt VMO2. [redacted]:
- (a) [redacted];
 - (b) [redacted];⁶⁸⁶ and
 - (c) [redacted].⁶⁸⁷

⁶⁸⁵ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 154.

⁶⁸⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 150.

⁶⁸⁷ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.12.

525. Regarding the mutual dependence between network sharing parties, the Parties also submitted that VMO2 could also seek to frustrate the roll out of the Merged Entity's upgrades to shared MORAN sites in the East.⁶⁸⁸

526. Further, the Parties submitted that it is not realistic to think that [redacted].⁶⁸⁹

5.4.3.1.3.2.2 *Impact of symmetry on incentives*

527. The Beacon network sharing arrangement relies on relative symmetry between VMO2 and VUK. That symmetry currently incentivises both parties to deliver on the requirements of the other [redacted]. As set out above, 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).

528. The Merger could have a number of impacts on this symmetry:

- (a) The Merged Entity will have access to an additional [redacted] sites than VMO2, resulting from the fact that it will also have access to 3UK's sites.⁶⁹⁰ This includes an extra [redacted] sites in the East MORAN area.⁶⁹¹
- (b) As set out in section 5.1.2.1.5, 3UK already has by far the most C-band spectrum of the four MNOs and post-Merger, the Merged Entity would hold nearly three times the amount of C-band spectrum held by VMO2. The Merged Entity would also have twice as much spectrum overall as VMO2.
- (c) The Merged Entity's wider business strategy would be impacted by the merger integration, and therefore it would have more competing priorities in terms of time and resourcing.

529. These impacts could reduce the Merged Entity's incentives to continue co-operating under the Beacon arrangement, for example:

- (a) Optimal network strategies could differ for the Merged Entity and VMO2 (eg the Merged Entity may slow down the pace at which it upgrades existing sites to focus on adding additional spectrum at existing sites).

⁶⁸⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 150.

⁶⁸⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 152.

⁶⁹⁰ FMN, Table 15.40. The CMA notes that this is based on the JBP, over which there is uncertainty. Changes to this plan could change the Merged Entity's incentive to engage in the potential mechanisms for harm.

⁶⁹¹ FMN, Table 15.42.

- (b) The Merged Entity may have more bargaining power and there may be less co-dependence because it [REDACTED].

5.4.3.1.3.2.3 *Assessment of benefits*

530. The CMA believes that the Merged Entity may have an incentive to reallocate time or resources from carrying out works on behalf of VMO2 to works required for post-Merger integration, thereby disrupting the Beacon network sharing arrangement. This is because reallocating time or resources in this way may assist the Merged Entity in realising the benefits of additional sites and spectrum arising from the Merger.
531. The Merged Entity may also receive higher revenue from VMO2 if it increases the amount it charges for any unilateral deployments it carries out, particularly if VMO2 becomes more reliant on unilateral deployments post-Merger.
532. The CMA has also considered the extent to which there may be wider competitive benefits associated with the Merged Entity engaging in the mechanisms for harm. As set out in sections 5.1.2, 5.1.3 and 5.1.6, the CMA believes that quality is an important parameter of competition in the supply of retail mobile services and of wholesale mobile services, alongside other factors including price. Further, the Parties submitted that quality is a critically important parameter of competition in their claims about the efficiencies and customer benefits they submit will result from the Merger.
533. A degradation in the quality of VMO2's network through disruption to the Beacon network sharing agreement could therefore lead to a proportion of VMO2's customers switching to the Merged Entity, particularly if the Merged Entity's network was of significantly higher quality. The Merged Entity may recapture more customers because of its greater retail presence.

5.4.3.1.3.2.4 *Assessment of costs*

534. The CMA notes that there may be some financial and competitive costs to the Merged Entity from disrupting Beacon, however the CMA believes these are uncertain and may not offset the benefits.
535. In terms of the financial costs:
- (a) [REDACTED].⁶⁹² [REDACTED],⁶⁹³ [REDACTED]. However, VMO2 may not have an incentive to claim damages – the process to do so would be costly, time consuming and risky,

⁶⁹² Vodafone Confidential Annex VGP S109 1-7.00001, Appendix 5, Section 2.

⁶⁹³ Vodafone Confidential Annex VGP S109 1-7.00001, Appendix 5, paragraph 2.10.

especially given that VMO2 will remain reliant on the Merged Entity during the life of the network sharing arrangement.

(b) [REDACTED].⁶⁹⁴

(c) If the Merged Entity decides to block VMO2's unilateral deployments entirely, rather than simply increasing the prices it charges for them, it would also [REDACTED].

536. There may be some wider competitive costs if VMO2 were to retaliate by, for example, disrupting the Merged Entity's unilateral deployments in the East. This could lead to a certain amount of switching from the Merged Entity to its competitors. However, VMO2 may not have an incentive to do so given the Merged Entity's greater bargaining power arising from the fact that post-Merger it has access to a greater number of sites and spectrum, making it less reliant on unilateral deployments in the East to increase capacity. It would also be a costly strategy for VMO2. [REDACTED].⁶⁹⁵

5.4.3.1.3.2.5 *Conclusion on incentive*

537. The CMA believes that the Merged Entity may have an incentive to deliberately or inadvertently use its participation in Beacon to disrupt the effective functioning of the network sharing arrangement as the expected benefits from doing so may outweigh the expected costs. Misalignment in the parties' reliance on Beacon post-Merger may increase the financial and competitive benefits of disruption to the Merged Entity. The Merged Entity's scale also suggests that it may have a weaker incentive to co-operate with VMO2 post-Merger and could recapture a significant number of VMO2's customers. The views of third-parties also support the CMA's position.

5.4.3.1.3.3 *Effect*

538. The CMA has considered the cumulative effect of the mechanisms for harm on the effective functioning of the Beacon network sharing arrangement, and thereby the constraint from VMO2.

5.4.3.1.3.3.1 *Parties' submissions*

539. The Parties submitted that the Merger will not lead to any adverse effects on VMO2 within the Beacon agreements because the parties have expanded the

⁶⁹⁴ Vodafone Confidential Annex VGP S109 1-7.00001, Schedule 10, Section 22.

⁶⁹⁵ FMN, Table 15.42. See also paragraph 528(a) and accompanying footnote.

areas in the UK where they pursue independent active network strategies and [redacted].⁶⁹⁶

540. The Parties submitted that they agree that the Beacon network is a significant driver of VUK's network quality.⁶⁹⁷

5.4.3.1.3.3.2 CMA assessment

541. Whilst the CMA believes that the Merged Entity could disrupt the effective functioning of Beacon, the extent to which this could limit the competitive constraint from VMO2 depends on the extent to which: (a) Beacon plays an important role in determining VMO2's network quality; and (b) VMO2 has alternatives which could offset the impact of any disruption.

542. VUK and VMO2 have both passive and active network sharing arrangements. Subject to certain carved out areas (discussed below), VUK is responsible for the shared network in the West and VMO2 is responsible for the shared network in the East.⁶⁹⁸ Upgrades required for the roll out of 5G including passive upgrades (for example, addition of new sites) and active infrastructure (addition of additional 5G equipment to sites) therefore involve both parties. For example, VUK, as the host operator in the West, deploys, operates and manages the RAN for both itself and VMO2 in the West.⁶⁹⁹

543. As the Parties have acknowledged, 'VUK and VMO2 rely on each other for the provision of active network services outside London and the Unwind Polygons'.⁷⁰⁰ There are currently [redacted] sites in the West MORAN area which VUK manages,⁷⁰¹ and as noted above, this amounts to [30-40]% of VMO2's total sites, which the CMA believes is a material proportion of VMO2's total sites.

544. [redacted].⁷⁰² However, VUK estimated that it spent £[redacted] on capex relating to the joint network in FY23.⁷⁰³ This amounts to [10-20]% of VUK's total network cost.⁷⁰⁴ The CMA believes that this is a material percentage of VUK's total network cost, which indicates that the shared network is likely to be a significant driver of network quality.

⁶⁹⁶ FMN, paragraph 15.477.

⁶⁹⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 163.

⁶⁹⁸ FMN, paragraph 15.16.

⁶⁹⁹ FMN, paragraph 15.491.

⁷⁰⁰ FMN, paragraph 24.81(iv).

⁷⁰¹ FMN, table 15.33.

⁷⁰² FMN, paragraph 15.526.

⁷⁰³ FMN, table 15.36.

⁷⁰⁴ Vodafone Confidential Annex VF RFI-6 1.001, tab 'RFI3 51 Sheet 2 – RFI 6'.

545. The CMA believes that VMO2 may have limited alternatives to an effectively functioning network sharing arrangement which could offset the impacts set out above:

- (a) [X] if the Merged Entity frustrates VMO2's unilateral deployments, but this could involve further delays and/or costs;
- (b) should VMO2 be required to deploy its own network infrastructure to supplement or substitute for an effectively functioning shared network, this could involve substantial delays and costs; and
- (c) VMO2 may face practical limitations to deploying its own network infrastructure including the availability of alternative sites.

5.4.3.1.3.3.3 *Conclusion on effect*

546. VMO2 and VUK currently co-operate via the Beacon network sharing arrangement to undertake significant activities and spend on the shared network accounts for a material proportion of VMO2's network spend. VMO2 also has limited alternatives to avoid the impact of the disruption to the network sharing arrangement. The effect of the mechanisms for harm therefore could be a degradation in the quality of VMO2's network and/or higher costs.

547. As set out in sections 5.1.3 and 5.1.6 above, network quality is an important parameter of competition and the Parties submitted that it is a critically important parameter and the basis for much of their claimed post-Merger benefits to competition. The CMA notes that VMO2 is already ranked by some external measures as the lowest quality network. The effect may be a lessening of VMO2's ability to maintain/improve its network quality in the future and/or VMO2 may face higher costs. This may lead to a reduction in VMO2's future competitiveness relative to the counterfactual. In the context of a concentrated post-Merger market structure with only three MNOs able to fully compete on network quality, the significance of this reduction in competitiveness is heightened.

548. Based on the available evidence in the round, the CMA believes that the combined effect of the mechanisms for harm could lead to a reduction in VMO2's ability to exert a competitive constraint post-Merger, in particular through a potential reduction in the network quality it offers to its customers. The views of third-parties also support the CMA's position.

5.4.3.1.3.3.4 *Impact of the Merger on the constraint from VMO2 through CTIL/Beacon*

549. For the reasons set out above and considering the available evidence in the round, the CMA believes that the Merged Entity may have the ability and incentive

to use its participation in CTIL/Beacon to disrupt the effective functioning of the network sharing arrangement.

5.4.3.2 *Post-Merger constraint from MVNOs*

550. The CMA is considering the impact of the Merger on the constraint from MVNOs. The CMA believes that:

- (a) As outlined in paragraph 416, the competitiveness of an MVNO will be significantly impacted by the terms they are able to get from their MNO host.
- (b) As set out in TOH 2, the CMA believes that the Merger may lead to a reduction in competition in the supply of wholesale mobile services. This may lead to MVNOs receiving worse price and/or non-price terms. A number of MVNOs expressed this concern to the CMA.⁷⁰⁵

551. On this basis, the CMA believes 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.

5.4.3.3 *Conclusion on the impact of the Merger on alternative competitive constraints*

552. For the reasons set out above, the CMA believes that the competitive constraints faced by the Merged Entity may be weakened as a result of the Merger. In particular, the CMA believes that:

- (a) firstly, the Merged Entity may have the ability and incentive to disrupt the effective functioning of the network sharing agreements which may have the effect of limiting the competitive constraint exerted by BTEE and VMO2;
- (b) secondly, as explained above in section 1.1.3.1.1, BTEE and VMO2 may have incentives to respond to a price rise by the Merged Entity by increasing their own prices. This, in turn, could have some positive feedback on the Merged Entity's own prices and therefore magnify the effect of the Merger on prices; and
- (c) thirdly, the constraint exerted by MVNOs may be weakened as a result of the impact of the Merger on competition in the supply of wholesale mobile services.

⁷⁰⁵ Responses to the CMA competitor questionnaire from third parties, January 2024.

5.4.4 Conclusion on TOH 1

553. For the reasons set out above, the CMA believes that in relation to this theory of harm the Merged Entity – and its competitors – may have incentives to raise prices or degrade non-price aspects of their offerings (including by reducing network investment). This is because:

- (a) The Parties, and in particular 3UK, have strong incentives to compete aggressively which they are acting on through their competitive strategies and growth plans. By contrast, the Merged Entity would have a significantly larger customer base and may therefore have lower incentives to compete aggressively compared to each Party, and in particular 3UK, on a standalone basis.
- (b) The Merger will eliminate the competitive constraint which 3UK and VUK place upon each other now and in the future in an already concentrated market. This means that it may be less costly for the Merged Entity to raise price or reduce quality (including through reducing network investment). This is because some of the customers who would have been lost to the other Party before the Merger may be recaptured by the Merged Entity post-Merger.

554. Further, the remaining competitive constraints appear insufficient to offset this loss of competition. In particular, the other MNOs currently provide a constraint but appear to compete less aggressively than 3UK and, in some respects, VUK. Sky Mobile exerts some constraint, whilst the constraint from other MVNOs is very limited. The MVNOs also – to a large extent – do not compete on network quality as they do not own their own mobile radio network infrastructure. Only the MNOs compete on network investment.

555. The remaining competitive constraints the Merged Entity would face may be further reduced as a result of the Merger. In particular:

- (a) in an oligopolistic market, 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 in the market;
- (b) the Merged Entity may have the ability and incentive to disrupt the effective functioning of the network sharing agreements which could have the effect of limiting the constraint exerted by BTEE and VMO2;
- (c) 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 (TOH 2); and

- (d) these factors, taken together, may limit the competitive constraints which the Merged Entity faces and increase its incentives to raise prices or degrade non-price factors (including through reducing network investment and therefore degrading the quality of its offering to customers) as it risks losing fewer customers by doing so.

556. Accordingly, the CMA found that the Merger raises significant competition concerns as a result of horizontal unilateral effects in the supply of retail mobile telecommunications services to end consumers in the UK.

5.5 TOH 2: Horizontal unilateral effects in the supply of wholesale mobile services

557. The CMA has assessed whether the Merger may be expected to result in an SLC as a result of horizontal unilateral effects in the supply of wholesale mobile services (as defined at sections 5.2.1.2 and 5.2.2.2). As part of this assessment, the CMA has considered:

- (a) existing levels of competition;
- (b) closeness of competition between the Parties;
- (c) alternative competitive constraints;
- (d) buyer power;
- (e) the impact of the Merger on alternative constraints; and
- (f) third party views on the impact of the Merger.

5.5.1 Existing levels of competition

558. The CMA has considered the extent of the 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, the CMA may take into account whether there is only limited competition in the market to begin with.⁷⁰⁶

559. The CMA has assessed whether there is currently limited competition in the supply of wholesale mobile services by considering:

- (a) the Parties' submissions;

⁷⁰⁶ [CMA129](#), paragraph 2.9.

- (b) market structure;
- (c) tender data;
- (d) MNOs' competitive incentives and strategies; and
- (e) third party views.

5.5.1.1 *Parties' submissions*

560. The Parties submitted that the supply of wholesale mobile services is characterised by intense competition currently achieved by [§<].⁷⁰⁷ Specifically, the Parties submitted that [§<].⁷⁰⁸
561. The Parties submitted that the supply of wholesale mobile services is opaque (they do not typically know who they are competing with in a tender/for an opportunity) and is characterised by long-term contracts. They submitted that this means MNOs have a strong incentive to bid competitively.⁷⁰⁹
562. The Parties submitted that strong competition in the supply of wholesale mobile services means MNOs are incentivised to compete on price in order to win/retain wholesale business that would otherwise switch to an alternative MNO.⁷¹⁰
563. The Parties submitted that MNOs are incentivised to attract MVNOs to their networks despite the fact that MVNOs often undercut MNOs on price to end-consumers, because not only does securing MVNOs contribute to an MNO's revenue and cashflow, but having a wider subscriber base allows the MNO to spread network costs across that larger base.⁷¹¹ The Parties submitted that MNOs with higher amounts of spare capacity are incentivised to compete aggressively for MVNOs as larger MNOs operating at scale have lower incremental costs to add new customers to their network.⁷¹²
564. The Parties further submitted that MNOs also have an incentive to compete for MVNOs' business even if they consider there is a risk of cannibalisation of their retail base, as rivalry to secure wholesale revenues forces the MNO to offer competitive terms to MVNOs. This is because experiencing cannibalisation and securing wholesale revenue is more profitable for an MNO than experiencing

⁷⁰⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 179.

⁷⁰⁸ FMN, paragraph 15.458; Parties' response to the Issues Letter, 4 March 2024, paragraphs 4.8-4.9.

⁷⁰⁹ FMN, paragraph 15.440.

⁷¹⁰ FMN, paragraph 15.440.

⁷¹¹ FMN, paragraph 15.407.

⁷¹² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 169.

cannibalisation and not making any wholesale revenue⁷¹³ and as such the cannibalisation risk does not outweigh the risks from not bidding.⁷¹⁴

565. The Parties submitted that they take a number of factors into account when assessing a potential MVNO relationship. VUK assesses criteria including [REDACTED]. 3UK assesses criteria including [REDACTED].⁷¹⁵

5.5.1.2 Market structure

566. There are only four MNOs in the UK meaning that at most four MNOs compete for any given wholesale tender/opportunity.

5.5.1.2.1 Approach to shares of supply

567. The CMA has relied on shares of supply based on subscriber data submitted by the Parties. The Parties were not able to estimate shares of supply based on revenue,⁷¹⁶ and therefore the CMA has produced shares of supply using revenue data submitted by the Parties and third-party MNOs.
568. While shares of supply can serve as useful evidence when assessing competition between the Parties and third-party MNOs,⁷¹⁷ the CMA believes that the largely tender-based nature of competition for the supply of wholesale mobile services (as described in section 5.5.1.3.1) means that shares of supply may not fully reflect the degree of competitive constraint which the Parties and the third-party MNOs impose on one another.
569. The CMA believes that the supply of wholesale mobile services is characterised by infrequent opportunities and lengthy contracts. Based on the Parties' existing contracts with MVNOs, contract lengths vary between [REDACTED] for VUK⁷¹⁸ and between [REDACTED] for 3UK.⁷¹⁹ The typically long duration of MVNO contracts means that current shares principally reflect historic tender performance rather than current conditions of competition. The award of a single contract by a large MVNO can also lead to large changes in shares of supply.⁷²⁰ Therefore, the CMA has had regard to these shares alongside other evidence.

⁷¹³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 167.

⁷¹⁴ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 178.

⁷¹⁵ FMN, paragraphs 15.421 and 15.429.

⁷¹⁶ FMN, Annex 14.00001, footnote 6.

⁷¹⁷ [CMA129](#), paragraph 4.14.

⁷¹⁸ Vodafone Confidential Annex VF RFI-3 35.001. [REDACTED].

⁷¹⁹ CK Hutchison Confidential Annex CKH RFI-3 35.001. [REDACTED].

⁷²⁰ In the context of this Merger the CMA notes that: Sky Mobile is the largest independent MVNO, with a retail share of supply of [0-5]% in 2023 (and a retail share of [30-40]% based on MVNOs only). (FMN, Annex 15.00001, excluding Tesco Mobile and Superdrug).

5.5.1.2.2 Shares of supply

570. Table 19 shows the shares of the Parties and their competitors in the supply of wholesale mobile services in the UK (by number of subscribers and revenue) between 2020-2023.⁷²¹

Table 19: Shares of supply of wholesale mobile services in the UK, 2020–2023

MNO	Subscribers				Revenue	
	2020	2021	2022	2023	2022	2023
VUK	[10-20]%	[10-20]%	[20-30]%	[20-30]%	[30-40]%	[20-30]%
3UK	[20-30]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[20-30]%
Combined	[30-40]%	[30-40]%	[30-40]%	[40-50]%	[40-50]%	[40-50]%
VMO2	[50-60]%	[50-60]%	[50-60]%	[30-40]%	[30-40]%	[30-40]%
BTEE	[0-10]%	[0-10]%	[0-10]%	[20-30]%	[10-20]%	[10-20]%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CMA analysis of the Parties' data and third-party responses.

Note: Tesco Mobile is excluded because Tesco Mobile is part owned by VMO2, and as such is not a potential wholesale customer for other MNOs.

571. Overall, the CMA believes that the supply of wholesale mobile services is currently concentrated, with only four suppliers. Although there has been some variation in shares of supply over the period 2020-2023, the data shows that all four MNOs have historically been successful in winning MVNO tenders.

572. The Merger would reduce the number of players from four to three in the UK and create the largest wholesale supplier, by both subscribers and revenue. The Merged Entity would have a share of supply by subscribers of [40-50]%, with an increment of [10-20]% and a share of supply by revenue of [40-50]% with an increment of [20-30]%.

573. Overall, however, the CMA believes that the share of supply data provides limited insight into the extent of competition in the supply of wholesale mobile services.

5.5.1.3 Tender data analysis

5.5.1.3.1 Background to wholesale tendering

574. Access agreements for MVNOs, MVNEs and MVNAs⁷²² can be negotiated through formal tender processes or informal negotiations:

- (a) formal tender process: an MVNO issues a formal request for proposal. Once bids have been received, the MVNO typically identifies a subset of bidders it wants to engage with in more in-depth negotiations and may have multiple rounds of bidding and negotiations. Formal tender processes made up only

⁷²¹ Shares of supply by revenue were unable to be calculated for 2020 and 2021 due to unavailability of third party data.

⁷²² 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.

[10-20]% [redacted] of MVNO opportunities between 2020-2023 based on data submitted by the Parties.⁷²³ Formal tender processes are more likely to be used by larger MVNOs than smaller MVNOs. Of the ten largest MVNOs, as set out in Table 1, [40-50]% [redacted] were formal tenders ([redacted]).⁷²⁴

- (b) informal negotiations: based on the data submitted by the Parties, between 2020-2023, informal negotiations made up [80-90]% [redacted] of MVNO opportunities.⁷²⁵ Smaller MVNOs and new entrants are more likely to engage in informal negotiations, making up [80-90]% [redacted] of informal negotiations in the Parties' data. [redacted].⁷²⁶ Informal negotiations were held with [60-70]% [redacted] of the ten largest MVNOs ([redacted]), as set out in Table 1.

575. MVNOs also engage with MNOs on possible contract extensions or renegotiations during the contract term. One large MVNO 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.⁷²⁷

576. There is limited transparency over who is bidding and the terms offered, although there is some suggestion in the Parties' internal documents that it is possible to reverse engineer a rough estimate of wholesale supply terms based on publicly available information on an MVNO's retail prices and published financial information.⁷²⁸ Further, there seems to be some transparency over when MVNOs are due to come off contract and re-tender:

- (a) [redacted].⁷²⁹

- (b) Both VUK and 3UK's internal documents suggest that the MNOs are aware of MNOs' larger MVNO customers and when their contracts are up for renewal/due to expire.^{730,731}

⁷²³ Excludes opportunities where the type of tender was unknown to the Parties.

⁷²⁴ Of the ten largest MVNOs, as set out in Table 1, [redacted] tendered between 2020-2023. [redacted] were not up for tender during the time period considered by the CMA. Tesco Mobile and Superdrug are also excluded from the analysis. Tesco Mobile is part owned by VMO2 and Superdrug is owned by CK Hutchison, and as such are not considered potential wholesale customers for other MNOs. The type of discussion held for [redacted] was unknown to the Parties. Data from CK Hutchison Confidential Annex CKH S109-4 1.001.

⁷²⁵ Excludes opportunities where the type of tender was unknown to the Parties.

⁷²⁶ Based on the [redacted] MVNO opportunities that were submitted in CK Hutchison Confidential Annex CKH S109-4 1.001. [redacted].

⁷²⁷ Submission to the CMA from a third party, October 2023.

⁷²⁸ CK Hutchison Internal Document CKH_00001809, page 5.

⁷²⁹ [redacted].

⁷³⁰ For example, Vodafone Internal Document VF_00006337_001, page 7 and VF_00009478_001, page 10 [redacted].

⁷³¹ For example, CK Hutchison Internal Documents CKH_00002032, page 5; CKH_00002022, page 2.

5.5.1.3.2 Approach to tender data analysis

577. Tender data can be used to assess more recent conditions of competition.⁷³²
578. Using the tender data provided by the Parties, the CMA has considered the percentage of MVNO tenders that VUK and 3UK were invited to and participated in, out of all the tenders VUK and 3UK were each aware of.⁷³³
579. The tender data submitted by the Parties covers the period between 2018 and 2023.⁷³⁴ The CMA used the period between 2020 and 2023 in its analysis, to reflect recent competitive conditions.
580. The CMA believes that the data submitted by the Parties has the following limitations:
- (a) It may not include all tenders that took place during the relevant period.⁷³⁵
 - (b) The Parties may have incorrectly identified some tenders.
 - (c) The Parties may have incomplete or incorrect data on which MNOs bid.
 - (d) Although the CMA has focused only on tenders between 2020 and 2023, given the data is necessarily backward-looking, it may not be reflective of the Parties' future position in the supply of wholesale mobile services.
581. The CMA has therefore also collected some tender data from third parties to supplement the data received from the Parties. As noted at paragraph 584 below, the CMA believes third party tender data on third parties' own participation and win rates to be more reliable than the Parties' data.

