SLAUGHTER AND MAY

Freshfields Bruckhaus Deringer

INITIAL PHASE 2 SUBMISSION AND RESPONSE TO THE CMA'S PHASE 1 DECISION

Case No. M.7064.23

Vodafone UK / Three UK

SLAUGHTER AND MAY

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12 JUNE 2024

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CASE M.7064.23

Certain information contained in this Decision Response may be confidential to one party and should not be disclosed to the other party. Information confidential to CK Hutchison as against Vodafone is highlighted in blue (if it is an extract from an internal document then it is highlighted in purple). Information confidential to Vodafone as against CK Hutchison is highlighted in yellow (if it is an extract from an internal document then it is highlighted in orange). Information confidential to both CK Hutchison and Vodafone as against both Vodafone and CK Hutchison and as against third parties is highlighted in green. Information known by Vodafone and CK Hutchison and confidential as against third parties is highlighted in teal.

In addition, annexes expressly marked "Confidential" are confidential to the party or parties to whom the annex relates and should not be shared with the other party to the transaction or with third parties.

1. Executive Summary

1.1 This submission responds to the findings set out in the CMA's Phase 1 Decision (the "**Phase 1 Decision**"), which does not fully reflect the realities of the mobile market in the UK or the Parties' competitive positions. This submission provides an overview of the core issues that Vodafone and CK Hutchison consider critical to the CMA's further in-depth review of the Transaction at Phase 2.[1]

1.2 The Transaction will be highly pro-competitive. It will unlock substantial investment in a best-in-class mobile network which will deliver a transformational market-wide step change in network quality and capacity. MergeCo's superior network quality will increase the competitive pressure on rivals and create a strong incentive for MergeCo to compete aggressively in both the retail and wholesale mobile markets to win customers in order to fill its expanded capacity. Rather than any lessening of competition, the enhanced competition from MergeCo will trigger a pro-competitive reaction from BTEE and VMO2, boosting dynamic competition on both quality and price to the benefit of UK consumers. The Transaction provides a once in a generation opportunity to shift the UK mobile market to a high-investment equilibrium thereby achieving the UK Government's 5G growth ambitions as set out in its Wireless Infrastructure Strategy.[2]

The "prevailing conditions of competition" will continue to deliver sub-optimal outcomes for UK consumers and businesses*.*

1.3 As set out in **section 2**, the prevailing conditions of competition have delivered, and will continue to deliver, sub-optimal outcomes for UK consumers and businesses. Without the Transaction, these conditions of weak (and progressively weaker) competition will endure, as the market would inevitably become increasingly bifurcated between:

(i) BTEE and VMO2 – the two MNOs that generate the lion's share of the mobile industry's cashflows and profits and which have the scale (but not currently the incentive) to invest what would be required for the UK to compete globally on 5G rollout and network quality; and

(ii) 3UK and VUK – whilst the positions of 3UK and VUK are distinct, what they have in common is that they are both sub-scale MNOs that would each continue to earn insufficient returns and generate a negligible share of mobile cashflows, limiting their ability to invest [REDACTED] and to challenge the market leaders.

1.4 The result is that the UK currently lags behind most of its European and international peers The UK consistently ranks poorly in a number of recent international benchmarks, for example: (i) OpenSignal ranks the UK 22 out of 25 among European countries for both 5G download

[1] This response should be read in conjunction with the Parties' response to the Issues Letter. Where terms in this submission have not been otherwise defined, the Parties have adopted the definitions used in the Phase 1 Decision and the Merger Notice.

[2] UK Government, 'UK Wireless Infrastructure Strategy', 11 April 2023, available at: https://www.gov.uk/government/publications/uk-wireless-infrastructure-strategy/uk-wireless-infrastructure-strategy (accessed 26 April 2024).

speeds and 5G availability;[3] and (ii) the latest 5G quality study by MedUx ranks London last for 5G quality in a comparison of ten major European cities, concluding that "*networks in London should improve across the board to offer the citizens a closer performance to the best-in-class Cities in Europe*".[4] The picture is the same in many other recent studies. This reality falls *far* short of the Government's ambitions for the UK to have world-class infrastructure fit for the digital age and growth.[5]

1.5 With the continued absence of a third scale MNO with the ability to invest in