5.5.1.3.3 Tender data analysis

582. Table 20 shows the participation rates for the MVNO tenders the Parties were aware of between 2020-2023.

Table 20: Tender data analysis - participation rates, 2020–2023

	VUK	3UK	BTEE	VMO2
Tenders the MNO was aware of	[>]	[>]	N/A	N/A

⁷³² [CMA129](#), paragraph 4.13.

⁷³³ Throughout this section 'tenders' and 'opportunities' are referred to interchangeably and treated the same in the tender data analysis.

⁷³⁴ CK Hutchison Confidential Annex CKH S109-4 1.001

⁷³⁵ CK Hutchison Confidential Annex CKH S109-4 1.001.

MNO invited to	[<]% (<)]	[>]% (>)]		
MNO bid for (of those invited to)	[<]% (<)]	[>]% (>)]		
MNO bid for (of total)	[<]% (<)]	[>]% (>)]	[<]% (<)]	[>]% (>)]

Source: CMA analysis of the Parties' data.

Note: Excludes known MVNE/MVNA and M2M tenders. [<].

583. Based on the Parties' tender data, all MNOs are active in bidding for wholesale mobile services contracts, but VMO2 is significantly less likely to bid for a given tender than the other three MNOs:
- (a) VUK was invited to [30-40]% of tenders it was aware of (<)] and bid for [90-100]% of tenders it was invited to.
 - (b) 3UK was invited to [40-50]% of tenders it was aware of (<)] and bid for [90-100]% of tenders it was invited to.
 - (c) BTEE bid for almost [>] ([40-50]%; [>]) of the tenders the Parties were aware of.
 - (d) VMO2 bid for [0-5]% (<)] of the tenders the Parties were aware of.
584. As noted above, the CMA believes the data provided by the Parties on third-party participation rates to have limited reliability and therefore is considering it in conjunction with third-party tender data.
585. Based on third-party tender data:
- (a) One third-party MNO was invited to, and bid for, more tenders than the Parties' data suggests.
 - (b) The other third-party MNO was invited to, and bid for, more tenders than the Parties' data suggests, although it bid [>].
586. The evidence on participation rates shows that not all MNOs bid for all tenders (either because they are not invited or, particularly in the case of one third-party MNO, because they sometimes choose not to bid even when invited). This means that while theoretically there are a maximum of four potential MNOs for any given tender, in practice fewer than four may compete for it.
587. As discussed below, participation rates also do not necessarily reflect the extent to which MNOs offer competitive terms and prices when they do bid.

5.5.1.4 *MNOs' competitive incentives and strategies*

588. The CMA considered the extent to which MNOs' competitive incentives and strategies affect their incentives to compete to supply wholesale mobile services.

5.5.1.4.1 *MNOs' competitive incentives*

589. 5.4.2.3 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 will consider a number of factors when deciding whether to compete for an MVNO's business, and the price and other terms they offer, including:

- (a) the costs of onboarding the MVNO as compared to the potential revenues the MVNO might generate;
- (b) the level of overlap between the MNO and the MVNO's customers (including whether the MNO and MVNO supply fixed as well as mobile services) and therefore the likely extent to which the MVNO will 'cannibalise' the MNO's retail customers;
- (c) the likelihood of winning and likely costs involved in bidding; and
- (d) the likelihood that the MVNO will obtain wholesale services from another MNO if the MNO does not win (meaning that the MNO still risks losing retail customers, but without any revenue upside).

590. A number of the Parties' internal documents and third-party evidence⁷³⁶ show that these factors affect an MNO's willingness to bid for a particular tender (and how aggressively it competes for that tender) if invited; and that their significance can differ between MVNOs, which may lead to differences in the experiences of MVNOs negotiating with MNOs. For example, although larger, mass-market MVNOs like Sky Mobile may be more likely to cannibalise an MNO's existing customer base, such MVNOs may also offer the MNO higher potential revenues. This may lead to MNOs competing more aggressively for an MVNO such as Sky Mobile—notwithstanding the cannibalisation risk—than for a new entrant which an MNO may assess as having a lower cannibalisation risk, but uncertain potential revenues.

⁷³⁶ Specific references are included in section 5.5.1.5 below.

591. The CMA also believes that larger MNOs (with a larger customer base at risk of cannibalisation) may have less incentive to increase scale and may be relatively less incentivised to compete aggressively for MVNO tenders than smaller MNOs.

5.5.1.4.2 MNOs' strategies in the supply of wholesale mobile services

592. The CMA has considered evidence on each of the MNO's strategies, and what these suggest in terms of their incentives to compete for MVNOs.

5.5.1.4.2.1 VUK

593. VUK's internal documents suggest that [redacted]:

(a) [redacted].⁷³⁷ This is reflected in VUK winning three large MVNO tenders in 2019 and 2020, including Virgin Media Mobile,⁷³⁸ Asda Mobile and Lebara.

(b) VUK's internal documents [redacted], suggest that [redacted]⁷³⁹ [redacted].⁷⁴⁰ [redacted].⁷⁴¹ VUK's internal documents suggest that [redacted].⁷⁴²

594. When negotiating wholesale contracts, VUK's internal documents suggest that [redacted].⁷⁴³ During negotiations with [redacted], VUK's internal documents suggest that [redacted].⁷⁴⁴ [redacted].⁷⁴⁵ The CMA notes that in the same document VUK considered [redacted], suggesting that the cannibalistic impact on VUK's retail mobile services is considered in the broader context of wholesale competition.⁷⁴⁶

595. [redacted], VUK's internal documents suggest that [redacted].⁷⁴⁷

5.5.1.4.2.2 3UK

596. 3UK's internal documents suggest [redacted].⁷⁴⁸ Internal documents suggest [redacted].⁷⁴⁹ For instance, one 3UK internal document [redacted].⁷⁵⁰

⁷³⁷ Vodafone Internal Document VF_00005918_001, page 8.

⁷³⁸ Which it would later lose to O2 when VM/O2 merged in 2021.

⁷³⁹ Vodafone Internal Documents VF_00008075_001, page 4 states [redacted].

⁷⁴⁰ Vodafone Internal Document VF_00008443_001, page 14. [redacted].

⁷⁴¹ Vodafone Internal Documents VF_00004674_001, page 5, VF_00008199_001, page 33, VF_00008674_001, page 13, VF_00006214_001, page 6, VF_00008075_001, page 4.

⁷⁴² Vodafone Internal Document VF_00008443_001, page 14.

⁷⁴³ Vodafone Internal Document VF_00001653_001, page 10, [redacted].

⁷⁴⁴ Vodafone Internal Document VF_00006337_001, page 8.

⁷⁴⁵ Vodafone Internal Document VF_00006310_001.

⁷⁴⁶ Vodafone Internal Document VF_00006310_001.

⁷⁴⁷ Vodafone Internal Document VF_00006337_001 page 8, [redacted].

⁷⁴⁸ CK Hutchison Internal Document CKH_00002246, page 10. See also, CK Hutchison Internal Document CKH_00002032 which explains [redacted].

⁷⁴⁹ CK Hutchison Internal Document CKH_00002246, pages 3 and 4.

⁷⁵⁰ CK Hutchison Internal Document CKH_00001845.

597. Internal documents suggest that 3UK is [REDACTED],⁷⁵¹ [REDACTED].⁷⁵² [REDACTED], 3UK's internal documents suggest [REDACTED].⁷⁵³ [REDACTED].⁷⁵⁴
598. Another internal document suggests that [REDACTED].⁷⁵⁵
599. [REDACTED].⁷⁵⁶ [REDACTED]. For example, based on 3UK's internal documents, [REDACTED].⁷⁵⁷
600. 3UK's internal documents also suggest that [REDACTED].⁷⁵⁸ The Parties submitted that [REDACTED].⁷⁵⁹

5.5.1.4.2.3 *Third-party MNOs' competitive strategies*

601. One third-party MNO submitted that it plays an active role in wholesale to ensure MVNO value is maximised. This third-party MNO works with all of its MVNO customers with the aim of maintaining the MVNO's competitive position, as well as attracting new MVNO customers.⁷⁶⁰
602. The other third-party MNO indicated that its wholesale strategy is to [REDACTED]. This third-party MNO indicated that it has [REDACTED].⁷⁶¹
603. As noted in section 5.4.1.2.1, both third-party MNOs have larger customer bases than either Party (in particular 3UK). The third-party MNOs are therefore at a greater risk of cannibalising their own sales. Therefore, the CMA believes that the third-party MNOs both have a more limited incentive to win wholesale contracts to increase the overall scale of their businesses.

5.5.1.5 *Third party views*

604. The CMA has considered evidence from third-parties on existing competition in the supply of wholesale mobile services and barriers to switching wholesale suppliers.
605. As described in section 5.1.2.2, the size of MVNOs varies substantially. While the CMA has taken account of all submissions from third-party MVNOs (including potential entrant MVNOs), it has placed more weight on submissions from large MVNOs (defined for these purposes as MVNOs with over 100,000 subscribers).

⁷⁵¹ CK Hutchison Internal Document CKH_00002245.

⁷⁵² CK Hutchison Internal Documents CKH_00002246, page 19; CKH_00001857.

⁷⁵³ CK Hutchison Internal Document CKH_00002032, page 12.

⁷⁵⁴ CK Hutchison Internal Document, [REDACTED], pages 27 and 40.

⁷⁵⁵ CK Hutchison Internal Document CKH_00002246, page 29.

⁷⁵⁶ CK Hutchison Internal Document CKH_00001804, page 3, [REDACTED].

⁷⁵⁷ CK Hutchison Internal Document CKH_00002791, page 7.

⁷⁵⁸ CK Hutchison Internal Document CKH_00002032, page 12.

⁷⁵⁹ FMN, footnote 548.

⁷⁶⁰ Note of call with a third party, October 2023.

⁷⁶¹ Note of call with a third party, October 2023.

This is to reflect the competitive importance of these MVNOs as customers of wholesale mobile services and suppliers of retail mobile services.

5.5.1.5.1 *Experience of competition for the supply of wholesale services*

606. Based on third-party submissions, the CMA believes that MVNOs experience a range of competition between MNOs for wholesale tenders.
607. Feedback from large MVNOs was mixed on the competitiveness between MNOs for wholesale tenders. One large 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'.⁷⁶² However, feedback from the majority of large MVNOs indicated that they were able to obtain competitive wholesale contracts in recent tenders by negotiating with fewer than four MNOs.
608. The CMA believes that Sky Mobile is in a unique position amongst MVNOs due to its strong brand, ability to cross-sell to a large, fixed customer base and strong growth. The CMA believes that Sky Mobile's status provides it with significantly more leverage in negotiations with MNOs, as is reflected in the Parties' internal documents, [redacted]. The CMA therefore does not consider Sky Mobile's tendering experience of strong competition between [redacted] MNOs as representative of the experience that other MVNOs would have. Notwithstanding Sky Mobile's experience of strong competition in wholesale negotiations, the CMA notes that Sky Mobile is unable to offer high data packages, including unlimited (see paragraph 403(a)).
609. The CMA believes that based on feedback from some potential new entrants, new entrants may experience limited competition in the supply of wholesale mobile services:
- (a) One third party, which decided not to launch as an MVNO, noted that 'fundamentally, the margin between likely retail pricing and the wholesale pricing would push payback periods beyond an acceptable level'.⁷⁶³ When asked to indicate how easy it is to enter the supply of retail mobile services, the same third party noted that 'whilst the technology is not that complex and there are MVNAs who can help with set up and service delivery, the economics of wholesale make setting up a viable mobile business very challenging'.⁷⁶⁴

⁷⁶² Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁶³ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁷⁶⁴ Response to the CMA wholesale questionnaire from a third party, January 2024.

- (b) The same third party also noted that in its experience, two out of the four MNOs, VUK and VMO2, were ‘not keen’ on competing in wholesale, indicating already limited choice for MVNOs.⁷⁶⁵
- (c) 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’. The same third party noted that its negotiations with all four MNOs failed, either for operational reasons or due to ‘uneconomic offers’.⁷⁶⁶

610. The Parties submitted that views from potential new entrants cannot be read in isolation and absent important context, including the date at which they considered entering. The Parties submitted that VUK has improved its ability to support operational logistics or offer advantageous terms through its MVNE agreement with Digitalk.⁷⁶⁷ However, the CMA notes that both third parties referenced in paragraph 609 attempted to launch as MVNOs in the last two years, after VUK began working with Digitalk in 2021.⁷⁶⁸ While one third-party noted that VUK was ‘not keen’ on competing in wholesale at paragraph 609(b), the CMA notes that there may be reasons specific to the potential entrant which meant that VUK was not interested in this instance, consistent with the factors VUK considers when considering whether to bid for a wholesale contract (discussed at section 5.5.1.4.2.1).

5.5.1.5.2 *Barriers to switching*

611. The CMA believes that MVNOs experience barriers to switching which may limit effective competition. As noted by the Parties, switching network host is simpler for full MVNOs than for light MVNOs.⁷⁶⁹ As set out in section 5.1.2.2, based on the ten largest MVNOs, full MVNOs supply [80-90]% of all subscribers supplied by MVNOs and light MVNOs supply [10-20]%. Three of the ten largest MVNOs are full MVNOs.

612. The responses of wholesale customers to the CMA’s merger investigation suggest that they already face difficulties in switching MNO suppliers:

- (a) Two out of three full MVNOs said that switching was very difficult.⁷⁷⁰

⁷⁶⁵ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁷⁶⁶ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁷⁶⁷ Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, note 263.

⁷⁶⁸ [Digitalk selected by Vodafone UK to support MVNO growth strategy](#), February 2021.

⁷⁶⁹ FMN, paragraph 15.418. See also paragraph 613(c).

⁷⁷⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

- (b) Three out of five light MVNOs said that switching was very difficult.⁷⁷¹
613. Light MVNOs (one of which has recently switched MNO providers) explained the difficulties of switching:
- (a) A light MVNO stated 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’ and this risks significant customer loss when switching.⁷⁷²
 - (b) Another light MVNO stated that ‘implementation [of a switch] is difficult, costly, time-consuming and resource heavy’.⁷⁷³
 - (c) Another light MVNO stated that ‘It would be a difficult and complex process to switch providers as the impact would be to both customers and operationally. There likely would be an increase in churn. Operationally moving systems could become very costly due to integrating with the MVNO’s wider business.’⁷⁷⁴ Another light MVNO made similar comments.⁷⁷⁵
614. 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’.⁷⁷⁶ Another full MVNO rated the difficulty 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.⁷⁷⁷
615. The CMA notes that some MVNOs have recently switched MNO providers, suggesting that, although switching is difficult, these difficulties are not insurmountable. Based on the Parties’ data, [§<].

5.5.1.6 *Conclusion on existing levels of competition*

616. The CMA notes that there are only four MNOs capable of hosting MNOs. Not all MNOs compete for all opportunities and a number of existing and potential MVNOs told the CMA that they experienced limited competition when negotiating wholesale access contracts. The CMA believes that in this context any reduction in the number of competitors could lead to competition concerns.

⁷⁷¹ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁷⁷² Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁷³ Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁷⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁷⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁷⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

⁷⁷⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

5.5.2 Closeness of competition between the Parties

617. In differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors or where their products are close substitutes. However, the merger firms need not be each other's closest competitors for unilateral effects to arise.⁷⁷⁸ The CMA considers closeness of competition in the context of the other constraints that would remain post-merger. For example, 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.⁷⁷⁹

618. Within this assessment, the CMA has considered:

- (a) the Parties' submissions;
- (b) shares of supply;
- (c) tender data;
- (d) evidence from the Parties' internal documents; and
- (e) third-party views.

5.5.2.1 Parties' submissions

619. The Parties submitted that shares of supply cannot be used to assess closeness of competition between the Parties and in particular, 3UK's share of supply [REDACTED].⁷⁸⁰

620. The Parties submitted that 3UK [REDACTED] as a wholesale supplier for the following reasons:⁷⁸¹

- (a) 3UK [REDACTED].⁷⁸²
- (b) 3UK's wholesale offering is [REDACTED].⁷⁸³
- (c) [REDACTED].⁷⁸⁴

⁷⁷⁸ [CMA129](#), paragraph 4.8.

⁷⁷⁹ [CMA129](#), paragraph 4.10.

⁷⁸⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 185.

⁷⁸¹ FMN, paragraph 15.400.

⁷⁸² FMN, paragraph 15.457.

⁷⁸³ FMN, paragraph 15.458.

⁷⁸⁴ FMN, paragraph 15.461.

(d) [REDACTED].⁷⁸⁵

(e) [REDACTED].⁷⁸⁶

621. The Parties further submitted that whilst VUK would continue to compete in the supply of wholesale mobile services, it would become a weaker competitor absent the Merger.⁷⁸⁷
622. The Parties submitted that there were only [REDACTED] tenders where both Parties were invited to bid, stating that the Parties' overlap of only [5-10]% of all tenders (that they were aware of) was strong evidence against the Parties being close competitors in wholesale mobile services.⁷⁸⁸
623. More generally, the Parties also submitted that the Parties compete with all MNOs and cannot be considered to be each other's closest competitor.⁷⁸⁹

5.5.2.2 *Shares of supply*

624. As set out above, the CMA believes that shares of supply, although subject to certain limitations, are nonetheless of some use in assessing competition between the Parties. In particular, the CMA has considered the extent to which shares of supply indicate that the Parties may have exerted a constraint on each other historically.
625. 3UK has a modest share of supply by subscribers of [10-20]%. 3UK's share of supply declined slightly over the period 2020-2023; although 3UK's total number of wholesale subscribers grew, the overall size of the supply of wholesale mobile services grew [REDACTED]. The CMA notes that [REDACTED].
626. VUK has a significant share of supply by subscribers of [20-30]%. VUK's share of supply increased over the period 2020-2023; although the Parties' tender data suggests that VUK [REDACTED], data on the supply of retail mobile services suggests that some of VUK's existing MVNO customers may have grown in scale, in particular, Lebara.
627. The CMA believes that these shares of supply indicate that the Parties have both held material positions in the supply of wholesale mobile services over the period 2020-2023. Although the CMA believes that the share of supply data provides limited insight into competition in the supply of wholesale mobile services

⁷⁸⁵ FMN, paragraph 15.462.

⁷⁸⁶ FMN, paragraph 15.462.

⁷⁸⁷ FMN, paragraph 15.472.

⁷⁸⁸ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 198.

⁷⁸⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 204.

currently, in the context of there being only four competitors in the market and the Parties' competitive strategies being similar (as set out in section 5.5.2.4.1 below), these shares of supply are consistent with Parties being close competitors historically.

5.5.2.3 *Tender data analysis*

5.5.2.3.1 *Approach to tender analysis*

628. Tender data can be used to assess closeness of competition.⁷⁹⁰ Evidence of VUK and 3UK participating in the same tenders can indicate that VUK and 3UK compete closely.
629. Using the tender data provided by the Parties, the CMA has considered:
- (a) the percentage of MVNO tenders VUK and 3UK was each invited to and participated in, out of all the tenders each was aware of – discussed above at paragraph 582;
 - (b) the percentage of MVNO tenders both VUK and 3UK were invited to and participated in (ie they overlapped with each other); and
 - (c) the percentage of MVNO tenders VUK and 3UK each won out of all the tenders each was aware of.
630. As set out above at paragraph 580, the CMA believes that the data submitted by the Parties has a number of limitations. In addition, tender data also does not necessarily capture the full extent of the competitive interaction between the Parties. For example, the extent to which the MVNOs can use the MNO's participation to extract better terms.

5.5.2.3.2 *Tender data analysis*

631. Table 21 shows the participation and win rates for VUK and 3UK, based on the MVNO tenders the Parties were aware of between 2020-2023.

⁷⁹⁰ [CMA129](#), paragraph 4.13.

Table 21: Tender data analysis – Parties' participation and win rates, 2020–2023

	VUK	3UK
Tenders the MNO was aware of	[]	[]
MNO invited to	[]% ([])	[]% ([])
MNO bid for	[]% ([])	[]% ([])
Both Parties were invited to	[]% ([])	[]% ([])
Both Parties bid for	[]% ([])	[]% ([])
MNO won (total tenders with a result)	[]% ([])	[]% ([])

Source: CMA analysis of the Parties' data.

Note: Tenders 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 tenders.

632. The CMA believes that the tender data in Table 21 demonstrates the Parties are both actively participating in the supply of wholesale mobile services, including by bidding for key tenders:

- (a) VUK submitted data for [] MVNO tenders, of which it bid for [30-40]%. This included contracts to supply [], Lebara, [], and TalkTalk, which are amongst the largest MVNOs, as set out in Table 1.
- (b) 3UK submitted data for [] MVNO tenders, of which it bid for [40-50]%. This also included contracts to supply [].
- (c) []. As set out in more detail in paragraph 637 below, the Parties both competed for [10-20]% of the tenders they were aware of.

633. The Parties submitted that []. ⁷⁹¹ The CMA believes that the tender is still relevant, regardless of whether the MNO is the incumbent and/or knows that the MVNO has approached other MNOs.

634. The Parties submitted []. ⁷⁹² The Parties submitted that 3UK's participation for the following tenders could not be described as 'wins' by 3UK: ⁷⁹³

- (a) []. ⁷⁹⁴ []. ⁷⁹⁵ []. ⁷⁹⁶

⁷⁹¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 187.

⁷⁹² FMN, paragraph 15.457.

⁷⁹³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 200.

⁷⁹⁴ FMN, paragraphs 15.464, 15.467 and 15.468.

⁷⁹⁵ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 200.

⁷⁹⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 200.

(b) [REDACTED].⁷⁹⁷ [REDACTED].⁷⁹⁸

(c) [REDACTED].⁷⁹⁹

635. The CMA believes, based on the tender data, that 3UK won [5-10]% ([REDACTED]) of the total MVNO tenders that it was aware of for which there was a result ([REDACTED]).

- (a) The CMA believes that the historical context of [REDACTED] does not reduce the relevance of 3UK's [REDACTED] win or therefore the weight the CMA places on it, given that this was a competitive tender process [REDACTED].⁸⁰⁰ Noting that participation in the competitive process is not limited to submitting a bid, the CMA believes that [REDACTED].⁸⁰¹ The CMA has also relied on the view of third parties in reaching this position.
- (b) Given the unique circumstances, the CMA places less weight on the [REDACTED] win than the other tenders. However, the CMA still believes it to be an indicator of 3UK's credibility as a wholesale supplier on the basis that [REDACTED]. The CMA has also relied on the view of third parties in reaching this position.
- (c) The CMA has excluded [REDACTED] as a tender win for 3UK on the basis that [REDACTED] and therefore out of the scope of wholesale mobile services as defined in section 5.2.1.2.⁸⁰² However, the CMA believes that [REDACTED] decision to supply its customers using 3UK's network suggests that it has credible network quality.

636. As set out in Table 1 there are a limited number of MVNOs with more than 100,000 subscribers. In that context the Parties' win data demonstrates that they have been successful in winning business, in particular some of the larger MVNO tenders:

- (a) VUK won [5-10]% ([REDACTED]) of all MVNO tenders that it was aware of, for which there was a result (Lebara and TalkTalk). Although the win rate for VUK is low, it has won large tenders such as Lebara, which is the second largest MVNO, and TalkTalk, the eighth largest MVNO. This is consistent with VUK having a relatively high share of supply by revenue of [20-30]%, as set out in section 5.5.1.2.2.
- (b) 3UK won [5-10]% [REDACTED] of all MVNO tenders that it was aware of, for which there was a result ([REDACTED]). 3UK was also invited to bid for other large tenders including [REDACTED]. The CMA therefore disagrees with [REDACTED] that [REDACTED]. The CMA

⁷⁹⁷ Parties' response to the Issues Letter, 4 March 2024, paragraph 4.11.(b) and Annex ILR A, note 200.

⁷⁹⁸ CK Hutchison Confidential Annex CKH S109-4 1.001.

⁷⁹⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 200.

⁸⁰⁰ FMN, paragraph 15.468.

⁸⁰¹ Parties' response to the Issues Letter, 4 March 2024, paragraph 4.15.

⁸⁰² The Parties submitted that [REDACTED]; FMN, footnote 582 and CK Hutchison Confidential Annex CKH S.109-4 1.001.

therefore disagrees that 3UK has not been successful in competing for wholesale mobile services tenders. Moreover, as noted in paragraph 671, the CMA believes that 3UK exerts a competitive constraint by participating in tenders even if it does not go on to win those tenders.

637. Separately, as set out in sections 5.5.2.4.2.1 and 5.5.2.5.1, evidence from internal documents and third-party submissions respectively, indicate that even where the Parties do not win, their involvement in the tender process and the prices/terms they offer can be used as leverage by the MVNO to secure better prices/terms from the winning MNO.
638. In relation to the extent to which VUK and 3UK bid against each other for MVNO tenders:
- (a) VUK and 3UK took part in [X] of the same MVNO tenders ([X]) and [X] MVNA tenders ([X]). The data shows that VUK and 3UK competed against one another to supply [X] of the largest MVNOs in recent years: [X].⁸⁰³
 - (b) Whilst the Parties both competed for [10-20]%⁸⁰⁴ of the MVNO tenders that they were aware of between 2020-2023, they overlapped in a higher proportion of tenders based on the number of tenders VUK and 3UK actually bid for. 3UK bid for [20-30]% [X] of the tenders VUK bid for whilst VUK bid for [20-30]% [X] of the tenders 3UK bid for. The CMA believes this measure better reflects the competitive constraint actually exerted by one Party on another as it excludes tenders in which neither Party participated. The Parties' overlap with each other based on the tenders that at least one of them bid for was generally higher than their overlap with third-party MNOs (as mentioned in section 5.5.3.3).

5.5.2.4 Evidence from Parties' internal documents

639. The CMA has assessed the Parties' internal documents and considered:
- (a) the Parties' competitive strategies, and what that means for closeness of competition; and
 - (b) whether the Parties consider each other to be close competitors.
640. As noted above in paragraph 617, the CMA does not need to find that the Parties are each other's closest competitors for unilateral effects to arise. In particular, where the CMA finds evidence that competition mainly takes place among few

⁸⁰³ The top five largest MVNOs by retail subscribers are Tesco Mobile, Sky Mobile, Lebara, Lyca Mobile, and iD Mobile.

⁸⁰⁴ This figure has been updated to reflect the exclusion of [X], the overlap was [X]% in the Issue Letter.

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.⁸⁰⁵

5.5.2.4.1 *Parties' competitive strategies*

641. Based on the CMA's review of the Parties' internal documents discussed above at section 5.5.1.4.2, the CMA believes that both Parties' strategy is to grow in the supply of wholesale mobile services, in order to increase scale and share network costs over a larger customer base. Both the Parties have identified growing scale as a strategic priority and the CMA believes that in the counterfactual it is likely that VUK and 3UK would continue to actively pursue wholesale opportunities in the future. Both Parties also have existing large MVNO customers (VUK has Asda Mobile and Lebara, 3UK has iD Mobile) and both Parties also pursue opportunities to host new MVNO entrants which they consider complementary to their retail offering. Further, both Parties' internal documents suggest that they have an incentive to compete against one another and third-party MNOs to defend their overall mobile revenues.
642. The CMA believes that in the context of an already concentrated market, this is consistent with the Parties being close competitors.

5.5.2.4.2 *Parties' views of each other in internal documents*

643. The CMA has considered the extent to which the Parties view each other as close competitors in internal documents covering their wholesale strategy and internal documents produced during wholesale tenders.
644. The Parties' wholesale strategy documents indicate that both Parties monitor MVNOs hosted by the other, with the aim of targeting the MVNO when its wholesale contract comes up for renewal.
645. For example, a VUK [REDACTED] document [REDACTED].⁸⁰⁶ [REDACTED],⁸⁰⁷ [REDACTED].
646. Similarly, a 3UK document titled [REDACTED]⁸⁰⁸ [REDACTED].
647. An earlier 3UK document [REDACTED],⁸⁰⁹ [REDACTED]. As referenced above at paragraph 598, the document [REDACTED].

⁸⁰⁵ [CMA129](#), paragraph 4.10.

⁸⁰⁶ Vodafone Internal Document, VF_00003621, page 10.

⁸⁰⁷ Vodafone Internal Document, VF_00016015, page 15.

⁸⁰⁸ CK Hutchison Internal Document, CKH_00002032, page 5.

⁸⁰⁹ CK Hutchison Internal Document, CKH_00002246, pages 15 and 29.

648. The same 3UK document demonstrates that [REDACTED]. 3UK also notes that [REDACTED].⁸¹⁰ [REDACTED].⁸¹¹

649. Further to paragraph 590, the CMA has placed particular weight on internal documents relating to the most recent Sky Mobile tender as Sky Mobile is the largest independent MVNO by subscribers, with a retail share of supply by subscribers of [0-5]% in 2022 as set out in Table 3. Sky Mobile's most recent tender was in 2021 and [REDACTED].⁸¹²

5.5.2.4.2.1 Sky Mobile

650. When Sky Mobile began supplying retail mobile services in 2017, it had a wholesale contract with Telefonica UK. In mid-2020 when Telefónica UK announced its intention to merge its UK operations with Virgin Media, a change of control clause gave rise to a termination right. For simplicity, the CMA refers to Telefónica UK as VMO2 when discussing the Sky Mobile tender. As such, from 2020 to 2021, Sky Mobile engaged in a rigorous, industry-wide tender process, which drew bids from [REDACTED].

651. 3UK's original response to the tender demonstrates [REDACTED]⁸¹³ [REDACTED].⁸¹⁴ [REDACTED]. 3UK's internal documents [REDACTED].⁸¹⁵

652. VUK's original response to the tender [REDACTED].⁸¹⁶ VUK's internal documents [REDACTED].⁸¹⁷

653. [REDACTED].⁸¹⁸ Further, both Parties' internal documents indicate that [REDACTED].⁸¹⁹ In response to Sky Mobile's feedback:

- (a) [REDACTED].⁸²⁰ 3UK's internal documents demonstrate that [REDACTED].⁸²¹ 3UK's internal documents from this time demonstrate [REDACTED].⁸²² 3UK's internal documents suggest that [REDACTED].⁸²³

⁸¹⁰ CK Hutchison Internal Document, CKH_00002246, page 17.

⁸¹¹ CK Hutchison Internal Document, CKH_00002436.

⁸¹² FMN, paragraph 15.458(i) and CK Hutchison Confidential Annex CKH S109-4 1.001.

⁸¹³ These plans are discussed in the above section 4.

⁸¹⁴ CK Hutchison Internal Document, CKH_00002667.

⁸¹⁵ CK Hutchison Internal Document, CKH_00002002.

⁸¹⁶ Vodafone Internal Document, VF_00005978_001.

⁸¹⁷ Vodafone Internal Document, VF_00005843_001, page 7.

⁸¹⁸ CK Hutchison Internal Document, CKH_00002506; Vodafone Internal Documents, VF_00006128_001, VF_00006202_001.

⁸¹⁹ Vodafone Internal Document, VF_00006256_001, page 1, CK Hutchison Internal Document, CKH_00002259.

⁸²⁰ For example, CK Hutchison Internal Documents, CKH_00002780, CKH_00002068, CKH_00002403.

⁸²¹ CK Hutchison Internal Documents, CKH_00002745, page 2, CKH_00002065, CKH_00002332.

⁸²² CK Hutchison Internal Document, CKH_00002773.

⁸²³ CK Hutchison Internal Documents, CKH_00001980; and CKH_00002065

- (b) [REDACTED].⁸²⁴ The same document demonstrates that [REDACTED].⁸²⁵
- (c) The same email chain demonstrates [REDACTED].⁸²⁶ VUK's internal documents [REDACTED].⁸²⁷

654. On the basis of this evidence, the CMA believes that the Parties were close competitors in the Sky Mobile wholesale tender, with [REDACTED]. Based on the Parties' internal documents, [REDACTED].⁸²⁸ Although neither Party won the tender, [REDACTED].

655. The Parties submitted that [REDACTED].⁸²⁹ However, the CMA notes that [REDACTED].⁸³⁰ [REDACTED] internal documents from this time suggest that [REDACTED].⁸³¹ On this basis and considering all the available evidence in the round, the CMA believes that 3UK was a credible competitor for the Sky Mobile tender.

5.5.2.4.2.2 *Other tenders*

656. VUK's internal documents regarding other tenders also suggest that 3UK exerts a competitive constraint on VUK in the context of specific MVNO tenders:

- (a) For instance, VUK's internal documents suggest that [REDACTED].⁸³²
- (b) [REDACTED], VUK's internal documents suggest that [REDACTED]. For instance, VUK's internal documents [REDACTED].⁸³³ VUK's internal documents also suggest that [REDACTED].⁸³⁴

5.5.2.4.2.3 *Conclusion on evidence from the Parties' internal documents*

657. The CMA believes that the Sky Mobile tender—by far the largest independent MVNO tender—saw particularly close competition between the Parties, as evidenced in their internal documents, such that [REDACTED]. As noted in paragraph 605, in its assessment the CMA has placed more weight on competition for large MVNOs as they reflect a larger proportion of the market.

658. The CMA believes that the Parties' internal documents for other MVNO tenders demonstrate less emphasis on one another, but notwithstanding this the Parties

⁸²⁴ Vodafone Internal Document, VF_00006412_001.

⁸²⁵ Vodafone Internal Document, VF_00006412_001, page 2.

⁸²⁶ Vodafone Internal Document, VF_00006333_001, page 2.

⁸²⁷ Vodafone Internal Document, VF_00006256_001, page 1. [REDACTED].

⁸²⁸ CK Hutchison Internal Document, CKH_00002745, page 2.

⁸²⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 210 and 213; CK Hutchison Internal Document, CKH_00002259.

⁸³⁰ CK Hutchison Internal Document, CKH_00002259.

⁸³¹ CK Hutchison Internal Document, CKH_00002196.

⁸³² Vodafone Internal Documents, VF_00009306_001, VF_00006337_001, page 8, VF_00008972_001 page 1.

⁸³³ Vodafone Internal Document, VF_00003618_001, page 2.

⁸³⁴ Vodafone Internal Document, VF_00005420_001, page 14.

do recognise one another as competitive threats, [redacted].⁸³⁵ In the context of wholesale tenders where MNOs are not typically aware of who they are competing against, the CMA believes that the Parties' internal documents suggest that they are close competitors.⁸³⁶

5.5.2.5 *Third-party views*

659. Responses to the CMA's merger investigation indicate that 3UK and VUK exert a competitive constraint on each other. This section considers submissions from MVNOs and third-party MNOs (BTEE and VMO2).

5.5.2.5.1 *MVNOs*

660. The Parties submitted that [redacted].⁸³⁷ The CMA sought the views of MVNOs in considering whether 3UK exerts a competitive constraint and the extent to which the Parties are close competitors, based on their experience during formal tenders and informal negotiations. The CMA believes that the responses of MVNOs point to 3UK exerting a competitive constraint in the supply of wholesale mobile services.

661. In this regard and consistent with the approach explained in paragraph 605, the CMA has 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. This is particularly true for the CMA's assessment of MVNOs' views of 3UK's network reputation, as 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. For example, as noted in paragraph 653(a), [redacted].

662. MVNOs were asked to indicate how strongly they considered each of the MNOs competed in the provision of wholesale mobile services with the Parties. Multiple MVNOs submitted that 3UK is a credible wholesale provider, and competitive in tenders.

663. In relation to 3UK's network quality and reputation:

- (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'. The same

⁸³⁵ The CMA notes that CK Hutchison submitted a limited number of internal documents regarding wholesale opportunities [redacted].

⁸³⁶ In this regard, see [CMA129](#), paragraph 4.10.

⁸³⁷ FMN, paragraphs 15.455-15.462.

MVNO commented that it considered 3UK's network quality to be equivalent to VMO2.⁸³⁸

- (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'.⁸³⁹
- (c) By contrast, one large 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'.⁸⁴⁰

664. In relation to 3UK's wholesale price:

- (a) One large MVNO commented that [redacted].⁸⁴¹
- (b) One large MVNO noted that [redacted].⁸⁴²
- (c) One large MVNO commented that [redacted].⁸⁴³
- (d) One large MVNO commented that as part of its negotiations with MNOs that included both 3UK and VUK, [redacted].⁸⁴⁴
- (e) A potential MVNO entrant also submitted that [redacted].⁸⁴⁵

665. Given the limited number of players in the supply of wholesale mobile services, the CMA also believes that the responses of MVNOs (including potential entrant MVNOs) indicate that the Parties are close competitors, in that:

- (a) Four out of nine respondents indicated that 3UK was a strong or very strong competitor to VUK,⁸⁴⁶ and
- (b) five out of nine respondents indicated that VUK was a very strong competitor to 3UK,⁸⁴⁷ and
- (c) a large MVNO noted that both 3UK and VUK are 'strong competitors with similar focus as both are large MNOs providing similar services'.⁸⁴⁸

⁸³⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸³⁹ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁴⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁴¹ Third party submission to the CMA, October 2023.

⁸⁴² Third party submission to the CMA, October 2023.

⁸⁴³ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁴⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁴⁵ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁸⁴⁶ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁸⁴⁷ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁸⁴⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

666. Although MVNOs have limited transparency over MNOs' wholesale strategies, when MVNOs were asked for their views on VUK's and 3UK's strategy, strengths and weaknesses, the responses to the CMA's merger investigation were consistent with the CMA's interpretation of the Parties' internal documents. For example:
- (a) One large 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.⁸⁴⁹
 - (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.⁸⁵⁰
 - (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.⁸⁵¹
667. Further, one third party commented that 3UK is an important competitor as the only pure non-fixed MNO, meaning it has different incentives to VUK and third-party MNOs.⁸⁵²

5.5.2.5.2 Competitors

668. The CMA has also considered the views of the Parties' competitors (third-party MNOs). However, the CMA notes that competitors have limited transparency over the strategies, participation and win rates of the Parties.⁸⁵³
669. One third-party MNO stated 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.⁸⁵⁴
670. Another third-party MNO noted that VUK has a pedigree in the wholesale business, is a credible partner to MVNOs and has made significant improvements

⁸⁴⁹ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁵⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁵¹ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁵² Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁵³ Consistent with [CMA2revised](#) paragraph 9.13, the CMA recognises that, in some cases, third parties may have commercial incentives to raise concerns in relation to a merger.

⁸⁵⁴ Note of call with a third party, October 2023.

in terms of network performance. With respect to 3UK, the same MNO stated that 3UK's level of 5G spectrum holdings has allowed it to materially improve its network performance in recent years and, in turn, to become a more credible supplier of wholesale mobile services, including to larger MVNOs.⁸⁵⁵

5.5.2.6 *Conclusion on closeness of competition between the Parties*

671. The CMA believes, based on the evidence above, including analysis of the tender data submitted by the Parties, the Parties' internal documents and third-party views, that notwithstanding that 3UK [§<], it is a credible competitor and competes closely with VUK. In particular, the CMA places weight on feedback from large MVNOs. Their feedback suggests that 3UK's network quality is credible and on par with VMO2 and that 3UK is the most competitive on price.

5.5.3 **Alternative competitive constraints**

672. In analysing the potential for horizontal unilateral effects, one of the CMA's main considerations is whether there are sufficient remaining good alternatives to constrain the merged entity post-merger.⁸⁵⁶ Where there are few 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.⁸⁵⁷

673. There are only two alternative suppliers of wholesale mobile services to the Parties in the UK: BTEE and VMO2. The CMA has considered whether these alternative suppliers would provide a sufficient competitive constraint on the Merged Entity by assessing:

- (a) the Parties' submissions;
- (b) shares of supply;
- (c) tender data analysis;
- (d) evidence from the Parties' internal documents; and
- (e) third-party views.

⁸⁵⁵ Note of call with a third party, October 2023.

⁸⁵⁶ [CMA129](#), paragraph 4.3.

⁸⁵⁷ [CMA129](#), paragraph 4.3.

5.5.3.1 Parties' submissions

674. The Parties submitted that post-Merger, the Merged Entity will continue to face strong competition and in particular that BTEE is a strong resurgent competitive constraint that is actively building share and VMO2 is by far the largest provider today.⁸⁵⁸
675. According to the Parties:
- (a) BTEE is actively rebuilding its position in the supply of wholesale mobile services and its current share of supply ([10-20]% according to the Parties) is not reflective of its future importance to the market.⁸⁵⁹
 - (b) BTEE has been highly successful in winning new tenders and hosts the largest number of MVNOs on its network.⁸⁶⁰
 - (c) When considering the tenders for which the Parties bid but lost between 2018 and 2023, BTEE won [X] of them, [X].⁸⁶¹
 - (d) Between 2018 and September 2023, BTEE won at least [X] tenders that neither Party was invited to.⁸⁶²
 - (e) BTEE has a strong competitive advantage with the UK's best network.⁸⁶³
676. The Parties also submitted that VMO2 poses a strong constraint and will continue to exert a strong competitive constraint post-Merger.⁸⁶⁴ According to the Parties:
- (a) VMO2 is by far the largest supplier of wholesale mobile services with a share of MVNO-hosted subscribers of [50-60]% and contracts with the two largest and most well-known MVNOs, Tesco Mobile (which it part owns) and Sky Mobile.⁸⁶⁵
 - (b) VMO2 can also leverage broader business relationships including its provision of TV content, to secure key contracts.⁸⁶⁶
 - (c) The Parties submitted that [X] VMO2 successfully retained Sky Mobile.⁸⁶⁷

⁸⁵⁸ Parties' response to the Issues Letter, 4 March 2024, paragraph 4.16.

⁸⁵⁹ FMN, paragraph 15.405. Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 226.

⁸⁶⁰ FMN, paragraph 15.405.

⁸⁶¹ FMN, paragraph 15.405.

⁸⁶² FMN, paragraph 15.405.

⁸⁶³ Parties' response to the Issues Letter, 4 March 2024, paragraph 4.17.

⁸⁶⁴ FMN, paragraph 15.400.

⁸⁶⁵ FMN, paragraph 15.404.

⁸⁶⁶ FMN, paragraph 15.404.

⁸⁶⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 225.

5.5.3.2 Shares of supply

677. As set out above, the CMA believes that shares of supply, although subject to certain limitations, are nonetheless of some use in assessing competition between the Parties and third party MNOs. As set out in paragraph 572, the Merged Entity would become the largest wholesale supplier with a share of supply by subscribers of [40-50]% (an increment of [10-20]%) and a share of supply by revenue of [40-50]% (an increment of [20-30]%).
678. Post-Merger, VMO2 would be the largest third-party MNO, with a share of supply by subscribers of [30-40]% and a share of supply by revenue of [30-40]%. BTEE would have a share of supply by subscribers of [20-30]% and a share of supply by revenue of [10-20]%.
679. The CMA believes that although BTEE and VMO2's shares of supply suggest that they have been active competitors historically:
- (a) BTEE had a low share of supply by subscribers between 2020-2022 (at most 10%). This increased to [20-30]% in 2023 largely as a result of winning Lyca Mobile from VMO2.
 - (b) While VMO2 currently has the highest share of supply by subscribers of the four competitors ([30-40]% in 2023), this is largely driven by the fact that it hosts Sky Mobile, the largest independent MVNO, on its network. Its share of supply declined in 2023 due to the loss of Lyca Mobile to BTEE.

5.5.3.3 Tender data analysis

680. As noted above at paragraph 580, there are a number of limitations with the Parties' tender data. Tender data also does not necessarily capture the full extent of the competitive interaction between the Parties and third-party MNOs. Notwithstanding these limitations, it appears based on the Parties' tender data that BTEE exerts a greater constraint on the Parties than VMO2, having participated to a greater degree and won a number of opportunities which the Parties bid for.
681. Table 22 shows the MNOs' participation and win rates based on the MVNO tenders the Parties were aware of between 2020-2023.

Table 22: Tender data analysis – MNOs' participation and win rates, 2020–2023

	Vodafone	Three	BTEE	VMO2
Tender the MNO was aware of	[><]	[><]	N/A	N/A
MNO invited to	[><] % ([><])	[><] % ([><])		

MNO bid for (of those invited to)	[<]%	[<]%		
MNO bid for (of total)	[<]%	[<]%	[<]%	[<]%
MNO won (total tender with a result)	[<]%	[<]%	[<]%	[<]%

Source: CMA analysis of the Parties' data.

Note: Tenders 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 tenders. The Parties submitted that they were aware of [<] tenders where BTEE was a participant, they also submitted [<] tenders that were won by BTEE, and [<] that were either lost or on hold. These are included in the figures for participation in Table 22. Similarly, for VMO2 the Parties submitted [<] tenders that were won by VMO2 but submitted that VMO2 participated for only [<] of them. [<] were included as participation in Table 22.

682. Based on the Parties' data, set out in Table 22 above, during the period between 2020-2023 BTEE participated in [<] tenders ([40-50]%) that the Parties were aware of.⁸⁶⁸
683. BTEE appears to have historically exerted a competitive constraint on VUK and 3UK, having competed in and won some of the tenders VUK and 3UK participated in:
- (a) Of the [<] tenders VUK bid for, BTEE participated in [<] of them ([10-20]%; [<]) between 2020-2023. These tenders were [<]. VUK did not win [<] tender. BTEE won [<].
 - (b) Of the [<] tenders 3UK bid for, BTEE participated in [<] of them ([20-30]%; [<]) during the same period. BTEE won [<] out of the [<] tenders - [<].
684. The Parties' submission included [<] MVNO tenders where BTEE was the winner ([70-80]% win rate).⁸⁶⁹ However, [<] of these were new entrants, and only [<] of the MVNOs (Lyca Mobile [<]) were in the ten largest MVNOs, as set out in Table 1.
685. Based on the Parties' data, set out in Table 22 above, during the period between 2020-2023 VMO2 participated in [<] out of the [<] tenders the Parties were aware of ([0-5]%). However, one of these MVNOs, [<], has a subscriber base of less than 100,000 customers, based on Table 1.
686. VMO2 appears to have historically exerted a weaker competitive constraint than BTEE on VUK and 3UK, having competed in and won fewer of the tenders the Parties participated in:

⁸⁶⁸ The CMA uses the updated total number of opportunities submitted by CK Hutchison, Confidential Annex CKH S109-4 1.001.

⁸⁶⁹ CK Hutchison Confidential Annex CKH S109-4 1.001.

(a) [REDACTED] MNOs bid for Sky Mobile, with VMO2 winning the tender. Of the [REDACTED] tenders VUK bid for, VMO2 participated in [REDACTED] of them ([5-10]%, [REDACTED]) and of the [REDACTED] tenders 3UK bid for, VMO2 participated in [REDACTED] of them ([5-10]%, [REDACTED]) between 2020-2023. [REDACTED].

(b) VMO2 had a win rate of [5-10]% ([REDACTED]) Sky Mobile and Plan.com. [REDACTED].

687. Based on third-party data, the CMA believes that one third-party MNO had a lower win rate and the other third-party MNO had a higher win rate than the Parties' tender data suggests. The CMA believes that the third-party data is broadly consistent with the CMA's conclusions on the constraint exerted by each third-party MNO on the Parties based on the Parties' tender data.

5.5.3.4 Evidence from the Parties' internal documents

688. The Parties' internal documents suggest that [REDACTED]. The Parties' internal documents suggest that [REDACTED].

(a) VUK's internal documents suggest that [REDACTED].⁸⁷⁰ [REDACTED]; for instance 3UK notes that [REDACTED],⁸⁷¹ and VUK notes that [REDACTED].⁸⁷²

(b) Both Parties have speculated that [REDACTED];⁸⁷³

(c) Both Parties have also speculated that [REDACTED].⁸⁷⁴

689. 3UK's internal documents also suggests that [REDACTED].⁸⁷⁵

690. In relation to the Sky Mobile tender, as outlined above, both Parties' internal documents suggest that [REDACTED].

5.5.3.5 Third-party views

691. Third-party MVNOs responding to the CMA's investigation were asked to indicate how strongly they consider BTEE and VMO2 compete with VUK and 3UK in the provision of wholesale mobile services. The responses suggest that BTEE and VMO2 exert a competitive constraint on the Parties.

⁸⁷⁰ For example, Vodafone Internal Documents, VF_00005918_001, page 7; and VF_00014806_00001, page 55.

⁸⁷¹ CK Hutchison Internal Document, CKH_00002791, page 5.

⁸⁷² Vodafone Internal Document, VF_00003621_001, page 12.

⁸⁷³ For example, Vodafone Internal Documents, VF_00006337_001, page 7 [REDACTED]; CK Hutchison Internal Document, CKH_00002403, [REDACTED].

⁸⁷⁴ CK Hutchison Internal Documents, CKH_00002705, CKH_00001978 [REDACTED]; Vodafone Internal Document, VF_00005843_001, page 7, [REDACTED].

⁸⁷⁵ CK Hutchison Internal Document, CKH_00002246, page 29.

692. With respect to BTEE:
- (a) Five out of 10 customers indicated that BTEE competes strongly or very strongly with VUK.⁸⁷⁶
 - (b) Four out of nine customers indicated that BTEE competes strongly or very strongly with 3UK.⁸⁷⁷
693. With respect to VMO2:
- (a) Five out of 10 customers indicated that VMO2 competes strongly or very strongly with VUK.⁸⁷⁸
 - (b) Five out of eight customers indicated that VMO2 competes strongly or very strongly with 3UK.⁸⁷⁹
694. However, when asked to describe their experience of engaging with third-party MNOs, the feedback from MVNOs suggests that BTEE and VMO2 do not always exert a competitive constraint on the Parties.
695. For example, one large MVNO indicated that in its negotiations, 'BTEE did not submit a bid giving a variety of non-specific technical and commercial reasons' for not doing so and in their view BTEE was not interested in hosting MVNOs at that time. The same MVNO also indicated that based on its previous interactions, it did not appear to it that 'BTEE views independent MVNOs as a significant part of their market strategy' and that 'BTEE wishes to preserve its premium brand image and pricing and market offer'.⁸⁸⁰ In the same MVNO's experience, VMO2 submitted a bid which it considered to be 'highly uncompetitive' and despite its attempts to negotiate in several rounds, VMO2 would 'not offer better terms, including not offering unlimited data and competitive rates'.⁸⁸¹
696. Another large MVNO commented that 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 commented that in its tender experience, it observed complex competitive dynamics among the MNOs and that its incumbent MNO provider was unwilling to engage in productive conversations until the MVNO engaged with competitor MNOs. In this MVNO's experience, BTEE submitted a very uncompetitive bid with terms that included a delay on new technologies and not agreeing to its proposed term length. The same MVNO commented that VMO2

⁸⁷⁶ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

⁸⁷⁷ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

⁸⁷⁸ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁸⁷⁹ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁸⁸⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁸¹ Response to the CMA competitor questionnaire from a third party, January 2024.

has proven capability hosting MVNOs, but its network quality has degraded over time.

697. 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.⁸⁸²
698. As noted above, the CMA also heard from potential new entrants. In one third-party'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' and VMO2 presented an 'uneconomic' commercial offer.⁸⁸³ In another's experience, VMO2 was 'not keen at all on wholesale' but was more focused on protecting its existing businesses. While it considered BTEE to be active in the supply of wholesale mobile services, it noted that BTEE did not offer 'low prices'.⁸⁸⁴
699. Regarding the strategy of third-party MNOs:
- (a) A 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.⁸⁸⁵
 - (b) Another large MVNO submitted that it did not appear that BTEE viewed 'independent MVNOs as a significant part' of its market strategy.⁸⁸⁶
 - (c) Another MVNO noted that while it believed BTEE was ambitious to grow in the supply of wholesale mobile services and had been encouraging MVNOs 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.⁸⁸⁷
 - (d) A 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.⁸⁸⁸

⁸⁸² Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁸³ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁸⁸⁴ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁸⁸⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁸⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁸⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁸⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

- (e) Another large MVNO submitted that in its experience, VMO2 did not ‘appear to wish to offer competitive commercial rates/terms for independent MVNOs’.⁸⁸⁹
- (f) A potential MVNO entrant noted that in its experience, VMO2 was ‘not keen at all on wholesale’ and was instead focused on protecting ‘large retail and co-owned’ businesses like Tesco Mobile and Giffgaff.⁸⁹⁰
- (g) Another potential MVNO entrant submitted 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.⁸⁹¹
- (h) 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’.⁸⁹²

5.5.3.6 Conclusion on alternative constraints

700. As referenced in paragraph 617, the CMA notes that in differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors or where their products are close substitutes. In this regard, 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.⁸⁹³ As noted in paragraph 671, the CMA believes that the Parties are close competitors.
701. Based on the CMA’s review of the Parties’ internal documents, tender data and third-party views discussed above, the CMA believes that third-party MNOs provide some constraint on the Parties by virtue of BTEE’s strong network quality and VMO2’s experience hosting large MVNOs. However, the CMA notes that feedback from MVNOs (including large MVNOs which the CMA places more weight on)⁸⁹⁴ suggests that although MVNOs may consider third-party MNOs as potential strong competitors to the Parties, their experience in wholesale tenders suggests that third-party MNOs do not always bid or bid competitively.

⁸⁸⁹ Response to the CMA competitor questionnaire from a third party, January 2024

⁸⁹⁰ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁸⁹¹ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁸⁹² Response to the CMA competitor questionnaire from a third party, January 2024.

⁸⁹³ [CMA129](#), paragraph 4.8.

⁸⁹⁴ See paragraph 605.

702. Accordingly, the CMA believes that BTEE and VMO2 exert a constraint on the Parties but that this constraint would not be sufficient to offset the loss of competition from the Merger in the supply of wholesale mobile services in the UK.

5.5.4 Buyer power

5.5.4.1 Parties' submissions

703. The Parties submitted that there have been a number of important market developments which have increased MVNOs' bargaining power with MNOs:

- (a) MNOs are more incentivised to give MVNOs access to 5G compared to 4G as the cost of supplying one GB of 5G data is cheaper than supplying one GB of 4G data;⁸⁹⁵
- (b) MVNOs have growing subscriber bases and shares of supply, and are therefore increasingly important to the revenues and cashflows of their host MNOs;⁸⁹⁶ The Parties submitted that this is well illustrated by Sky Mobile which has grown to have a subscriber base of 3.2 million⁸⁹⁷; and
- (c) [redacted].⁸⁹⁸ Full MVNOs are able to switch hosts easily due to Over the Air switches of network (ie without replacing the customers' SIM), and the advent of eSIMs will facilitate both (i) consumer switching and (ii) light MVNOs switching MNO hosts.⁸⁹⁹ [redacted].⁹⁰⁰

704. According to the Parties, this increased bargaining power is evidenced by the better terms MVNOs are agreeing with MNOs:

- (a) in relation to new technologies, MVNOs are now able to gain almost instantaneous access to the latest technologies and features available to MNOs, and many MVNOs have clauses in their contracts guaranteeing such access;⁹⁰¹
- (b) in relation to network quality more broadly, the Parties' customers receive the same network quality as the MVNOs' customers (as they have access to the same RAN infrastructure). MVNO customer traffic is not treated differently to the MNO's customer traffic.⁹⁰² The Parties noted that customers of full

⁸⁹⁵ FMN, paragraph 15.418.

⁸⁹⁶ FMN, paragraphs 15.417(ii)(a) and 15.400 (iii).

⁸⁹⁷ FMN, paragraph 15.443.

⁸⁹⁸ FMN, paragraphs 15.443 and 15.445.

⁸⁹⁹ FMN, paragraph 15.418. For background on the impact of eSIMs, see section 5.1.4.3.2.

⁹⁰⁰ FMN, paragraphs 15.443 and 15.445.

⁹⁰¹ FMN, paragraph 15.418(i)(a).

⁹⁰² FMN, paragraphs 15.419 and 15.425-15.426.

MVNOs may experience some difference in service quality, but these are typically marginal and the result of the MVNO's choice of network setup.⁹⁰³

- (c) in relation to price, MVNOs have been able to negotiate stronger wholesale commercial terms and this often means that the wholesale unit cost price for data is [redacted].⁹⁰⁴

5.5.4.2 CMA's analysis

705. In contrast to the Parties' claims at paragraph 704(c), VUK's internal documents suggest that [redacted].⁹⁰⁵

706. The CMA notes that, in line with its guidance, most forms of buyer power that do not result in new entry – for example buyer power based on a customer's ability to switch easily – are unlikely to prevent an SLC that would otherwise arise from the elimination of competition between the merger firms. This is because a customer's buyer power depends on the availability of good alternatives it can switch to, which in the context of an SLC will have been reduced.⁹⁰⁶ For the reasons set out in this section, post-Merger the CMA does not believe that sufficient good alternatives will remain and so this is not considered further.

5.5.5 Impact of the Merger on alternative constraints

707. The CMA has considered how any alternative competitive constraints may be impacted by the Merger, and in particular:

- (a) the post-Merger competitive incentives of MNOs; and
- (b) how the Merged Entity's participation in MBNL and CTIL/Beacon could impact the constraint BTEE and VMO2 are able to exert post-Merger.

5.5.5.1 Post-Merger competitive incentives of MNOs

5.5.5.1.1 Parties' submissions

708. The Parties submitted that the Merged Entity will have greater spare capacity as part of its JNP and will be highly incentivised to bid for MVNO contracts to fill its

⁹⁰³ FMN, paragraphs 15.419 and 15.427.

⁹⁰⁴ FMN, paragraph 15.418.

⁹⁰⁵ Vodafone Internal Documents VF_00011993_001 page 2 [redacted], which read in conjunction with Vodafone Internal Document VF_00007158_001 page [redacted]. Vodafone Internal Document VF_00003750_001, page 8, [redacted].

⁹⁰⁶ [CMA129](#), paragraph 4.20.

increased spare capacity. The Parties also submitted that as a consequence, BTEE and VMO2 will be driven to compete aggressively.⁹⁰⁷

709. The Parties submitted that the Merger will expand the supply of capacity available to MVNOs and create a stronger third player in the supply of wholesale mobile services that will be highly incentivised to compete aggressively to fill its expanded network capacity with as many subscribers as possible, to the benefit of MVNOs and ultimately, end consumers.⁹⁰⁸

710. The Parties submitted that [redacted].⁹⁰⁹

5.5.5.1.2 CMA assessment

711. The CMA believes that post-Merger, the Merged Entity may have a reduced incentive to compete for MVNO tenders than the Parties individually because the Merger will lead to the removal of the constraint which the Parties currently exert on each other. In addition, the Merged Entity's increased scale also increases the risk of cannibalisation which may make the Merged Entity less willing to bid and/or offer competitive prices/terms.

712. 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 them with incentives to compete less aggressively.

713. The CMA notes that by the Parties' own submissions, network capacity is one factor (amongst others described at paragraph 589) that is not individually determinative of whether an MNO will bid and/or offer competitive prices/terms. This is discussed further in the efficiencies section at 6.2.

5.5.5.2 Merger impact on the constraint exerted by BTEE and VMO2 through the Merged Entity's participation in MBNL and CTIL/Beacon.

714. As set out in sections 5.4.3.1.2 and 5.4.3.1.3 the CMA believes that the Merged Entity may have the ability and incentive to use its participation in MBNL and CTIL/Beacon to disrupt the effective functioning of the network sharing arrangements and that this may have the effect of limiting the competitive constraint exerted by BTEE and VMO2 in both the supply of retail mobile services and of wholesale mobile services.

⁹⁰⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 167, 169 and 196.

⁹⁰⁸ Parties' response to the Issues Letter, 4 March 2024, paragraph 1.6.

⁹⁰⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 182.

5.5.6 Third-party views on the impact of the Merger in the supply of wholesale mobile services

715. The CMA has considered the views of third parties on how the Merger may impact competition in the supply of wholesale mobile services.
- (a) Eight out of 11 MVNOs told the CMA that the Merger would worsen competition.⁹¹⁰
 - (b) Two out of 11 MVNOs told the CMA that the Merger would improve competition.
 - (i) One small 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.⁹¹¹
 - (ii) Another small 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.'⁹¹²
 - (c) One large MVNO said that the Merger would have no impact as in its view the costs may remain the same and that its customers would have access to better coverage, benefitting the MVNO's offering.⁹¹³
716. Certain MVNOs raised concerns that without the Parties as independent competitors, their choices would be limited and this would impact their ability to compete in the supply of retail mobile services.⁹¹⁴ One of these MVNOs said that it is important for it to 'test whether wholesale arrangements provide the best blend of value for money and features for our customers and be prepared to move providers if necessary' and that the reduction of MNOs from four to three would impact future bids it could consider.⁹¹⁵
717. In relation to the impact of the Merger, one third-party MNO stated that one of the potential outcomes could be to reduce wholesale price pressure on MNOs as a result of having less competition.⁹¹⁶

⁹¹⁰ Responses to the CMA competitor and wholesale questionnaires from third parties, January 2024.

⁹¹¹ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁹¹² Response to the CMA wholesale questionnaire from a third party, January 2024.

⁹¹³ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹¹⁴ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹¹⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹¹⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

5.5.7 Conclusion on TOH 2

718. For the reasons set out above, the CMA believes that:

- (a) There is already limited competition in the supply of wholesale mobile services. There are only four MNOs and each of these faces a trade-off when competing for MVNOs. Not all MNOs bid for all tenders. Removing one of four competitors may have the effect of diminishing the MVNOs' ability to leverage a real or potential bid from another MNO, thereby reducing their ability to extract a favourable contract.
- (b) The Merged Entity would have a share of supply by subscribers of [40-50]%, with an increment of [10-20]% and a share of supply by revenue of [40-50]% with an increment of [20-30]%. Post-Merger, the Merged Entity would be the largest supplier of wholesale mobile services.
- (c) VUK and 3UK are close competitors in the supply of wholesale mobile services. The Parties' internal documents suggest that [§<]. Moreover, the Parties competed against one another for a number of larger MVNO opportunities, including the Sky Mobile tender, by far the largest independent MVNO tender, which saw particularly close competition between the Parties, such that competitive pressure from 3UK directly influenced VUK's negotiating position and vice-versa.
- (d) Contrary to the Parties' submissions, 3UK is an active participant in the supply of wholesale mobile services and exerts a competitive constraint on the other MNOs. This is based on evidence including the Parties' tender data, noting that 3UK won two tenders between 2020-2023, as well as internal documents and MVNO views.
- (e) The evidence shows that BTEE and VMO2 exert a competitive constraint on the Parties. However, the CMA believes that due to their large customer bases, both BTEE and VMO2 may have a more limited incentive to win new wholesale business. This is consistent with feedback from MVNOs that noted that these MNOs do not always bid competitively. Moreover, in the context of a market in which there is already limited competition, the CMA believes that the constraint imposed by BTEE and VMO2 would not be sufficient to constrain the Merged Entity in the supply of wholesale mobile services in the UK.

719. As well as the direct loss of competition at the wholesale level, the CMA believes that there is an indirect effect resulting from the fact that the Merged Entity will also have an expanded presence in the supply of retail mobile services. The CMA believes that the expanded retail presence may reduce the Merged Entity's incentive to supply MVNOs because it increases the risk of cannibalisation of its existing customer base.

720. Accordingly, the CMA found that the Merger raises significant competition concerns as a result of horizontal unilateral effects in the supply of wholesale mobile services in the UK.

5.6 TOH 3: Competitive impact of the Merged Entity's participation in both network sharing arrangements

721. As set out in sections 5.4.3.1.2 and 5.4.3.1.3, the CMA has considered the impact of the Merged Entity's participation in MBNL and CTIL/Beacon on the competitive constraint exerted by BTEE and VMO2 individually. The CMA has also 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, the CMA has assessed the potential mechanisms by which MNOs' incentives to invest could be reduced; and, in turn the potential impact of reduced investments on industry-wide network quality. These mechanisms include the sharing of commercially sensitive information, and the Merged Entity's network quality being linked to third-party MNOs' investment in their own networks.

5.6.1 Impact of increased sharing of commercially sensitive information

722. The CMA's Merger Assessment Guidelines recognise that where, as a result of a merger, the merged entity may gain access to commercially sensitive information of its rivals, this may be cause for competition concerns. Such information access could allow the merged entity to compete less aggressively, for example with prices or product specifications only marginally better than its rivals, and may also deter rivals from innovating. The CMA's Merger Assessment Guidelines also recognise that the CMA may assess this concern as a separate theory of harm.⁹¹⁷

723. In the present case, the CMA has considered whether increased sharing of commercially sensitive information between the Merged Entity and each of BTEE and VMO2 separately, may lead to competition concerns by reducing MNOs' incentives to invest. By participating in both network sharing arrangements, the Merged Entity may gain access to commercially sensitive information of both its remaining MNO competitors. This could include data on investments, information on deployment plans, technical specifications, or any other information which, in the context of a concentrated market, may facilitate the Merged Entity's prediction of its competitors' commercial strategy. In certain instances, the Parties' access to this type of information may also deter the remaining MNOs from investing, for the reasons outlined in detail below.

⁹¹⁷ [CMA129](#), paragraph 7.3.

1.1.1.1 Parties' submissions

724. In relation to the information shared within MBNL and Beacon:

- (a) MBNL: The Parties submitted that 3UK does not receive significant information on BTEE's actual or proposed network investments through MBNL.⁹¹⁸ [X].⁹¹⁹ The Parties submitted that MBNL shareholders [X].⁹²⁰
- (b) Beacon: The Parties submitted that [X].⁹²¹ [X].⁹²² [X].⁹²³ The Parties also submitted that [X].⁹²⁴

725. The Parties also submitted that the information shared is subject to safeguards:

- (a) MBNL: The Parties submitted that the information shared within MBNL is closely controlled and subject to robust safeguards and the CMA should place full weight on these because the shareholders are strongly incentivised to comply with these to ensure their own commercially sensitive information is not disclosed to their competitor.⁹²⁵ In particular, the Parties submitted that [X].⁹²⁶ The Parties submitted that [X].⁹²⁷ The Parties submitted that [X].⁹²⁸
- (b) Beacon: The Parties submitted that information sharing within Beacon is closely controlled [X].⁹²⁹ The Parties submitted that [X].⁹³⁰ [X].⁹³¹

726. The Parties submitted that the information shared within MBNL and Beacon is not sufficient to provide the Merged Entity with any insight into BTEE or VMO2's strategy and would therefore not be sufficient to substantiate any network investment decision.⁹³²

727. The Parties also submitted that post-Merger:

- (a) both the Merged Entity and competing MNOs will be incentivised to invest in network quality;⁹³³ and

⁹¹⁸ FMN, paragraph 15.669.

⁹¹⁹ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.13.

⁹²⁰ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.14.

⁹²¹ FMN, paragraphs 15.665-15.667.

⁹²² Parties' response to the Issues Letter, 4 March 2024, paragraph 5.16.

⁹²³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 243.

⁹²⁴ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.16.

⁹²⁵ FMN, paragraphs 15.668-15.672. Parties' response to the Issues Letter, 4 March 2024, paragraph 1.7; Annex ILR A, note 245.

⁹²⁶ FMN, paragraph 15.671.

⁹²⁷ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.13.

⁹²⁸ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.13.

⁹²⁹ FMN, paragraph 15.666.

⁹³⁰ FMN, paragraphs 15.665-15.667. Parties' response to the Issues Letter, 4 March 2024, paragraph 1.7, 5.16.

⁹³¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 243.

⁹³² Parties' response to the Issues Letter, 4 March 2024, paragraphs 5.13, 5.16.

⁹³³ FMN, paragraphs 2.70-2.87.

(b) [REDACTED].⁹³⁴

5.6.1.1 CMA's analysis

728. In relation to the impact of increased sharing of commercially sensitive information between the Merged Entity, and separately, BTEE and VMO2, the CMA has considered:

- (a) what information pertaining to each of BTEE and VMO2 will be shared with the Merged Entity;
- (b) what safeguards are in place in each of the network sharing arrangements to ring fence this information; and
- (c) how sharing commercially sensitive information could impact MNOs' incentives to invest.

5.6.1.1.1 Information to be shared with the Merged Entity

729. The CMA has gathered evidence on the type of information shared through each of the network sharing arrangements within MBNL and Beacon.

5.6.1.1.1.1 MBNL

730. [REDACTED].⁹³⁵ [REDACTED].⁹³⁶ [REDACTED].

731. [REDACTED].⁹³⁷

5.6.1.1.1.2 Beacon

732. Information regarding [REDACTED] needs to be communicated with VUK in order for it to carry out upgrades for VMO2 in the West MORAN area⁹³⁸ including capacity upgrades and roll out of 5G services. In particular, [REDACTED].

733. VUK also stated that it is able to make a reasonably good guess of [REDACTED].⁹³⁹

⁹³⁴ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.17.

⁹³⁵ FMN, paragraph 15.594.

⁹³⁶ FMN, paragraph 15.594.

⁹³⁷ FMN, paragraph 15.596.

⁹³⁸ The West MORAN area refers to the sites in the West of the UK which are managed by VUK for both parties. As set out in paragraph 543, there are currently [REDACTED] sites in the West MORAN area. This amounts to a material proportion of VMO2's sites.

⁹³⁹ Note of call with the Parties, 27 October 2023.

5.6.1.1.1.3 CMA's analysis

734. The CMA believes that, given its position in both network sharing arrangements, the Merged Entity may have significant visibility as to the network upgrades and/or launch of new technologies planned by BTEE and VMO2.
735. The Parties submitted that information regarding the parties' actual or proposed network investments is only shared via [REDACTED]. However, the CMA notes that this may still relate to a material number of sites [REDACTED], for example. Although the Parties submitted that [REDACTED], the CMA notes that there is uncertainty about the extent and speed of this [REDACTED] because there is uncertainty over the JBP and JNP (discussed at section 6.2.3).
736. The Parties also submitted that [REDACTED].⁹⁴⁰ Although the Parties have not defined what is meant by [REDACTED] in this context, the CMA notes that in the context of Beacon the Parties have [REDACTED].⁹⁴¹ The CMA believes that any information shared relating to BTEE's site builds or deployments outside MBNL may be useful without necessarily understanding BTEE's macro level strategy or commercial rationale.
737. The CMA notes that the Parties have not provided evidence that the unilateral sites represent the vast majority of each shareholder's network spend. Moreover, the CMA believes that spend on sites may not be a relevant indicator of whether the information regarding those sites is commercially useful. For example, spend to upgrade an existing site for NSA 5G (such as strengthening) is likely to be significantly lower than spend on a new site (including the cost of finding a new location and building the passive infrastructure). In this context, the CMA believes that information about which existing sites a competitor is readying for NSA 5G roll out may be as useful to informing the Merged Entity's NSA 5G roll-out strategy as information regarding which new sites are being readied for NSA 5G roll-out. This is because, in either case the Merged Entity could use the information, in combination with information about its other competitor's plans, to deduce that its competitors do not have roll out plans in a particular area (or that their plans are delayed), and therefore may cancel or delay its own plans.
738. In relation to Beacon, the CMA believes that information [REDACTED], may be commercially useful information. This information provides [REDACTED] which may be useful for MNOs as set out below. It may be more useful than [REDACTED].
739. The CMA also does not believe that it is necessary to have information regarding BTEE or VMO2's underlying strategy for the information to be useful. For example, if the Merged Entity had complete information regarding VMO2's NSA 5G roll-out

⁹⁴⁰ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.14.

⁹⁴¹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 243.

plans in the West MORAN area, it might be able to use that information to target its own NSA 5G roll-out.

5.6.1.1.2 *Safeguards in place*

740. As set out above at paragraph 725, the Parties submitted that there are a number of safeguards in place which limit information sharing via the network sharing arrangements.

741. The CMA typically places limited weight on formal or informal agreements, including contractual protections, which purport to limit potential competitive harm. This is because such contracts may not completely remove the potential for competitive harm, the contracts may be of limited duration and over time may be renegotiated or terminated, and firms may waive their rights to enforce any breaches in light of their overall bargaining position. Instead, as outlined in more detail below, the CMA will typically focus more on an assessment of the firms' economic incentives as likely predictors of their future behaviour.

742. In the present case, the CMA believes that while the 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. Given the network sharing agreements are drafted in a detailed but general manner there is also inevitably leeway in judging what exactly these safeguards consist of. Therefore, contractual protections by themselves are insufficient to prevent concerns from arising.

743. For example, in the context of MBNL, it might be found that sharing of information regarding BTEE's network investment plans via MBNL is necessary for the functioning of MBNL.

744. Similarly, in the context of the Beacon arrangement, the Merged Entity will necessarily have access to information about [X] VMO2 plans to roll out in the West of the UK, where it is responsible for roll out of the network. The Parties acknowledge this.⁹⁴²

5.6.1.1.3 *How sharing of commercially sensitive information could impact incentives*

745. As set out in sections 5.1.3 and 5.1.6, the CMA believes that quality is an important parameter of competition for wholesale and retail mobile services in addition to price and other factors, which means that MNOs are incentivised to invest in their respective networks. The Merged Entity will be in a network sharing

⁹⁴² Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 243.

arrangement with the only other two remaining MNOs, BTEE and VMO2 which may impact its incentives to invest as set out below.

746. The CMA believes, in line with the concern outlined in its Mergers Assessment Guidelines, that there is 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.⁹⁴³ This may reduce or postpone investments by the Merged Entity and the other MNOs compared to the scenario absent the Merger:

- (a) For example, absent the Merger, VUK might have plans to roll out 5G SA 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 SA roll-out plans in that particular area (or that its plans are delayed), and therefore may cancel or delay the previous plans of VUK. Based on the CMA's review of the Parties' internal documents, it understands that [redacted].⁹⁴⁴ Therefore, the CMA believes there is a realistic prospect that the Merged Entity could cancel or delay the Parties' previous roll-out plans on the basis of receiving information regarding competing MNOs' roll-out plans.
- (b) In addition, the Merged Entity's competitors may also be less incentivised to invest in their networks. BTEE and VMO2's incentives to invest may also be reduced as a result of a loss or deterioration of their respective first mover advantages. 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 and/or they may seek to rely less on network sharing arrangements which could lead to slower network deployment and higher costs.
- (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.

747. The result of the reduction in MNOs' incentives to invest in their networks is that the quality of services offered may be lower than would otherwise have been the

⁹⁴³ [CMA129](#), paragraph 7.3.

⁹⁴⁴ CK Hutchison Internal Documents, CKH_00003175, page 11; CKH_00000577.

case absent the Merger. The views of a third-party MNO also support the CMA's views.

5.6.2 Impact of the Merged Entity's network quality being linked to third-party MNOs' investment in their own networks

748. As set out in section 5.1.7, in a network sharing arrangement MNOs agree to share some of mobile network infrastructure in order to reduce costs and increase coverage and capacity. In the UK, MNOs have agreed to share passive (in the case of MBNL, subject to limited exceptions where 3G active sharing also takes place) and active (in the case of CTIL/Beacon) infrastructure.
749. As set out in sections 5.4.3.1.2.3 and 5.4.3.1.3.3, the infrastructure shared through the network sharing arrangements is a critical input into MNOs' network quality. For example, MBNL is currently responsible for [X] sites which are shared by 3UK and BTEE. VMO2 and VUK share sites as well as active equipment through the combination of CTIL and the Beacon network sharing agreement.
750. MNOs' network quality is driven by a number of elements:
- (a) spectrum;
 - (b) sites;
 - (c) core and backhaul networks; and
 - (d) technology, including active equipment (4G, 5G etc).
751. While MNOs' spectrum holdings, core and backhaul networks are independent from each other (ie not shared), MNOs seeking to maintain or upgrade their network quality by adding new sites and/or active equipment may share those assets with their network sharing partner. For example, the benefit of investments made by BTEE in maintaining the quality of existing passive MBNL sites is shared with 3UK. Similarly, VMO2 and VUK share sites as well as in some circumstances, active deployments. As a result, the network quality of an MNO is linked to investments made by their network sharing partners.
752. The CMA considered whether there may be a reduction in MNOs' incentives to invest arising from the Merged Entity's network quality being linked to third-party MNOs' investment in their own networks. In particular, an MNO benefits from investment in its network when that investment enables it to perform better relative to its competitors, increasing the likelihood that it will win customers from its competitors. Post-Merger, investments which are made jointly with network sharing partners will only improve the MNOs' network performance relative to one MNO, rather than two in the counterfactual. This reduces the benefit to the MNO of making that shared investment and could therefore reduce its incentive to invest.

5.6.2.1 *Parties' submissions*

753. The Parties submitted that MBNL is largely limited to passive sharing and BTEE pursues an entirely separate and independent network strategy to 3UK, including unilateral 4G and 5G roll-outs, investment in its network outside MBNL and separate spectrum.⁹⁴⁵ BTEE is readily able to distinguish its network quality from 3UK, which is reflected in objective measures of its network performance compared to 3UK's network.⁹⁴⁶ The Parties submitted that [redacted].⁹⁴⁷
754. The Parties submitted that VMO2's network is also differentiated from VUK's today, and will be differentiated from the Merged Entity's in the future, so not all investments by VMO2 in its network will benefit the Merged Entity.⁹⁴⁸ Within Beacon, VMO2 can still make investments to improve its network quality relative to the Merged Entity (eg unilateral deployments), a large part of its active network is outside Beacon and VMO2 has its own spectrum, backhaul and core network.⁹⁴⁹ [redacted].⁹⁵⁰
755. The Parties submitted that post-Merger:
- (a) both the Merged Entity and its competitor MNOs will be incentivised to invest in network quality,⁹⁵¹
 - (b) [redacted];⁹⁵² and
 - (c) [redacted].⁹⁵³

5.6.2.2 *CMA's analysis*

756. The CMA has assessed:
- (a) how network sharing agreements impact an MNO's ability to differentiate itself; and
 - (b) how this could impact incentives to invest.

⁹⁴⁵ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.4. and Annex ILR A, note 254.

⁹⁴⁶ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 256.

⁹⁴⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 254.

⁹⁴⁸ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.17.

⁹⁴⁹ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.17.

⁹⁵⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 254.

⁹⁵¹ FMN, paragraphs 2.70-2.87.

⁹⁵² Parties' response to the Issues Letter, 4 March 2024, paragraph 5.17 and Annex ILRA, note 240.

⁹⁵³ Parties' response to the Issues Letter, 4 March 2024, paragraph 5.4.

5.6.2.2.1 *How network sharing agreements impact an MNO's ability to differentiate itself*

757. MNOs have a more limited ability to differentiate their network quality from their network sharing partners than the other MNOs as they may share sites and/or active equipment. The extent to which MNOs can differentiate from their network sharing partner depends on whether the network sharing arrangement is an active and/or passive sharing arrangement (and the extent of sharing it relates to, for example, whether it covers the whole UK). MNOs in an active sharing arrangement that covers a wider geographic area and more technologies (4G and 5G) have a more limited ability to differentiate their network quality from that of their network sharing partner.
758. There is a greater degree of sharing between the parties to Beacon, and therefore BTEE and 3UK have a greater ability to differentiate from each other than VUK and VMO2. However even within Beacon, the parties can differentiate their network quality.
- (a) Passive sharing:
- (i) CTIL operates approximately [X] macro sites on behalf of VUK and VMO2.⁹⁵⁴ This amounts to [X]% of both VUK and VMO2's passive sites because [X], which the CMA understands the parties have complied with.⁹⁵⁵
 - (ii) BTEE and 3UK are both reliant on the same underlying passive infrastructure for the vast majority of their mobile sites but they also use sites outside MBNL. Specifically, [80-90]% of 3UK's sites⁹⁵⁶ and the vast majority of BTEE's sites are shared via MBNL.
 - (iii) In both the MBNL and Beacon passive sharing arrangements, the parties have the ability to unilaterally deploy. Whilst BTEE and 3UK jointly fund the maintenance cost of these sites, since April 2023, passive upgrades have been carried out unilaterally. In practice this means that although the site is shared, the upgrade to the site only benefits one party. [X].⁹⁵⁷
- (b) Active sharing:

⁹⁵⁴ FMN, paragraph 15.16.

⁹⁵⁵ FMN, paragraph 24.81

⁹⁵⁶ CK Hutchison Confidential Annex CKH 15.007.

⁹⁵⁷ Call with Vodafone, 27 October 2023.

- (i) As set out in section 5.1.7.2, BTEE and 3UK share minimal active 3G equipment [redacted] and no 4G [redacted] equipment.⁹⁵⁸
 - (ii) VMO2 and VUK share active equipment in a significant proportion of the UK (accounting for [60-70]% of the UK population).⁹⁵⁹
 - (iii) In the Beacon active sharing arrangement, the parties also have the ability to unilaterally deploy. As set out above, VUK's indicative split of capex spend on shared and unilateral deployments in FY23 was £[redacted] for shared and £[redacted] for unilateral deployments.⁹⁶⁰ The CMA notes that [redacted].⁹⁶¹
- (c) Other network elements: None of the MNOs share spectrum, core or backhaul networks.

759. The ability to differentiate from a network sharing partner is illustrated by differences in network quality outcomes. As outlined in section 5.1.3.3, whilst there is no clear industry consensus on measures of network quality, BTEE is generally accepted as having superior network quality to 3UK. Considering the Umlaut benchmarking scores, for example, BTEE is marked as having the highest network quality of the four MNOs, whilst 3UK scores third. There is also a similar disparity between VUK and VMO2, with VUK ranking second and VMO2 ranking fourth.

760. The CMA therefore believes that the network sharing agreements do not significantly impact an MNO's ability to differentiate itself from its competitors. This is based on the scope of network sharing arrangements, the use of unilateral deployments within network sharing arrangements, and the fact that MNOs do not share spectrum, core or backhaul networks. The ability of MNOs to differentiate within their network sharing arrangements is demonstrated by the divergence in network quality outcomes between MNOs and their network sharing partners.

5.6.2.2.2 *How the Merged Entity's network quality being linked to third party MNOs' could impact MNOs' incentives to invest*

761. In light of the CMA's conclusion that network sharing agreements do not significantly impact an MNO's ability to differentiate itself from its network sharing partner, the CMA has not considered the impact on incentives to invest.

⁹⁵⁸ FMN, paragraph 15.559.

⁹⁵⁹ FMN, paragraph 15.522.

⁹⁶⁰ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 254. [redacted].

⁹⁶¹ FMN, Annex 15.00008, paragraph 4.2.

5.6.3 Conclusion on TOH 3

762. For the reasons set out above, the CMA believes that because the Merged Entity will be a party to both network sharing arrangements, this may reduce MNOs' incentives to invest in network quality.

763. Accordingly, the CMA found that the impact of this is to raise further significant competition concerns, in addition to those found in relation to TOH 1 (see section 5.4.4) and TOH 2 (see section 5.5.7), regarding the impact of the Merger on competition in the supply of retail mobile telecommunications services to end consumers and the supply of wholesale mobile services in the UK.

6. COUNTERVAILING CONSTRAINTS

764. In some instances, there may be countervailing factors that prevent or mitigate any 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.⁹⁶² The CMA has assessed these in turn below.

6.1 Entry and expansion

765. Entry, or expansion of existing firms, can mitigate the initial effect of an acquisition on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent an SLC, the CMA considered whether such entry or expansion would be timely, likely and sufficient.⁹⁶³

6.1.1 Parties' submissions

766. The Parties submitted that:

- (a) the supply of retail mobile services 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.⁹⁶⁴

⁹⁶² [CMA129](#), paragraph 8.1.

⁹⁶³ [CMA129](#), paragraph 8.28-8.32.

⁹⁶⁴ FMN, paragraph 21.1.

767. With respect to barriers to entry, the Parties submitted that in the last ten years, the supply of retail mobile services has seen a significant number of new entrants and that MVNOs are credible competitors to MNOs, as reflected by their aggregate share of supply by subscribers in the consumer retail segment.⁹⁶⁵
768. The Parties submitted that all a new entrant needs is a wholesale access agreement with one of the competing MNOs, allowing it to enter without having to incur the upfront costs and investments that MNOs incur to build and upgrade mobile network infrastructure.⁹⁶⁶ The Parties also noted that MVNOs do not require any authorisation or spectrum licences to enter, but may be required, like MNOs, to comply with the conditions of general application, published by Ofcom. In some cases, MVNE platform providers also ensure they are compliant with regulation, which further simplifies matters for MVNOs that utilise their infrastructure.⁹⁶⁷
769. The Parties also submitted that they expect further entry by MVNOs, including potentially from big tech companies (such as Google, Amazon and Apple), existing brands that are active in various UK markets that would be able to leverage their brands and customer base (as Sky Mobile, Tesco Mobile and Asda Mobile have done), MVNOs with established strategies in other countries, IoT MVNOs, and Telecom-as-a-Service MVNOs.⁹⁶⁸
770. In addition to entry, the Parties also submitted that they expect existing MVNOs to continue expanding and growing their share of subscribers, owing to:
- (a) MVNOs having secured relatively faster access to new technology;
 - (b) MVNOs often being large, sophisticated customers with significant negotiating experience and bargaining power;
 - (c) MNOs having 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 that are expected to facilitate MVNO growth, such as:
 - (i) increased penetration of eSIMs, as discussed above at section 5.1.4.3.2;

⁹⁶⁵ FMN, paragraphs 21.2 and 21.6; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 260.

⁹⁶⁶ FMN, paragraph 21.3; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 261.

⁹⁶⁷ FMN, paragraph 21.4; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 261.

⁹⁶⁸ FMN, paragraphs 21.5 and 21.7; Parties' response to the Issues Letter, 4 March 2024, paragraph 3.20.

- (ii) the introduction of a 'text to switch' process which assists customer switching;
- (iii) growth of the SIMO subsegment; and
- (iv) growth of MVNE platforms, which reduce the investment and development required by MVNOs to enter the market.⁹⁶⁹

771. With respect to disintermediation, the Parties submitted that the roll out of eSIMs is likely to pave the way for entry by large tech platforms (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.⁹⁷⁰

772. 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, increasing competition for business customers. The Parties noted that these players do not require the same scale or financial investment in infrastructure as MNOs to enter.⁹⁷¹

6.1.2 CMA assessment

773. The CMA has considered the extent to which entry and/or expansion may prevent a realistic prospect of an SLC arising as a result of the Merger.

774. The CMA has seen no evidence of any scope for entry by MNOs due to high costs and availability of spectrum, nor did the Parties make any such submissions. A third-party MNO commented that 'barriers to entry as an MNO are significant' as entry requires significant upfront investment including, but not limited to, acquisition of spectrum, construction of a RAN on a national basis, establishing a core network and IT environment and developing a brand and retail presence.⁹⁷²

775. The CMA thus believes that the only realistic entry would be by MVNOs, although this would not address the CMA's competition concerns in relation to the supply of wholesale mobile services, or indeed for the network quality aspect of competition at the retail level. MVNOs represent a growing proportion of the supply of retail mobile services, although, as set out at paragraph 402, independent MVNOs only

⁹⁶⁹ FMN, paragraph 21.7; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 263-264.

⁹⁷⁰ FMN, paragraph 21.9; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, notes 260 and 266.

⁹⁷¹ FMN, paragraphs 21.10-21.1; Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 266.

⁹⁷² Response to the CMA competitor questionnaire from a third party, January 2024.

account for between [5-10]% of revenues and [10-20]% of subscribers in the supply of retail mobile services.

776. The CMA asked existing and potential MVNOs whether there are barriers to entry or expansion in the supply of retail mobile services. The majority of MVNO respondents indicated that there are significant barriers to entering and expanding in the supply of retail mobile services.⁹⁷³ MVNOs indicated that high costs were a hurdle and that they had concerns about their ability to obtain competitive commercial terms for their wholesale access agreements from MNOs in a concentrated market. For example:
- (a) one MVNO noted that the ability to offer retail mobile services is ‘entirely dependent on indirect distribution agreements’ mainly with MNOs and their ‘willingness to operate in the indirect market’.⁹⁷⁴ This view was echoed by another MVNO, which indicated that entering as an MVNO had ‘several significant challenges’, including the ‘ability to agree a wholesale deal with an MNO at economic rates’, which it considered a barrier to both entry and expansion.⁹⁷⁵ Similarly, one MVNO said the most important barrier was the ‘need to seek/conclude an MVNO agreement on reasonable terms’;⁹⁷⁶
 - (b) one MVNO noted that MNOs may not have an incentive to offer competitive terms to MVNOs as any independent MVNO will also have to compete with the MNO’s sub-brand in the supply of retail mobile services;⁹⁷⁷
 - (c) access to the latest technology and handsets were also considered barriers, which are to some extent ‘within the control of the MNO’. Similarly, an MVNO said it can be difficult to obtain wholesale pricing, network access, and service levels which are ‘equal or favourable to the MVNO’, which also make the process of negotiation ‘costly and time consuming’;⁹⁷⁸
 - (d) agreeing roaming relationships and handset relationships with major manufacturers were considered significant barriers by another MVNO;⁹⁷⁹
 - (e) one MVNO said it was difficult for MVNOs to compete as they do not have the additional advantages that well-established MNOs enjoy, such as ‘cross

⁹⁷³ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹⁷⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁷⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁷⁶ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁷⁷ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁷⁸ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹⁷⁹ Response to the CMA competitor questionnaire from a third party, January 2024.

subsidisation on various products, established brand image, large marketing budgets and established subscriber base’;⁹⁸⁰

- (f) MVNOs also identified the need to invest to build a strong, recognisable brand and to invest in technology and other operational capabilities, and to set up ‘new services to ensure a good customer experience and to comply with regulations’ as barriers;⁹⁸¹ and
- (g) one MVNO said MVNOs are not able to achieve the same economies of scale due to comparatively smaller customer numbers when compared to MNOs, who have the ‘ability to scale and maximise revenue streams’.⁹⁸²

777. Notwithstanding, some MVNO respondents indicated that subject to availability of resources, barriers to entry for MVNOs were lower, when compared to MNOs.⁹⁸³

778. The CMA also asked MVNOs whether they considered ‘future’ entry or expansion by MVNOs is likely and to identify any relevant companies in this respect. Most MVNO respondents said that entry is not likely, in part due to the thin margins that MVNOs experienced and how difficult and fragile the commercial model is for MVNOs, which is also evidenced by the exit of previous key MVNO players, such as TalkTalk and Plusnet.⁹⁸⁴

779. One MVNO noted that as a result of the Merger a possible reduction of competition in the supply of wholesale mobile services could increase wholesale prices, resulting in an even less favourable environment for MVNOs. Therefore, on balance, it considered that ‘future expansion / entry into the market is less likely’.⁹⁸⁵

780. In addition to feedback from existing MVNOs, the CMA also sought the views of potential and new entrants on ease of entry. While some third parties were interested in entering as MVNOs, they ultimately did not do so as they were unable to secure acceptable commercial terms for wholesale access with an MNO.

- (a) One potential entrant noted that it is ‘very difficult to enter the retail mobile services market’ as an MVNO, and while it had the ambition and intention to grow in the UK, its experience with the MNOs had been disappointing, as it did not at any point in its negotiation process have two firm bidders whose offers it could use to negotiate better terms.⁹⁸⁶ Another potential entrant

⁹⁸⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁸¹ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹⁸² Response to the CMA competitor questionnaire from a third party, January 2024

⁹⁸³ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹⁸⁴ Responses to the CMA competitor questionnaire from third parties, January 2024.

⁹⁸⁵ Response to the CMA competitor questionnaire from a third party, January 2024.

⁹⁸⁶ Response to the CMA wholesale questionnaire from a third party, January 2024.

noted that it decided not to launch a service for the time being as ‘the margin between likely retail pricing and the wholesale pricing would push payback periods beyond an acceptable level’.⁹⁸⁷ The CMA also heard from another potential entrant that it was difficult to enter due to the ‘restrictive nature of MNOs in seeking to on-board new MVNOs’.⁹⁸⁸

- (b) A recent entrant commented that the supply of retail mobile services is ‘fairly crowded with facsimile propositions and little differentiation’, which meant it was looking to provide an ‘alternative offering’ and hence faced ‘internal’ challenges in entering, such as ‘technical hurdles’.⁹⁸⁹ The CMA also heard from another new entrant that the need to be ‘fully dependent’ on an MNO also meant that it would be ‘very challenging’ for an MVNO to ‘deliver a sustainable business’.⁹⁹⁰

781. Taking the available evidence in the round, the CMA believes that while entry into the supply of retail mobile services as an MVNO is possible, any such entry would likely be on a small scale. In line with section 5.4.4, the CMA also believes that MVNOs provide a more limited constraint than MNOs on the Parties and other MNOs. In circumstances where any SLC is brought about by the loss of an MNO, the CMA does not consider entry by an MVNO would be sufficient to offset the loss of competition.

782. As noted in paragraphs 766 and 771-772, the Parties also made submissions relating to entry by large tech platforms, private networks and cloud players. However, the CMA has not seen evidence of entry or planned entry by these players. The CMA refers to section 5.1.4.3.2 regarding the disintermediation from the roll out of eSIMs.

6.1.3 Conclusion on entry and expansion

783. For the reasons set out above, the CMA believes that any entry or expansion would not be timely, likely and sufficient to prevent a realistic prospect of an SLC as a result of the Merger.

⁹⁸⁷ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁹⁸⁸ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁹⁸⁹ Response to the CMA wholesale questionnaire from a third party, January 2024.

⁹⁹⁰ Response to the CMA wholesale questionnaire from a third party, January 2024.

6.2 Efficiencies

6.2.1 Analytical framework

784. The CMA recognises that, in some instances, mergers can give rise to efficiencies. The CMA's guidance notes that examples of merger efficiencies might include cost savings; the elimination of double marginalisation through vertical integration; greater innovation or quality arising from the combination of unique assets; or better meeting customers' needs by enabling the integration or interoperability of complementary products.⁹⁹¹
785. Cost and revenue synergies often form part of the rationale for mergers, and it is not uncommon for firms to make efficiency claims in merger proceedings. However, many efficiency claims by merger firms are not accepted by the CMA because the evidence supporting those claims is difficult to verify and substantiate.⁹⁹² Some studies have found that firms often do not fully realise the expected synergies from their mergers and, even for the synergies that they do realise, firms do not always pass on the benefits to their customers.⁹⁹³ Merger efficiencies therefore must be likely to be realised so as to ensure that customers in the UK do benefit overall from the merger; this means that the evidence supporting the claimed future efficiencies needs to be verifiable.
786. The CMA treats merger efficiencies as falling into two categories:⁹⁹⁴
- (a) Rivalry-enhancing efficiencies: 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.
 - (b) Relevant customer benefits: benefits to UK customers resulting 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, or reduced carbon emissions (to the extent firms do not normally compete on sustainability).
787. Rivalry-enhancing efficiencies are concerned with the question of whether a merger will lead to an SLC. They therefore must be relevant to the process of rivalry in the market in which the CMA is considering the SLC question. Relevant

⁹⁹¹ [CMA129](#), paragraph 8.2.

⁹⁹² [CMA129](#), paragraph 8.6.

⁹⁹³ [CMA129](#), paragraph 8.6.

⁹⁹⁴ [CMA129](#), paragraph 8.3.

customer benefits, on the other hand, can be taken into account even if they are expected to be realised in markets other than the one subject to an SLC finding.⁹⁹⁵

788. Rivalry-enhancing efficiencies may prevent an SLC by offsetting any anti-competitive effects and must:
- (a) enhance rivalry in the supply of those products/services 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.⁹⁹⁶
789. The CMA will generally view reductions in the merger firms' marginal or variable costs as being more likely to result in an incentive to reduce price or make short-run improvements in quality than reductions in fixed costs. Some fixed cost savings or other efficiencies from a merger may enhance the ability of firms profitably to innovate or invest in entry or expansion, although cost reductions from a reduction in output will not be considered as efficiencies.⁹⁹⁷
790. As noted above, the merger efficiencies must be likely to be realised, which means that the evidence supporting efficiencies needs to be verifiable.⁹⁹⁸ At phase 1, the evidence must be sufficient to satisfy the CMA within the time available in an initial investigation that efficiencies would prevent the realistic prospect of an SLC.⁹⁹⁹
791. By contrast, relevant customer benefits do not prevent an SLC, but may outweigh an SLC and any adverse effects of that SLC. While the CMA does not take relevant customer benefits into account in its competitive assessment, it may take them into account when considering whether to refer a merger for a phase 2 investigation and the overall benefit to consumers of having such an investigation, or when considering options to remedy competition concerns and whether any of the remedy options would result in relevant customer benefits being unrealised.¹⁰⁰⁰
792. Relevant customer benefits are defined by section 30(1) of the Act as benefits to relevant customers in the form of:

⁹⁹⁵ [CMA129](#), paragraph 8.23.

⁹⁹⁶ [CMA129](#), paragraphs 8.4 and 8.8.

⁹⁹⁷ [CMA129](#), paragraph 8.10.

⁹⁹⁸ [CMA129](#), paragraph 8.13.

⁹⁹⁹ [CMA129](#), paragraph 8.15.

¹⁰⁰⁰ [CMA129](#), paragraph 8.5.

- (a) lower prices, higher quality or greater choice of goods or services in any market in the UK, or
- (b) greater innovation in relation to such goods or services.¹⁰⁰¹

793. Sections 30(2) and (3) of the Act provide that a benefit is only a relevant customer benefit if it has accrued or may be expected to accrue to relevant customers within the UK within a reasonable period from the merger and would be unlikely to accrue without the merger or a similar lessening of competition.¹⁰⁰²
794. 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 not to refer a merger, the claimed relevant customer benefits must be clear, and the merging parties should be able to produce detailed and verifiable evidence that anticipated price reductions or other benefits will in fact emerge.¹⁰⁰³
795. In practice, the CMA has rarely exercised its discretion to apply relevant customer benefits as an exception to the duty to refer.

6.2.2 Parties' submissions

796. The Parties submitted that the Merger would give rise to both categories of efficiency described above.
797. Firstly, the Parties submitted that the Merger would give rise to rivalry-enhancing efficiencies, through better quality offers from additional capacity brought into the market, strengthening dynamic network competition.¹⁰⁰⁴
798. In particular, the Parties submitted that their JBP¹⁰⁰⁵ aimed to deliver a 'best-in-class' network, with better network performance than in the counterfactual. The Parties submitted that by combining spectrum and assets in a single network, the Merger would (i) deliver a large one-off multiplicative increase in network capacity; and (ii) reduce the cost of expanding network capacity on an ongoing basis.¹⁰⁰⁶
799. The Parties explained this is because network capacity (in a given locality) is the product of the number of sites, the quantity of spectrum and the efficiency of the use of that spectrum.¹⁰⁰⁷ Therefore, increasing the size of an MNO's network (in

¹⁰⁰¹ [Mergers: Exceptions to the duty to refer \(CMA64\)](#), December 2018, paragraph 73.

¹⁰⁰² [CMA64](#), paragraph 74.

¹⁰⁰³ [CMA64](#), paragraph 77.

¹⁰⁰⁴ FMN, paragraph 24.42.

¹⁰⁰⁵ The JBP sets out the Parties' ambitions for the Merged Entity with a strong focus on future revenue and cost expectations. The document has been refined over time. In this decision, 'JBP' refers to the version [3<].

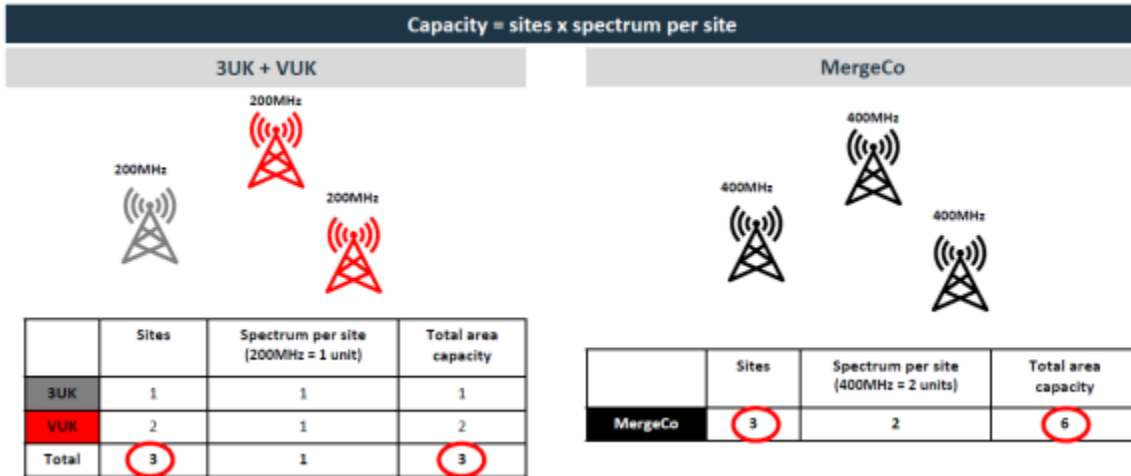
¹⁰⁰⁶ FMN, paragraph 2.67.

¹⁰⁰⁷ Area capacity = No. sites X Spectrum (Hz) X Spectral efficiency (bps/Hz).

terms of sites and spectrum) reduces unit costs as capacity increases with the product of these inputs but capacity costs only increase with the sum of the inputs.¹⁰⁰⁸

800. Figure 11 below is an illustrative example provided by the Parties on the claimed one-off capacity uplift of the Merger.

Figure 11: Illustrative example: one-off capacity increase from the Merger



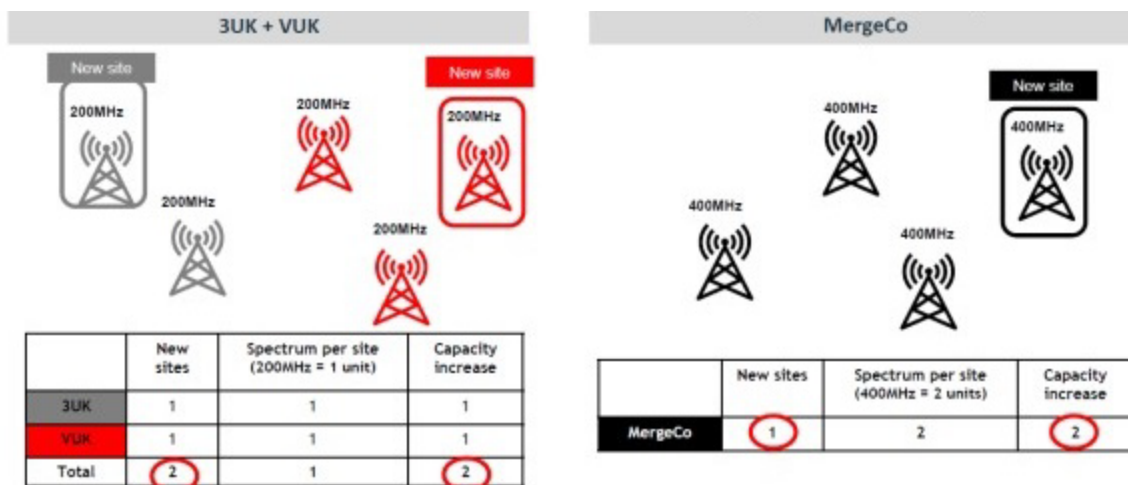
Source: FMN, Figure 24.8.

801. The Parties also submitted that as well as this one-off benefit the Merger would significantly reduce the unitary cost of expanding capacity in the longer run. This is because in the future when the Merged Entity needs to invest to expand capacity it would be able to expand capacity more cost-effectively than VUK and 3UK alone because it would have significantly more spectrum that either firm could deploy at a new site absent the Merger.¹⁰⁰⁹

¹⁰⁰⁸ FMN, paragraphs 2.67-2.68.

¹⁰⁰⁹ FMN, paragraphs 24.31-24.33.

Figure 12: Illustrative examples of Merged Entity' lower incremental cost of expanding capacity



Source: FMN, Figure 24.10.

802. The Parties also submitted that the Merged Entity would be able to use capacity more efficiently given the new spectrum holdings and would avoid more costly deployment solutions.¹⁰¹⁰ The greater capacity 'base' means the Merged Entity would have less need to deploy more costly solutions as, according to the Parties' submissions, the cost of adding sites increases as operators with congestion may have to increasingly rely on less cost effective sites.¹⁰¹¹ The Parties submitted that both of these also reduce the future incremental cost of expanding capacity.

803. In addition to the capacity expansion, the Parties submitted the Merger would allow them to accelerate investment in 5G network equipment architecture, infrastructure and equipment compared to what VUK and 3UK could achieve on their own.¹⁰¹²

804. The Parties submitted the overall effect of this would be to enable the Merged Entity to offer better quality, lower quality-adjusted prices and a lower price per GB than the Parties could offer as standalone operators. This would, in turn, incentivise BTEE and VMO2 to respond by reducing their quality-adjusted prices (whether through improving the quality of their offers or reducing their prices).¹⁰¹³

805. Secondly and relatedly, the Parties submitted that the Merger would generate substantial relevant customer benefits:

- (a) the Merged Entity's network would deliver material quality improvements nationwide, reflected in lower quality-adjusted consumer mobile prices, that

¹⁰¹⁰ FMN, paragraphs 24.27–24.29.

¹⁰¹¹ FMN, paragraphs 24.43–24.35.

¹⁰¹² FMN, paragraph 2.75.

¹⁰¹³ FMN, paragraph 24.46.

are made possible only through integration of the Parties' assets and the additional investment by the Merged Entity to create a 'best-in-class' network;

- (b) customers of communication services delivered using 5G SA / Advanced 5G capabilities would benefit, in turn driving benefits for the wider UK economy; and
- (c) customers in the fixed broadband market would benefit from a greater choice of available broadband technologies.¹⁰¹⁴

806. The Parties submitted that the Merged Entity would be commercially incentivised to deliver these efficiencies because rolling out a 'best-in-class' network is the optimal, profit-maximising strategy and [X].¹⁰¹⁵

807. The Parties further submitted that these efficiencies are merger-specific as they could not be achieved by VUK and 3UK individually, or through alternative means such as a network sharing agreement or 'NetCo' (a NetCo would combine network infrastructure and operations, potentially including spectrum, with business and legal entity separation from retail brands).¹⁰¹⁶

6.2.2.1 Detailed submissions and modelling on efficiencies

808. The Parties made a number of submissions on efficiencies during the course of the CMA's phase 1 investigation.¹⁰¹⁷ The CMA provides below a high-level overview of the following submissions:

- (a) Frontier Economics' detailed efficiencies paper submitted on behalf of the Parties and titled 'The pro-competitive effects of the Vodafone/Three merger' (the **Pro-Competitive Effects Paper**); and
- (b) the economic modelling that underpins the findings in the Pro-Competitive Effects Paper (the **modelling**).

809. The CMA received these submissions on 15 February and 24 February respectively, namely at a late stage of the phase 1 investigation. This has substantially limited the weight that the CMA can place on these submissions, as it has been unable to fully probe the submissions or validate the modelling.

¹⁰¹⁴ FMN, paragraph 24.7(iv).

¹⁰¹⁵ FMN, paragraphs 24.63-24.79.

¹⁰¹⁶ FMN, paragraph 24.7(vi).

¹⁰¹⁷ The Parties provided further modelling on 14 March 2023. This has not been taken account of in the CMA's assessment.

6.2.2.1.1 *Pro-Competitive Effects Paper*

810. The Pro-Competitive Effects Paper is broken down into two sections:

- (a) Part one: why the Parties anticipate an increase in network capacity post-Merger would translate into rivalry-enhancing efficiencies in the supply of retail mobile services in terms of price and quality in a timely, likely and merger-specific manner.
- (b) Part two: why the incentives for implementing the JNP show that the extensive network investment is the economically rational choice for the Merged Entity.

811. Part one is broken down into five sub-sections:

- (a) 'The rivalry-enhancing effects of the JNP' which sets out the Parties' view that capacity and the capabilities of a mobile network provide the core foundation underpinning the effectiveness of both price and quality competition in mobile markets.
- (b) 'Quality competition' which sets out the Parties' anticipated improvements in the technical performance characteristics of the Merged Entity's planned network versus the counterfactual.
- (c) 'Does quality impact on competitive rivalry' which sets out the Parties' arguments as to why the substantial increase in network capability and capacity resulting from the JNP would have a significant impact on the Merged Entity's ability to compete on quality, including the ability to contest and overtake BTEE's position as the market leader on network quality.
- (d) 'Price competition' which sets out the analysis used to quantify the effects of the Merger on the Merged Entity's capacity and incremental costs versus the counterfactual.
- (e) 'Response of rivals' which considers the likely competitive responses of BTEE and VMO2 in terms of both prices and investment in network quality.

812. Part two sets out the Parties' incentives to pursue the JNP, split between two sub-sections:

- (a) 'JNP vs the counterfactual' which outlines the incremental commercial benefits of the JNP in terms of gross adds, reduced churn, 5G use cases and FWA compared to a counterfactual baseline scenario.
- (b) 'JNP vs scaled back investment scenario', an analysis which involves constructing an alternative 'scaled-back' network scenario (focused on synergies rather than achieving the best UK network) with performance

maintained to a standard broadly in line with the expected performance of the Parties' counterfactual networks,¹⁰¹⁸ and comparing its claimed net present value¹⁰¹⁹ (NPV), £[<], with that of the JNP, £[<].

6.2.2.1.2 Modelling

813. The modelling is composed of three separate models:

- (a) VUK incremental cost modelling: this workbook calculates the incremental network costs of supplying an additional 10% more retail mobile customers compared with VUK's standalone forecast mobile customers while holding congestion at the standalone forecast level of congestion. The result is £[<] per subscriber per year.
- (b) 3UK incremental cost modelling: this workbook calculates the above for 3UK, using 3UK specific information, finding the incremental cost to be £[<] per subscriber per year.
- (c) The incentives financial modelling: this model estimates the Parties' view of the NPV of the JNP and compares it to a scaled back scenario focused on synergies as opposed to seeking to achieve the best network in the UK. As noted above, the model finds the NPV of the JNP is £[<] compared to £[<] for the scaled back scenario.

814. On 24 February 2024, the Parties also provided to the CMA two papers that describe VUK and 3UK's capacity and congestion modelling that feeds into the above model calculations:

- (a) Description of the VUK capacity and congestion modelling: the paper outlines how VUK's modelling estimates demand on its network in the future, how it has modelled VUK expected capacity and how this can be used to determine congestion estimates. Demand is estimated by making adjustments to the latest VUK data traffic forecast that was available at the point of the development of the JBP with capacity estimated site by site using estimates and assumptions for site configuration. The VUK model uses two different mobile subscriber scenarios, one based on the traffic forecasts available when the JBP was being produced, and the other assuming a 10% uplift in subscriber numbers.

¹⁰¹⁸ Pro-Competitive Effects Paper, paragraph 172.

¹⁰¹⁹ Net present value is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. It is commonly used in capital budgeting and investment planning to analyse the profitability of a projected investment or project.

- (b) Description of the 3UK capacity and congestion modelling: the paper outlines that 3UK's modelling forecasts capacity, congestion and speed at a detailed level for each of approximately [X] sites that are currently live, plus additional sites that are planned. The model is site by site and uses 3UK's forecast capex plans and forecast demand to estimate levels of expected congestion.

815. The Merged Entity's versions of the above models use the same core logic as VUK's and 3UK's standalone models but use parameters specific to expectations for the Merged Entity, including forecasts of traffic, traffic distribution, spectrum assignments, site numbers and configuration specific expectations for the Merged Entity's plans.

6.2.3 CMA assessment

816. The Parties' efficiency submissions are complex and underpinned by a combination of evidence and assumptions. In addition, there is a large amount of technical knowledge required to understand the modelling, in particular the capacity modelling. The CMA has not been able to fully scrutinise or evaluate the submissions, having received those at a late stage of the phase 1 investigation. However, the CMA sets out some initial observations under the headings below in relation to both the efficiency claims themselves and its current view as to the overall merger effect in light of the CMA's other findings about its impact on competition.

6.2.3.1 Rivalry-enhancing efficiencies

6.2.3.1.1 General comments

817. In their submissions in relation to both the competitive assessment of the Merger and potential countervailing factors, the Parties emphasised that, in their view, VUK and 3UK lacked the scale to invest and would face an [X] in their market positions, leaving customers with a choice of only two credible networks (BTEE and VMO2) with the result that there would be a softening of competitive pressure in the sector. They submitted that the Merger fundamentally changes these competitive dynamics.¹⁰²⁰

818. As outlined in both the counterfactual and competitive assessment sections of this decision, the CMA does not believe that the evidence supports the conclusion that there is likely to be a material weakening in the Parties' competitive position - including as this relates to their incentive or ability to invest in their networks -

¹⁰²⁰ FMN, paragraphs 24.2–24.5.

absent the Merger. In particular, in the counterfactual section, the CMA believes that 3UK's recent efforts to improve its network quality appear to be showing early signs of success and leading to strong recent revenue growth. With respect to VUK, the CMA notes that the Parties submitted that VUK has significant plans to continue to invest in its network quality, including the roll out of 5G SA.

819. Further, the CMA believes there is a realistic prospect of the Merger leading to a substantial loss of rivalry. Contrary to the Parties' efficiency claims, the CMA notes that the potential loss of competition set out in sections 5.4.4, 5.5.7, and 5.6.3, may have the effect of weakening the Parties' as well as their competitors' incentives to invest.¹⁰²¹
820. As noted above, the Parties' claims in relation to the proposed rivalry-enhancing efficiencies are based to a large extent upon the Parties' JBP, which they claim demonstrates how the combination of the Parties' complementary spectrum holdings and sites, together with the greater scale of the Merged Entity, means that it will be profitable for the Merged Entity to invest in a best-in-class network.¹⁰²²
821. In response to the Issues Letter, the Parties submitted that the JBP and JNP are the basis (i) upon which the Parties agreed to enter into the Merger, (ii) for the valuation of the synergies arising from the Merger and the financial parameters of the joint venture agreement, [§].¹⁰²³
822. The JBP and JNP were prepared in contemplation of the Merger, which is relevant for the CMA's assessment of the evidentiary weight to be attached to such documents. The CMA has also considered whether such documents are consistent with other evidence, including evidence related to the Merged Entity's economic incentives post-Merger.¹⁰²⁴
823. With regards to consistency with other evidence, the CMA notes that the claimed efficiency gains in the Parties' JBP depend on a number of assumptions about the Merged Entity's commercial behaviour post-Merger, which the CMA considers may not be in line with its post-Merger incentives. These include:
- (a) the number of sites deployed in the combined network (ie that the Merged Entity would deploy [§] sites, compared to current totals of about [§] for each of VUK and 3UK);

¹⁰²¹ The CMA's Merger Assessment Guidelines recognise that in some sectors, an important aspect of how firms compete involves efforts or investments aimed at protecting or expanding their profits in the future ([CMA129](#), paragraph 5.17).

¹⁰²² FMN, paragraph 2.70

¹⁰²³ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 268.

¹⁰²⁴ [CMA129](#), paragraphs 2.29(a) and 2.30.

- (b) the amount of spectrum deployed by the Merged Entity. [REDACTED];¹⁰²⁵
- (c) [REDACTED]); and
- (d) [REDACTED].¹⁰²⁶

824. With regards to network capacity, the CMA agrees that, in principle, combining the Parties' networks enables more spectrum to be deployed at each site. This may reduce the unit cost of expanding capacity; and, given that mobile operators need to increase capacity to meet growing demand, this reduction in unit cost of capacity may represent a reduction in marginal cost which could give the Merged Entity – all else being equal – an incentive to provide lower prices and/or a better quality of service (compared to a scenario where there is no reduction in unit cost of capacity). This would likely lead to the Merged Entity having more capacity in the initial period after the Merger,¹⁰²⁷ which the Parties referred to as a one-off increase in capacity.
825. However, the CMA notes that the extent of the increase in capacity depends on a number of assumptions about the decisions of the Merged Entity, in particular regarding the number of the Parties' sites retained and the amount of spectrum deployed at each site. The CMA understands that the deployment of additional spectrum at each site requires the installation or reconfiguration of specialist equipment (such as antennas) and therefore requires investment.¹⁰²⁸ Any such investments would therefore need to be weighed against the expected benefits from this deployment.
826. The CMA notes that the Parties' own submissions have been inconsistent as to the likely extent of any such capacity uplift, and that this inconsistency undermines the confidence the CMA is able to place on the Parties' attempts to substantiate and verify this core efficiency claim to the standard required in a phase 1 context.
827. For example, the JBP assumes a capacity uplift of [REDACTED]% versus the sum of the standalone position.¹⁰²⁹ However, in the FMN the Parties submitted that network capacity will be at least [70-80]% greater than the sum of VUK's and 3UK's projected individual capacities by 2029.¹⁰³⁰ The Parties submitted that the JBP

¹⁰²⁵ FMN, paragraph 24.11.

¹⁰²⁶ FMN, paragraphs 2.82 and 2.83.

¹⁰²⁷ The Parties said that, based on the JBP, the increase in capacity in [REDACTED] would be [REDACTED]%, [REDACTED] (Response to the CMA's capacity uplift follow-up query dated 18 January 2024, paragraph 1.8).

¹⁰²⁸ Parties' response to CMA RFI dated 27 September 2023, question 10.

¹⁰²⁹ CK Hutchison Internal Document, CKH_00000029, page 4.

¹⁰³⁰ FMN, paragraph 1.5(i).

figure of [X]% capacity increase relates to 2034 and was a preliminary estimate using simplified assumptions.¹⁰³¹ The Parties also noted that [X].¹⁰³²

828. The Parties also submitted that, in response to the Merged Entity's increased capacity and improved offering, rival operators would reduce their prices and invest more to improve quality in order to increase their competitiveness and stem loss of share to the Merged Entity.¹⁰³³ However, the CMA notes that this effect depends on the Merged Entity improving its offering compared to the counterfactual and the CMA does not agree that the Merged Entity will necessarily improve its offering compared to the counterfactual.
829. First, while any one-off increase in capacity from the Merger may enable the Merged Entity to improve its offering (eg by increasing quality), this also needs to be set against the effect of the loss of competition, set out in the CMA's competitive assessment above, which may enable the Merged Entity to increase its prices, therefore having the opposite effect to that claimed by the Parties.
830. Second, given the Parties' expectation that mobile traffic will continue to increase rapidly,¹⁰³⁴ any one-off increase in capacity due to the Merger (if realised) may be short-lived as, once any initial effect of deploying more spectrum at continuing sites is exhausted, the Merged Entity would incur further costs in expanding capacity. Such costs potentially include capex and opex savings foregone by keeping more sites open and/or adding new sites; accelerated costs from upgrading to 5G earlier than necessary; and foregoing any revenue gains from tighter market capacity relative to demand.
831. Against the background set out above, the CMA has assessed, in line with its established framework for assessing such claims,¹⁰³⁵ whether the efficiencies claimed by the Parties would result in stronger rivalry such as to prevent the realistic prospect of an SLC. In particular, the CMA has assessed whether:
- (a) the efficiencies claimed by the Parties are timely, likely and sufficient to offset the loss of rivalry in the supply of retail mobile services and wholesale mobile services as well as resulting from the Merged Entity's participation in both network sharing arrangements; and

¹⁰³¹ Response to the CMA's capacity uplift follow-up query dated 18 January 2024, paragraph 2.1.

¹⁰³² Response to the CMA's capacity uplift follow-up query dated 18 January 2024, paragraph 1.8.

¹⁰³³ Parties' response to the Issues Letter, 4 March 2024, paragraphs 6.14-6.16.

¹⁰³⁴ [X].

¹⁰³⁵ The CMA observes that core pieces of quantitative analysis were not available as at the start of the CMA's formal phase 1 investigation and were only provided midway through that investigation.

- (b) the Parties' claims regarding efficiencies are merger-specific and benefit customers in the UK.¹⁰³⁶

6.2.3.1.2 *Timeliness of potential efficiencies relative to impact on competition*

832. The Parties submitted that in the short term ([<]), they would implement spectrum sharing allowing specific VUK spectrum to be deployed on 3UK sites (and *vice versa*); and that this would strengthen coverage and capacity in selected areas, in particular for customers on 3UK's 4G network.¹⁰³⁷
833. However, the Parties anticipate it will take about [<] to fully integrate VUK's and 3UK's respective networks, albeit the Parties claim that the programme to integrate and refresh equipment on retained sites will be [<]% complete within [<] and [<].¹⁰³⁸ The Parties said that in capital intensive industries, such as telecoms, it is typical to work to multi-year investment plans that deliver benefits over a decade or more.¹⁰³⁹
834. Accordingly, while some of the Parties' claimed efficiencies would accrue in the short term, the bulk would take longer to achieve. By contrast, the CMA expects the loss of rivalry in the supply of retail mobile services and wholesale mobile services (see sections 5.4.4, 5.5.7, and 5.6.3) to occur more rapidly with customers experiencing the effects in the short term. Therefore, the CMA believes that any potential efficiencies will likely occur more slowly than the loss of rivalry. In light of this point, the CMA's view is that the timescale over which efficiencies will accrue as contemplated by the Parties means that any such efficiencies may be insufficiently timely to offset the loss of rivalry, and its related effects on customers in the short term.

6.2.3.1.3 *Likelihood and sufficiency of rivalry-enhancing efficiencies relative to impact on competition*

835. Although, as noted, the CMA has had limited time to assess the Parties' efficiency claims and underlying modelling, the CMA has a number of preliminary concerns about the approach adopted in these documents which it considers currently limits their probative value in relation to the likelihood and sufficiency of any potential rivalry-enhancing efficiencies.
836. As noted above, the Parties' efficiency claims rely heavily on their JBP which, they submitted, evidences their intention and incentive to deliver a 'best-in-class'

¹⁰³⁶ [CMA129](#), paragraph 8.8.

¹⁰³⁷ FMN, paragraph 24.8. Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 272.

¹⁰³⁸ FMN, paragraph 24.18.

¹⁰³⁹ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 273.

network, with better network performance than VUK and 3UK can achieve individually (see paragraph 822). However, as noted above, the CMA believes that it should attach limited weight to the benefits presented in the JBP.

837. This is because, firstly, as noted below, there are a large number of uncertainties around the implementation of the JBP. Secondly, the JBP [X] and therefore appears inconsistent with the CMA's conclusions on the post-Merger incentives resulting from (i) the loss of rivalry and (ii) the increase in the Merged Entity's customer base (see section 5.4.4), which may enable and incentivise the Merged Entity to raise prices and reduce investment in its network.
838. Thirdly, as noted above, the JBP was prepared while the Merger was in contemplation and therefore in knowledge of the CMA's review, with nothing to prevent the Merged Entity subsequently choosing different levels of investment once the CMA has completed its investigation. The Merged Entity could, in principle, decide to reduce the number of sites and spectrum deployed at sites to reduce costs and increase returns.
839. As also set out above (see section 6.2.2.1), during the course of the phase 1 investigation, the Parties submitted the Pro-Competitive Effects Paper along with its underlying modelling. Like with the JBP, the CMA believes that the claims in the Pro-Competitive Effects Paper (and the JNP to which it refers) are undermined by the existence of a large amount of uncertainty about the Parties' plans and the effects on rivalry and consumers.
- (a) Firstly, although there is a significant information asymmetry between the Parties and the CMA on the nature and extent of the practical risks or challenges to the roll out of the JNP that could compromise delivery and impact the claims the Parties have made, the CMA is nonetheless aware of a number of potential practical implementation risks and challenges, particularly given the technical complexity of the proposed plan and the time span involved. In particular, the CMA understands that such challenges at a minimum might include regulatory compliance, planning permissions, space to deploy equipment, civil engineering works and technology availability.
- (b) Secondly, the CMA also has questions about the Parties' ability to deploy spectrum in the way they described, which is at the heart of many of their claims about the Merged Entity's increased network capacity and therefore behaviour in the market. For example, the CMA understands that (as noted above) there are costs to deploying spectrum in the manner proposed by the Parties, and that there may also be limitations as to how much spectrum an MNO can deploy on a given site. The CMA understands that the latter point involves an assessment on a site-specific level about the position of the site relative to other sites and the size and current usage of the site tower. The CMA has not received a detailed roll-out plan that addresses these issues on

a site-by-site basis. The CMA would expect the Parties to have such a plan, especially for the densely populated urban areas where demand, congestion and roll out challenges are at their highest.

- (c) Thirdly, the Parties' plans [redacted] (see paragraphs 192 and 509).
- (d) Fourthly, the Parties' analysis is based on a comparison with the standalone plans of VUK and 3UK in the absence of the Merger. [redacted].¹⁰⁴⁰
- (e) Fifthly, the Parties also stated in the JNP that the Merged Entity [redacted].¹⁰⁴¹ This assumption creates some of the capacity difference between the JNP and capacity congestion absent the Merger. The CMA understands that the JNP will be more widescale, but it is not clear to the CMA why absent the Merger [redacted].
- (f) Sixthly, the CMA has not seen evidence as to how the Parties expected average user speeds of [redacted] which it claims in the Pro-Competitive Effects Paper the Merged Entity will attain,¹⁰⁴² are calculated/estimated for high, mid, and low traffic areas.
- (g) Finally, the Parties identified a number of 'variable' costs that they incorporated into their modelling of the incremental cost of capacity expansion absent the Merger. These costs encompass both capital and operating expenditure. The CMA has not seen any explanation as to how these costs have been identified and verified as being truly variable in nature and related to the cost of capacity expansion.

840. As well as its concerns about their practical ability to do so, the CMA also has a number of preliminary concerns about the Parties' claims that they are strongly incentivised to deliver the claimed efficiencies. The Parties submitted that the Merged Entity would have a strong incentive to roll out a 'best-in-class' network because the JBP and JNP represented the optimal, profit-maximising strategy.¹⁰⁴³ As noted above (see paragraph 812(b)), during the course of the phase 1 investigation, the Parties submitted a comparison of the JNP with an alternative scenario with 'scaled back' investment which, according to the Parties, shows the JNP has a higher NPV of future cash flows. The CMA does not believe this demonstrates that the JBP represents the optimal, profit-maximising strategy for the following reasons.

¹⁰⁴⁰ Pro-Competitive Effects Paper, footnote 88.

¹⁰⁴¹ Guide to VUK's capacity and congestion model, page 6.

¹⁰⁴² Pro-Competitive Effects Paper, paragraph 12(c).

¹⁰⁴³ FMN, paragraphs 24.63–24.66; Pro-Competitive Effects Paper, section 6.

- (a) Firstly, the CMA observes that there is a timing difference between the two scenarios, with the scaled back scenario delivering significant savings in the early years and the terminal values of the JNP NPV calculation playing a considerable role in the final result. There is greater uncertainty over future returns compared to shorter term savings and it is not clear to the CMA if the Parties have sufficiently factored this into the analysis.
- (b) Secondly, the Parties' analysis assumes the same prices in the JNP and scaled back scenario as in the counterfactual. However, given the CMA's finding that the Merger leads to competition concerns (see section 5.4.4), prices in the scaled back scenario (which envisages broadly similar performance to the counterfactual) would be higher than in the counterfactual due to weaker competition and similar quality performance to the counterfactual. Therefore, if, as the Parties assume, prices in the JNP are similar to the counterfactual, prices in the scaled back scenario must be higher than in the JNP. The Parties' analysis (which assumes the same prices in the scaled back scenario as the JNP) therefore underestimates revenue, and consequently NPV, in the scaled back scenario compared to the JNP.¹⁰⁴⁴
- (c) Finally, the scaled back scenario is only one of a number of alternative scenarios to the JNP; and a comparison of the JNP against just one alternative scenario cannot demonstrate that the JNP is the optimal profit-maximising strategy which requires some consideration of all alternative strategies.

841. The paragraphs above identify a large degree of uncertainty in relation to the Parties' plans and the claimed efficiencies associated with them. Accordingly, the CMA has taken account of such uncertainty and has assessed the Parties' submissions in light of all the available evidence.¹⁰⁴⁵

842. The CMA believes that due to the loss of rivalry in the supply of retail mobile services and wholesale mobile services, the Merged Entity may have the incentive to maximise its profits by rationalising and limiting investment in its network and raising its prices (see sections 5.4.4, 5.5.7, and 5.6.3), and the CMA has not seen evidence that there are efficiencies sufficient to offset these concerns.

¹⁰⁴⁴ Alternatively, if prices in the scaled back scenario are the same as prices in the JNP, it would follow that prices in the JNP are higher than in the counterfactual (given that prices in the scaled back scenario are higher than in the counterfactual), contrary to a key assumption in the Parties' modelling.

¹⁰⁴⁵ [CMA129](#), paragraph 2.27

843. Based on the available evidence, the CMA therefore believes that the efficiencies are not likely nor sufficient to prevent the realistic prospect of an SLC arising as a result of the Merger.

6.2.3.1.4 *Merger specificity*

844. The Parties submitted that the efficiencies are merger-specific as they could not be achieved through alternative means such as a NetCo (see paragraph 807).¹⁰⁴⁶

845. In response to the Issues Letter, the Parties submitted that given the current network sharing arrangements in the UK it would not be possible to negotiate and sustain a NetCo in practice given the Parties' different starting positions, assets and commercial strategies.¹⁰⁴⁷ The Parties also submitted that a NetCo would not be a viable/credible alternative to the Merger because it would require broader and more sweeping negotiation, both between the Parties and with third parties involved in existing network sharing arrangements; it would not deliver the same efficiencies as a merger; would result in a hold-up problem due to the asymmetry of incentives of the Parties' retail businesses; and would not benefit from cash flow generated by other synergies (eg in retail), obliging the Parties to inject additional cash to fund network integration.¹⁰⁴⁸

846. The CMA does not believe these reasons necessarily mean a NetCo, for example structured as a joint venture, would not be viable and/or credible. It is unclear why a joint venture could not reach similar agreements with third parties to those envisaged for the Merged Entity in the context of the Merger.¹⁰⁴⁹

847. The CMA notes that the efficiencies relate to the Merged Entity being able to deploy more spectrum at the Parties' sites and despite the challenges it may be possible for this to be achieved by a NetCo, at least in part. The CMA therefore believes that a NetCo could be a more competitive alternative, compared to the Merger, though less competitive than the counterfactual.

848. Moreover, the fact that a NetCo may be less profitable than the Merged Entity does not in itself imply that a NetCo would not be commercially viable as the Parties' submissions suggest. The existence of additional fixed cost savings, as well as the greater reduction in competition at the retail level, undoubtedly makes the Merger more attractive to shareholders than a NetCo. However, the

¹⁰⁴⁶ For the purpose of this section, a NetCo would pool spectrum and combine network infrastructure and operations, with business and legal entity separation from retail brands.

¹⁰⁴⁷ Parties' response to the Issues Letter, 4 March 2024, Annex ILR A, note 278.

¹⁰⁴⁸ FMN, paragraph 24.7(vi)(b).

¹⁰⁴⁹ See [Network sharing in the 5G era | Arthur D. Little \(adlittle.com\)](#) which mentions a number of examples of MOCN-based active network sharing with spectrum pooling (Net4Mobility, a joint venture in Sweden between Telenor and Tele2; Telia and Telenor in Denmark; and Orange and T-Mobile in Poland and other examples shown in Figure 1 of the paper).

attractiveness of the Merger to shareholders versus alternative options is not in itself relevant to the CMA's assessment.

849. The CMA accepts that a NetCo (or alternative network sharing agreement) would not enable the Parties to generate the financial synergies they seek to achieve from the Merger. The CMA also accepts that differing commercial strategies may reduce the scale of capacity improvements versus the Merger and the current network sharing agreements in the UK may make it challenging to deliver a new network agreement.
850. The CMA therefore believes that at least some of the efficiencies claimed by the Parties may be achievable via an alternative arrangement.

6.2.3.1.5 *International comparisons*

851. In support of their efficiency claims and submissions more broadly on the competitive impact of the Merger, the Parties submitted a 2023 review of research by Compass Lexecon,¹⁰⁵⁰ 3UK's economic advisors for the Merger, which considered studies on previous four-to-three MNO mergers (subject to regulatory scrutiny) in various countries. The review concluded that these mergers typically had little effect (if any) on prices; that they led, in many cases, to significant improvements in the network quality of the merging parties and better national average network quality relative to other countries; and that the average revenue per GB consumed (as a measure for quality-adjusted prices) generally fell either at a faster rate post-merger or at a similar rate as pre-merger.
852. The CMA's Merger Assessment Guidelines, reflecting the case law of the Competition Appeals Tribunal, 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.¹⁰⁵¹
853. The CMA believes 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 in assessing the effects of this Merger.
854. The CMA also notes 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. The CMA also notes

¹⁰⁵⁰ Padilla et al. (2023), Do four-to-three mobile mergers harm consumers? A review of post-merger effects and concentration studies (referred to at FMN, paragraph 24.48(ii)).

¹⁰⁵¹ *Ecolab Inc. v Competition and Markets Authority* [2020] CAT 12, quoted at [CMA129](#), footnote 13.

that the Compass Lexecon study represents ‘meta-research’ involving a substantial measure of judgment about previous studies.

855. The CMA also observes that there is conflicting economic evidence about the overall competitive effects of four-to-three MNO mergers subject to regulatory scrutiny.¹⁰⁵² The CMA notes that a study by Ofcom in 2020 found significant limitations with existing empirical evidence in the area, with Ofcom’s own analysis showing no evidence that mergers increased total investment or service quality (although Ofcom considered only 4G download speeds and not other dimensions of quality).¹⁰⁵³ As acknowledged by Ofcom,¹⁰⁵⁴ there are challenges in making reliable network quality comparisons across different countries and the CMA therefore takes a cautious approach to placing weight on any comparisons of the UK mobile industry to other countries’ markets in its assessment of the Merger.
856. Overall, the CMA does not believe that research on the effects of previous four-to-three MNO mergers demonstrates that they lead to rivalry-enhancing efficiencies.

6.2.3.1.6 *Conclusion on rivalry-enhancing efficiencies*

857. For the reasons set out above, the CMA believes that network integration may lead to reductions in the unit cost of capacity that could, in principle, enhance rivalry (compared to the situation where there are no reductions in the unit cost of capacity). However, the CMA does not believe there is verifiable evidence that such cost reductions would be timely, likely and sufficient so as to prevent the realistic prospect of an SLC arising as a result of the Merger, nor consequently that they would enhance rivalry in the markets where an SLC may otherwise occur or benefit consumers in the UK.

6.2.3.2 *Relevant customer benefits*

6.2.3.2.1 *Introduction*

858. As outlined above, the CMA has the discretion not to refer a merger for a phase 2 investigation if efficiencies arising from a merger result in relevant customer benefits which outweigh the SLC caused by the merger. The CMA considers the likeliness, timeliness and merger specificity of relevant customer benefits, in establishing whether they exist, and considers both quantitative and qualitative

¹⁰⁵² Business and Trade Committee, [Oral evidence: Three-Vodafone merger: implications for competition, HC 1869](#), 17 October 2023.

¹⁰⁵³ Ofcom, [Market structure, investment and quality in the mobile industry, Economics Discussion Paper Series, Issue Number 1](#), December 2020. This paper was included in the research reviewed by Compass Lexecon.

¹⁰⁵⁴ [Ofcom’s future approach to mobile markets and spectrum, Conclusions paper](#), December 2022, paragraph 3.13.

evidence of their likelihood and probability in deciding whether they outweigh the adverse effects of the SLC.¹⁰⁵⁵

859. The Parties' claims of relevant customer benefits (see paragraph 805) are based on similar underlying factors to their claims relating to rivalry-enhancing efficiencies. In particular, the claimed customer benefits derive from the Merged Entity purportedly benefitting from a lower unit cost of capacity and increasing capacity compared to the counterfactual.

860. In the following sections the CMA sets out its assessment in relation to the three relevant customer benefit claims made by the Parties:

- (a) improved network quality;
- (b) accelerated UK 5G SA; and
- (c) increased FWA offering.

6.2.3.2.2 *Improved network quality*

861. The Parties submitted that the Merged Entity's improved network would also generate substantial customer benefits through material quality improvements nationwide stemming from the enhanced network capacity and coverage.¹⁰⁵⁶

862. The CMA considers that the quality benefits are intrinsically linked to the rivalry-enhancing efficiencies claimed by the Parties and the points highlighted by the CMA in relation to those equally apply to this claim. Nevertheless, Figure 13 below sets out the Parties' claimed quality KPI improvements expected as a result of the Merger.

Figure 13: Parties forecast 'quality' key performance indicators

[✂]

Source: Efficiencies modelling presentation, 9 January 2024.

863. The CMA agrees with the Parties that the Merger may, in principle, lead to an increase in quality for customers in the UK. However, the CMA has not seen detailed and verifiable evidence on the timing, extent and implications of any such quality increase.

¹⁰⁵⁵ [CMA64](#), paragraphs 69-70.

¹⁰⁵⁶ Whilst quality is not a defined term, the Parties have suggested that the key performance indicators that encapsulate quality are Geographic coverage, Population coverage, Average speeds (Mbps), Downlink speed close to cell edge, Latency (ms).

864. The CMA has not seen detailed and verifiable evidence either corroborating (i) how the above metrics are calculated and the assumptions on which they are based or (ii) what impact this would have on the UK market and consumer experience. The CMA has not seen evidence as to how any quality benefits might outweigh the potential competition concerns.
865. The CMA therefore believes that the available evidence does not demonstrate that any quality improvements would be timely, likely and sufficient to outweigh the SLCs and any adverse effects of the SLCs.

6.2.3.2.3 Accelerated UK 5G SA

866. The Parties submitted that improved network capacity and quality along with its 5G SA core would allow the Merged Entity to accelerate opportunities in 5G SA as compared to either VUK or 3UK absent the Merger. The Parties claimed that this would benefit not just potential customers but also the UK economy as a whole as it would bring forward the 5G SA horizon.
867. The Parties submitted that [redacted].¹⁰⁵⁷ VUK, [redacted], has started deploying a limited 5G SA network focused on urban areas in London, Manchester, Glasgow and Cardiff, under 'Vodafone 5G Ultra'.¹⁰⁵⁸
868. [redacted].¹⁰⁵⁹ The CMA considers therefore that [redacted]. Given [redacted], it is not apparent to the CMA why the Merged Entity would not also focus its initial 5G SA investment [redacted], therefore it is not clear what impact the Merger has on this in the short to medium term.
869. There is general recognition of an investment 'hold-up' problem in relation to the roll out of 5G technology. For example, the UK Government's policy paper on UK Wireless Infrastructure Strategy notes that uncertain demand for 5G-enabled services presents a challenge to current 5G investment, and that as a result, 5G roll out in the near term is likely to focus on urban areas, where the commercial returns are more certain.¹⁰⁶⁰
870. Similarly, Ofcom has observed that some MNOs consider that the commercial incentives for investing in 5G networks are weaker than they were for investing in 4G networks. MNOs told Ofcom that this is because the step change in quality for mobile customers from switching from 3G to 4G was more noticeable than switching from 4G to 5G today. As a result, MNOs had strong commercial incentives to invest in upgrading 3G to 4G networks, to avoid the risk of losing

¹⁰⁵⁷ FMN, paragraph 11.39(ii).

¹⁰⁵⁸ FMN, paragraph 11.81 (ii).

¹⁰⁵⁹ FMN, paragraph 11.79.

¹⁰⁶⁰ Policy paper, [UK Wireless Infrastructure Strategy](#), April 2023.

customers to their competitors. By comparison, MNOs have suggested that since the change in quality for mobile customers from upgrading from 4G to 5G is less marked, the risk of losing a customer to a rival if they do not invest is lower and therefore the commercial incentives to invest and roll out 5G quickly are weaker.¹⁰⁶¹

871. Consistent with this, third parties told the CMA that the market is moving towards 5G SA but current demand is limited. One mobile operator told the CMA that it expects NSA 5G to be phased out following the launch of 5G SA devices and network, in the near future. It told the CMA that 5G SA will become the default access type for the mass market over the next five years but that it had not finalised its plan for launching 5G SA.¹⁰⁶² Another mobile operator told the CMA that in its experience there is no significant consumer demand for, or understanding of, 5G services. It added that it considers that 5G SA is a nascent technology that is yet to make a dramatic impact or be required for widespread specific use cases.¹⁰⁶³ Another mobile operator told the CMA that it does not see any immediate benefits of 5G SA versus NSA 5G.¹⁰⁶⁴
872. The CMA considers that, as of today, there is no widespread demand for 5G SA and it is uncertain how demand might evolve and how quickly. The Parties consider that the Merger will lead to speedier deployment of 5G cores unlocking 5G use cases and supporting a digital transformation in the UK.¹⁰⁶⁵ However, in light of the observed challenges from uncertain demand for 5G services and the less marked network quality difference between 4G and 5G relative to previous generations of technology, the CMA believes that the Merged Entity may still have limited commercial incentive to accelerate this investment whilst the demand remains as it is, raising questions about the likelihood of this investment post-Merger.
873. The timeframe for the claimed benefits is also uncertain with most of the benefits expected to occur after 2030. Revenue synergies from 5G use cases as per the Parties' JBP are [X]. This only [X].¹⁰⁶⁶ In the CMA's view, on the Parties' own estimates prepared in contemplation of the Merger, these benefits are limited and would only materialise years after the potential harms that could arise on completion of the Merger.
874. The Parties shared a copy of a report by the Department for Digital, Culture, Media & Sport (**DCMS**) on the potential future benefits of 5G to the UK economy. The

¹⁰⁶¹ [Ofcom's discussion paper on future approach to mobile markets](#), February 2022, paragraph 6.9.

¹⁰⁶² Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁰⁶³ Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁰⁶⁴ Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁰⁶⁵ FMN, paragraph 2.79.

¹⁰⁶⁶ Vodafone Internal Document, VF_00000026_001, page 14.

Parties submitted that if the benefits were brought forward by only one year, then the Merger would generate economic benefits to the UK by 2030 in the range of £[redacted] to £5 billion.¹⁰⁶⁷ However, as noted above, it is not clear to the CMA what evidence there is that the Merger would alter the commercial incentive of the Merged Entity (or the remaining MNOs) to invest in 5G SA roll-out given uncertainty over how demand will evolve and given that VUK and other MNOs are already planning to offer 5G SA in areas where demand is most likely (ie urban areas). The CMA has not seen any evidence that in the absence of the Merger there will be 5G SA demand that will not be met.

875. The Parties have not provided an explanation or evidence as to how the benefits from 5G SA, if realised, should be assessed against the harm the Merger could lead to.

876. The CMA therefore does not believe that there is detailed and verifiable evidence demonstrating that any customer benefits from any accelerated roll out of 5G SA would be timely, likely to materialise or sufficient to outweigh the SLCs and any adverse effects of the SLCs.

6.2.3.2.4 FWA

877. 3UK offers FWA in the UK [redacted] (see paragraphs 63 and 303). The Parties consider that the Merger would increase the availability of FWA versus the counterfactual.

878. The CMA understands that the Merged Entity plans to [redacted]. To the extent that the Merger leads to increased network capacity versus the counterfactual which in turn increases the number of areas with spare capacity (see section 6.2.3.1.3), the Merged Entity may have an increased capability to offer FWA to a larger number of customers than either 3UK or VUK do today.

879. Third-party feedback indicates that FWA might have a part to play in the future, but that it may be quite small and localised. One third party told the CMA that FWA is 'appropriate' in certain situations but is not a mass market substitute and is only an attractive solution where the available broadband services are lower speed copper services, or where mobile operators happen to have spare capacity.¹⁰⁶⁸ Another told the CMA that FWA is not a competitive product against fixed line fibre to the premises.¹⁰⁶⁹ However, a different third-party told the CMA that it believes FWA may challenge traditional broadband and cable providers such as BT and Virgin Media.¹⁰⁷⁰ Another third-party told the CMA that it remains sceptical about the

¹⁰⁶⁷ FMN, paragraph 24.54; Cambridge econometrics & Analysys Mason for DCMS, [Realising the Benefits of 5G](#), April 2023.

¹⁰⁶⁸ Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁰⁶⁹ Response to the CMA competitor questionnaire from a third party, January 2024.

¹⁰⁷⁰ Response to the CMA competitor questionnaire from a third party, January 2024.

claimed benefits of 5G FWA and it considers there is limited consumer demand for 3UK's FWA proposition, which is likely to remain a niche product, ie only attractive in hard to reach (eg rural) areas where fibre roll out is slow and/or cost prohibitive and mobile coverage is available.¹⁰⁷¹

880. The CMA believes that there will be parts of the UK for which FWA will remain a valuable option, especially in rural areas at least in the short to medium term. The Parties' JBP anticipates an increase in FWA sales. The Parties have not however provided detailed information or evidence as to what their FWA offering post-Merger would be, for example where it would be offered, where there is demand, or what the roll out plan is. In addition, with improving full fibre roll out across the UK, the potential attractiveness of FWA may be reduced or the opportunity time-limited.
881. In addition, the Merged Entity would have a large fixed footprint which may cut into the incentives to roll out FWA. For example, the Merged Entity may not be incentivised to roll out FWA in all areas where it has capacity given potential cannibalisation of fixed sales.
882. The Parties have not provided an explanation or evidence as to how the CMA should consider the benefit from FWA, if realised, against the harm the Merger could lead to.
883. Whilst the CMA recognises that the Merged Entity may be able to increase its FWA offering, the overall size of any benefit appears small based on the Parties' own internal documents and may only accrue to a small proportion of the UK population. Based on the available evidence, the CMA therefore believes that any FWA benefits from the Merger would be small, and therefore insufficient to outweigh the SLCs and any adverse effects of the SLCs.

6.2.3.2.5 *Merger specificity*

884. For the reasons outlined at section 6.2.3.1.4, there is insufficient evidence to conclude that the claimed relevant consumer benefits are merger-specific.

6.2.3.2.6 *International comparisons*

885. For completeness, for the reasons outlined at section 6.2.3.1.5, the CMA does not believe that research on the effects of MNO mergers in other countries provides probative evidence that relevant customer benefits would materialise as a result of

¹⁰⁷¹ Response to the CMA competitor questionnaire from a third party, January 2024.

this Merger or that they would outweigh the loss of rivalry and any adverse effects of the Merger.

6.2.3.2.7 *Conclusion on relevant consumer benefits*

886. For the reasons set out above, the CMA does not believe that there is detailed and verifiable evidence of customer benefits arising from the Merger that would outweigh any SLCs and any adverse effects of SLCs in the supply of retail mobile services, the supply of wholesale mobile services and as a result of the impact of the Merger on network sharing arrangements, as set out in sections 5.4.4, 5.5.7, and 5.6.3.

7. CONCLUSION ON SUBSTANTIAL LESSENING OF COMPETITION

887. Based on the evidence set out above, the CMA believes that it is or may be the case that the Merger may be expected to result in an SLC as a result of:

- (a) Horizontal unilateral effects in the supply of retail mobile telecommunications services to end consumers in the UK;
- (b) Horizontal unilateral effects in the supply of wholesale mobile services in the UK; and
- (c) Anti-competitive effects in the supply of retail mobile services telecommunications and wholesale mobile services in the UK arising from the sharing of commercially sensitive information through the Merged Entity's participation in both network sharing arrangements.

8. EXCEPTIONS TO THE DUTY TO REFER

888. Where the CMA's duty to refer is engaged, the CMA may, pursuant to section 33(2)(c) of the Act, decide not to refer the merger under investigation for a phase 2 investigation if it believes that any relevant customer benefits outweigh the adverse effects from the merger's impact on competition.

889. For the reasons set out above at section 6.2.3.2.7, the CMA does not believe that there is detailed and verifiable evidence of customer benefits arising from the Merger. The CMA therefore does not have sufficient evidence that customer benefits would outweigh the competition concerns the CMA has identified to warrant exercising its discretion not to refer the Merger.

DECISION

890. Consequently, the CMA believes that it is or may be the case that (i) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and (ii) the creation of that situation may be expected to result in an SLC within a market or markets in the UK.
891. The CMA therefore believes that it is under a duty to refer under section 33(1) of the Act. However, the duty to refer is not exercised whilst the CMA is considering whether to accept undertakings under section 73 of the Act instead of making such a reference.¹⁰⁷² The Parties have until 2 April 2024¹⁰⁷³ to offer an undertaking to the CMA.¹⁰⁷⁴ The CMA will refer the Merger for a phase 2 investigation¹⁰⁷⁵ if the Parties do not offer an undertaking by this date; if the Parties indicate before this date that they do not wish to offer an undertaking; or if the CMA decides¹⁰⁷⁶ by 9 April 2024 that there are no reasonable grounds for believing that it might accept the undertaking offered by the Parties, or a modified version of it.

Julie Bon
Deputy Chief Economic Adviser
Competition and Markets Authority
22 March 2024

¹⁰⁷² Section [33\(3\)\(b\)](#) of the Act.

¹⁰⁷³ Section [73A\(1\)](#) of the Act.

¹⁰⁷⁴ Section [73\(2\)](#) of the Act.

¹⁰⁷⁵ Sections [33\(1\)](#) and [34ZA\(2\)](#) of the Act.

¹⁰⁷⁶ Section [73A\(2\)](#) of the Act.

ENDNOTES:

Paragraph 189 should read Cornerstone Telecommunications Infrastructure Ltd is a joint venture concerning passive infrastructure between Vodafone (through its subsidiary Vantage Towers) and VMO2 (CTIL), after VMO2 sold a minority stake in CTIL (16.67%) to GLIL Infrastructure LLP in late 2023...

Figures 8 and 10 titles should read '...Q3 and Q4 2023'.

9. APPENDIX A: FINANCIAL PERFORMANCE

9.1 3UK

9.1.1 3UK's historic profitability performance (FY17 – FY22)

892. Table 23 sets out 3UK's total revenue, gross profit, EBITDA and EBIT over the period FY17 to FY22, with Figure 14 showing headline figures (revenue, EBITDA and EBITDA margin) over the same period.

Table 23: Summary of 3UK's P&L performance (FY17 – FY22)

	<i>Unit</i>	<i>FY17</i>	<i>FY18</i>	<i>FY19</i>	<i>FY20</i>	<i>FY21</i>	<i>FY22</i>	<i>Unit</i>	CAGR FY17 - FY22	Simple change FY17 to FY22
		<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>			
Publicly reported revenue	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Year on year growth	%	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Internally reported revenue	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Year on year growth	%	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Total direct costs		[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Internally reported gross profit	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Gross profit margin (internally reported revenue)	%	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
'Running' operating expenses	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Other operating expenses	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
EBITDA	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
EBITDA margin (publicly reported revenue)	%	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
EBIT	£m	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
EBIT margin (publicly reported revenue)	%	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Figure 14: 3UK's revenue, EBITDA and EBITDA margins (FY17 – FY22)

[X]

[X]

893. The CMA observes that:

- (a) 3UK's revenue performance has been [redacted]¹⁰⁷⁷ [redacted]. However, this is [redacted] with the revenue performance seen by the CMA for MNOs across the UK industry and does not suggest that 3UK has a weakening or declining position.¹⁰⁷⁸ The CMA notes that 3UK's business model, [redacted] relative to many other business models.
- (b) [redacted] 3UK's monthly profit statement (**MPS**) [redacted],¹⁰⁷⁹ [redacted].
- (c) While profitability has seen a material decline, 3UK has remained profitable at an EBIT and EBITDA level over this period. [redacted].¹⁰⁸⁰ More detailed management accounting information demonstrates this is largely as a result of [redacted], discussed more at paragraph 60.
- (d) EBITDA has seen less significant movements, but has generally been in decline, [redacted], 3UK has achieved some EBITDA margin recovery following [redacted]. Within this:
 - (i) A significant reduction in EBITDA of [redacted], largely driven by [redacted]. An internal document from around this period also suggest that [redacted].¹⁰⁸¹
 - (ii) More detailed movements seen in [redacted] suggest [redacted] (as compared to the earlier periods in this analysis), directly impacting EBITDA, and coinciding with [redacted] at this time.¹⁰⁸²

9.1.2 3UK's more recent profitability and growth performance (FY21 – FY23)

894. The CMA assessed 3UK's performance in more recent periods (Table 24), with movements between FY21 and FY22 summarised in Figure 15 and movements between FY22 and FY23 summarised at Figure 16.

¹⁰⁷⁷ Where the CMA refers to 'annual average' growth rates in this annex, it has used the compound annual growth rate (**CAGR**) to measure performance over several periods. CAGR gives an average yearly growth metric which aids comparability across different companies by dampening the effect of volatility in performance over several periods (as compared to a standard arithmetic mean).

¹⁰⁷⁸ [redacted] is largely consistent with (i) the CMA's analysis of shares of supply over the period, with the overall supply of retail mobile telecommunications services to end consumers in the UK showing a -1.7% CAGR decline over the period, and (ii) Ofcom's analysis that the telecoms sector (in fixed and mobile) has recently been in decline (see Ofcom, [Communications Market Report 2023](#), October 2023, page 2).

¹⁰⁷⁹ These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive.

¹⁰⁸⁰ [redacted] demonstrates this is as a result of [redacted], discussed in more detail in section 4.

¹⁰⁸¹ CK Hutchison Confidential Annex CKH S109-1 8.015, page 22 ([redacted]).

¹⁰⁸² CK Hutchison Confidential Annexes CKH S109-1 8.013, pages 3, 4, 16-18; CKH S109-1 8.015, pages 3-4.

Table 24: Summary of 3UK’s more recent P&L performance, with more granular revenue performance, as measured in its monthly profit statement (MPS) internal documents (FY21 – FY23)

	Unit	FY21	FY22	FY23	Unit	CAGR FY21- FY23	Growth FY21 - FY22	Growth FY22 - FY23
		Actual	Actual	Actual				
Consumer	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Business	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
FWA	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
MVNO and other wholesale revenue	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Handset, accessories and other non-customer revenue	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3UK’s definition of core revenue	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Publicly reported definition of revenue	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total direct costs	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Internally reported gross profit	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Gross profit margin (internal definition of revenue)	%	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
'Running' operating expenses	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other operating expenses	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
EBITDA	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
EBITDA margin (publicly reported revenue)	%	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
EBIT (before exceptional items)	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
EBIT margin (publicly reported revenue)	%	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis 3UK’s MPS internal documents from June 2018 to June 2023. These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive, together with Confidential Annex CKH ILR 1 to the Parties’ response to the Issues Letter, 4 March 2024.

[REDACTED].

Figure 15: Illustration of the movement in 3UK’s EBITDA from FY21 to FY22, showing changes in revenues and costs between the periods

[REDACTED]

Source: CMA analysis 3UK’s MPS internal documents from June 2018 to June 2023. These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive.

[REDACTED].

'Revenue' here means CK Hutchison’s internal, rather than externally reported, definition of revenue.

895. Figure 15 shows [REDACTED] 3UK’s EBITDA performance from FY21 to FY22. In summary:

- (a) [REDACTED]. While [REDACTED], Figure 15 demonstrates [REDACTED].
- (b) [REDACTED].

896. Key movements impacting EBITDA between FY22 to FY23 are highlighted at Figure 16. The CMA notes that [REDACTED]. Bearing in mind the late stage of the phase 1 investigation at which FY23 data was provided, the CMA has been unable to assess the impacts of this or of other movements in revenues and costs to FY23 in detail, but has noted some high-level observations at paragraph 897 below.

Figure 16: Illustration of the movement in 3UK’s EBITDA from FY22 to FY23, showing changes in revenues and costs between the periods

[REDACTED]

Source: CMA analysis 3UK's MPS internal documents from June 2018 to June 2023, together with 3UK's MPS internal document for December 2023. These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive, together with Confidential Annex CKH ILR 1 to the Parties' response to the Issues Letter, 4 March 2024.

[REDACTED].

'Revenue' here means CK Hutchison's internal, rather than externally reported, definition of revenue.

897. Figure 16 illustrates that 3UK has [REDACTED]. Evidence available to the CMA suggests that [REDACTED].¹⁰⁸³ In more detail:

- (a) [REDACTED]. This is in line with, or better than, data submitted to the CMA by other market participants over a similar period.¹⁰⁸⁴ In contrast with the Parties' submissions, this does not suggest that 3UK's position in this segment is declining, weakening or deteriorating as compared to other market participants.¹⁰⁸⁵
- (b) [REDACTED]. While [REDACTED], Figure 16 demonstrates that [REDACTED].
- (c) [REDACTED].
- (d) [REDACTED]¹⁰⁸⁶ [REDACTED]. However, comparison of this performance with [REDACTED], suggests that [REDACTED]. Evidence available to the CMA [REDACTED].¹⁰⁸⁷

9.1.3 3UK's cashflow and capital expenditure performance

898. Table 25 outlines 3UK's headline cashflow performance as recorded in its MPS documents over the period FY19 – FY23.¹⁰⁸⁸

Table 25: 3UK cashflow performance FY19 – FY23

	<i>Unit</i>	<i>FY19</i>	<i>FY20</i>	<i>FY21</i>	<i>FY22</i>	<i>FY23</i>
		<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>	<i>Actual</i>
Cash flow from operating activities (before change in working capital)	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Capex	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other impacts (inc. change in working capital)	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3UK definition: 'unlevered' free cash flow	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Impact of financing (inc. Group) and other items	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Net cash inflow/ outflow	£m	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

¹⁰⁸³ CK Hutchison Internal Document, CKH_00000804, page 2; CKH_00000838 page 3 [REDACTED].

¹⁰⁸⁴ Submissions to the CMA from third-parties, December 2023 and January 2024.

¹⁰⁸⁵ The CMA notes that [REDACTED].

¹⁰⁸⁶ NPAT means net profit after tax.

¹⁰⁸⁷ CK Hutchison Internal Document, CKH_00000804, page 2; Parties' Response to the Issues Letter, 4 March 2024, Confidential Annex CKH ILR1, page 8 [REDACTED]

¹⁰⁸⁸ These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive, together with Parties' response to the Issues Letter, 4 March 2024, Confidential Annex CKH ILR 1.

Source: CMA analysis 3UK's MPS internal documents from June 2018 to June 2023. These were provided to the CMA as CK Hutchison Confidential Annexes CKH S109-1 7.046 to CKH S109-1 7.106 inclusive, together with Confidential Annex CKH ILR 1 to the Parties' response to the Issues Letter, 4 March 2024.

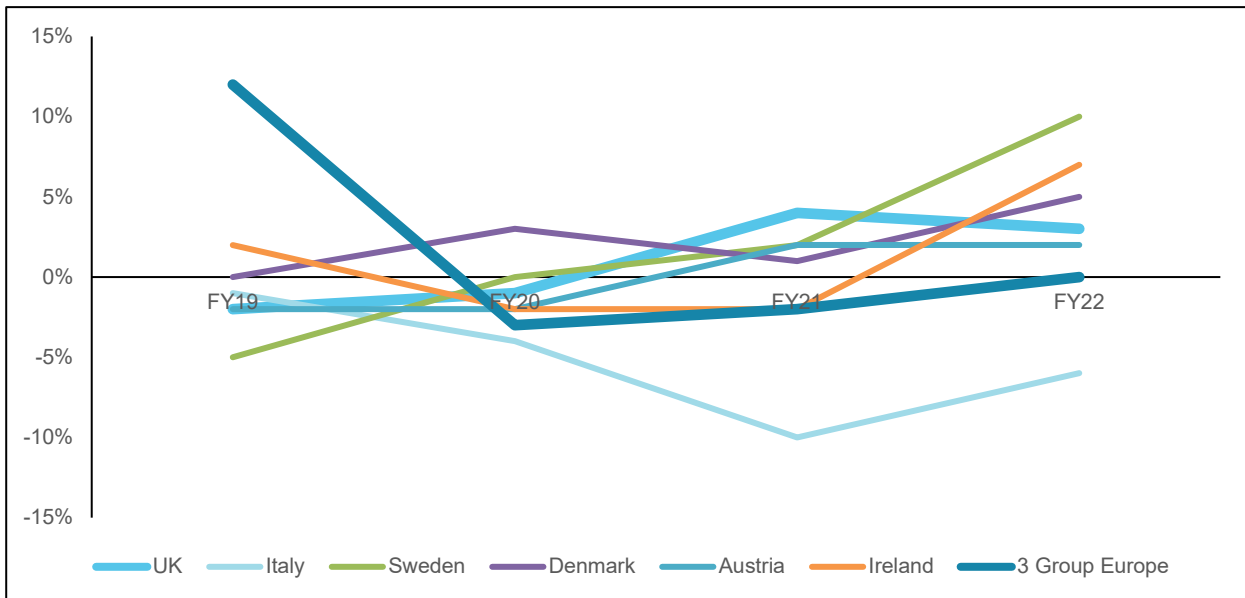
899. Table 25 demonstrates that, as noted at paragraph 59, over the period shown, [REDACTED].¹⁰⁸⁹

900. CK Hutchison has submitted to the CMA that 'unlevered free cash flow' (UFCF)¹⁰⁹⁰ is an important metric by which to measure its performance, as compared to any profitability measure, given the capital intensive nature of the industry.¹⁰⁹¹ As can be seen at Table 25, [REDACTED]. Evidence currently available to the CMA suggests that [REDACTED]. This is discussed more at paragraph 59.

9.1.4 3UK's performance as compared to 3 Group Europe

901. Figure 17 sets out revenue growth performance as reported by CK Hutchison across 3 Group Europe and its operating segments, which includes the UK (3UK), Italy, Sweden, Denmark, Austria, and Ireland. As discussed at paragraph 66, this demonstrates 3UK's performance to be largely in line with other major operating segments of the CK Hutchison telecommunications business.

Figure 17: Revenue growth of 3 Group Europe's operating segments (measured in constant currency) (FY19 – FY22)



¹⁰⁸⁹ [REDACTED].

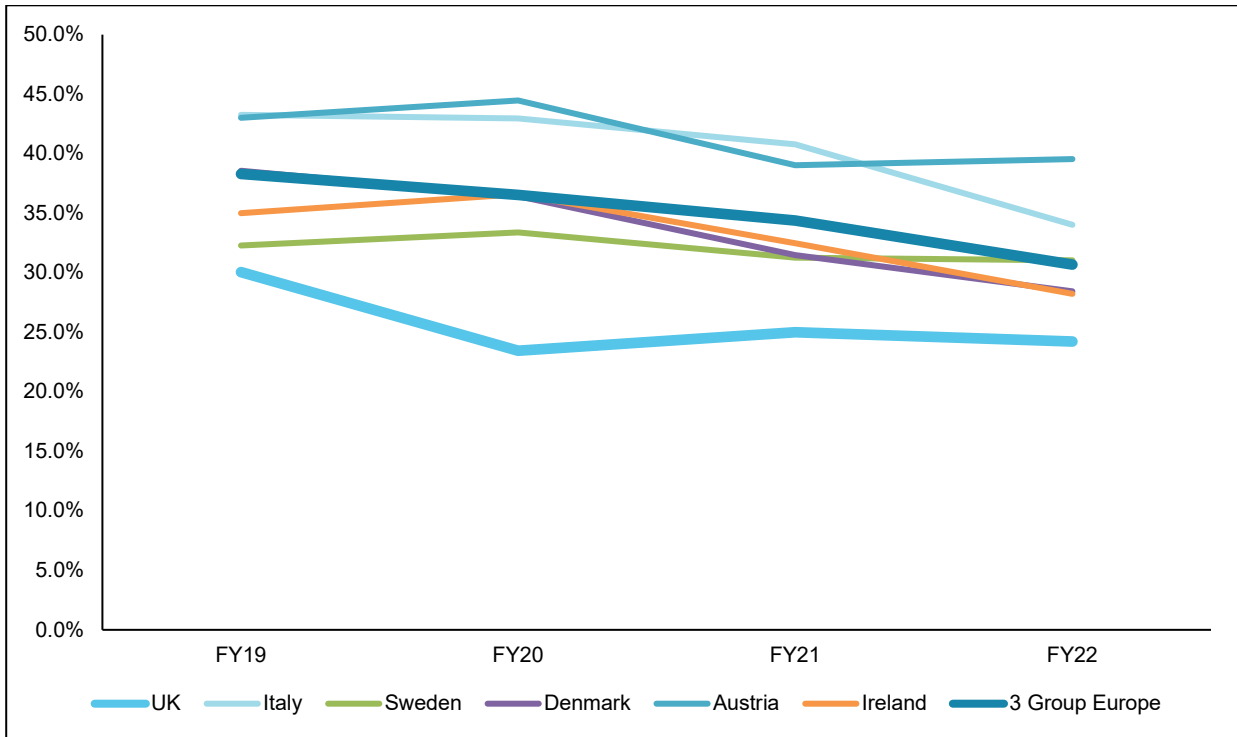
¹⁰⁹⁰ This means the cashflow theoretically available to both debt holders and equity holders of a business (ie disregarding a company's capital structure or 'mix' of debt and equity funding). This cashflow metric therefore excludes interest or debt related payments.

¹⁰⁹¹ Parties' response to the Issues Letter, 4 March 2024, paragraphs 2.13 and 2.14.

Source: 'CK Hutchison Group Telecom' financial reports. 3 Group Europe growth is measured at an aggregate level and does not exclude the impact of individual currency movements of operating segments.

902. Figure 18 sets out EBITDA margin performance as reported by CK Hutchison across 3 Group Europe and its operating segments. This demonstrates [redacted] as compared to other group operating segments. The CMA notes, for the purposes of its counterfactual assessment, that 3UK has been [redacted].

Figure 18: EBITDA margins across 3 Group Europe between (FY19 – FY22)



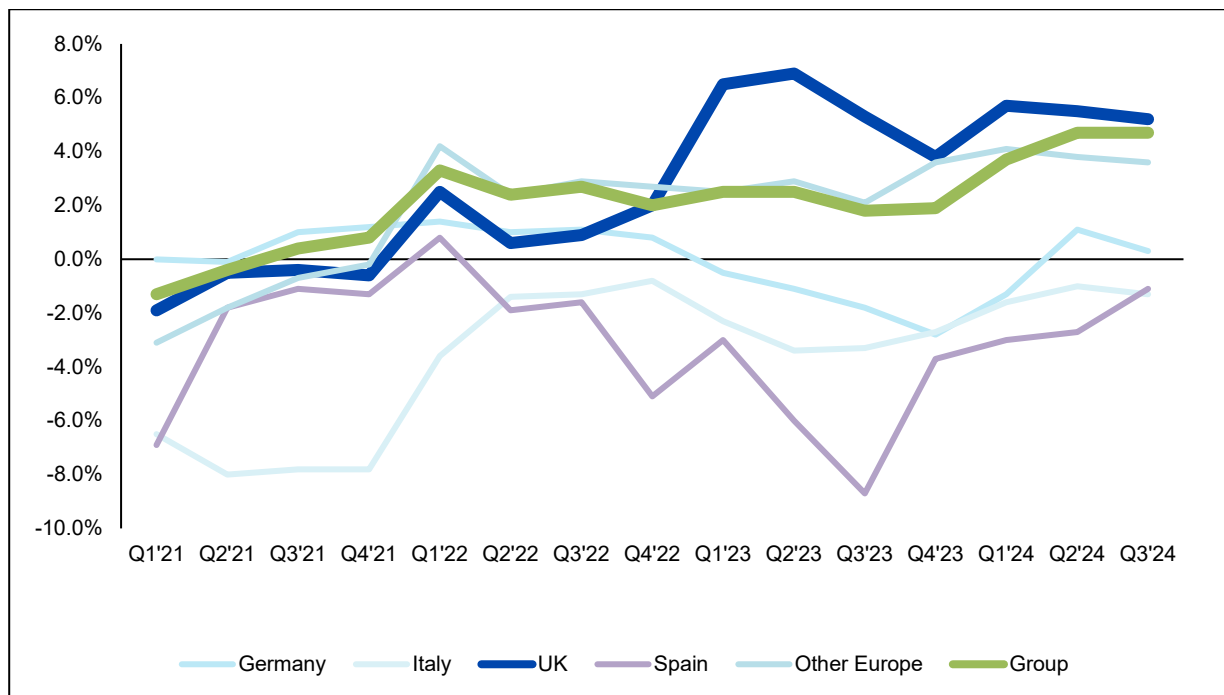
Source: 'CK Hutchison Group Telecom' financial reports. EBITDA is reported and considered by CK Hutchison primarily on a pre-IFRS 16 basis (shown here).

9.2 VUK

9.2.1 VUK's performance as compared to Vodafone group

903. Figure 19 outlines quarterly organic service revenue growth for various operating companies across Vodafone over the period Q1 FY21 – Q3 FY24, and shows the UK to be performing in line with the Vodafone group in earlier periods, before growing faster than the total group from the start of FY23 onwards.

Figure 19: Quarterly organic service revenue growth for Vodafone geographies (Q1 FY21 – Q3 FY24)¹⁰⁹²

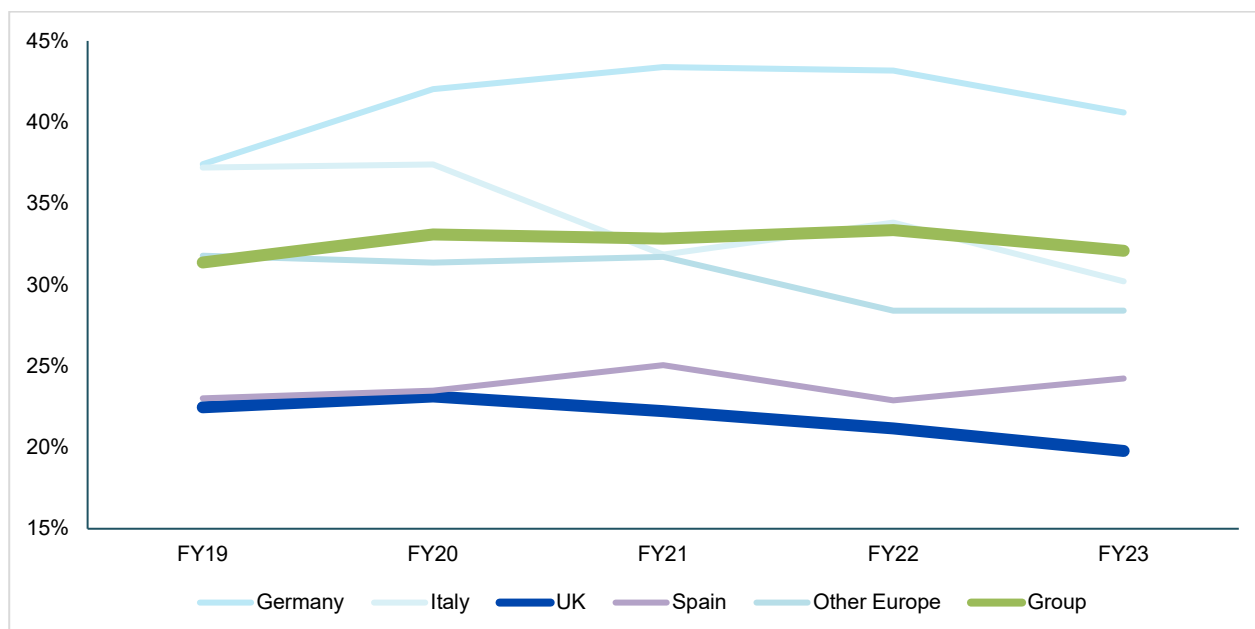


Source: publicly available financial performance metrics published by [Vodafone](#)

904. Figure 20 sets out EBITDA margins across Vodafone’s operating companies over a longer time period as seen in published financial statements, which shows the UK to have low and declining profitability compared to other Vodafone operating companies, discussed more at 70(b) (section 4).

¹⁰⁹² ‘Organic’ in this context means excluding the impacts of currency movements and mergers and acquisitions (M&A) activity.

Figure 20: EBITDA margins across Vodafone’s operating companies: FY19 – FY23



Source: publicly available financial performance metrics published by [Vodafone](#). Vodafone replaced EBITDA with EBITDAaL¹⁰⁹³ in FY22 (meaning the depreciation and interest expense associated with leases are deducted before this profit number is shown). Consistent with Vodafone’s approach in public reporting and in its submissions to the CMA, the CMA is assuming that EBITDAaL is broadly equivalent to pre-IFRS 16 EBITDA has shown the metric across time on this basis.

9.2.2 The impact of ‘below the line charges’ on VUK’s profitability (ROCE) and cashflow performance

905. As noted at paragraph 70(a), the CMA has seen several documents which suggest that [redacted].¹⁰⁹⁴ In response to the CMA’s observations to this effect, set out in its Issues Letter, the Parties submitted that [redacted].¹⁰⁹⁵

906. Similarly, [redacted],¹⁰⁹⁶ the Parties submitted that [redacted].¹⁰⁹⁷

907. In the time constraints of its phase 1 investigation and following these submissions, the CMA has not had significant time to assess the nature of BTL charges and discuss these in more detail with Vodafone and VUK. However, the CMA makes the following observations relevant to its counterfactual assessment:

¹⁰⁹³ The CMA understands EBITDAaL to be EBITDA, as described above, ‘after leases’. This means that depreciation and interest costs associated with lease assets and lease liabilities under IFRS 16 are deducted to reach this profit metric.

¹⁰⁹⁴ Vodafone Internal Documents, VF_00000501, pages 23, 87; VF_00004673, pages 14, 16. See also Vodafone Internal Document, VF_00034085, page 39. [redacted] (provided in Parties’ response to the Issues Letter, 4 March 2024, Confidential Annex VF ILR 4, [redacted]) suggest that [redacted].

¹⁰⁹⁵ Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, note 22.

¹⁰⁹⁶ Vodafone Confidential Annex VGP S109 1-8.0046 – [redacted], as referenced in Vodafone Confidential Annex VGP S109 1-9.0047 – [redacted].

¹⁰⁹⁷ Parties’ submission to the CMA, Issues Meeting Presentation, 29 February 2024, page 18; Parties’ response to the Issues Letter, 4 March 2024, Annex ILR A, note 26.

- (a) [REDACTED]. In considering Vodafone's incentive to support the activities of VUK, the CMA must consider [REDACTED].
- (b) The CMA notes that [REDACTED].¹⁰⁹⁸ In other words, [REDACTED].
- (c) [REDACTED] - in addition to the considerations above - the CMA notes that [REDACTED], which is inconsistent with generally accepted practice in accounting and financial analysis.¹⁰⁹⁹

¹⁰⁹⁸ Parties' response to RFI (4), 27 September 2023, paragraphs 3.5 – 3.41, Table 3.1.

¹⁰⁹⁹ Parties' response to the Issues Letter, 4 March 2024, Confidential Annex VF ILR 4, [REDACTED].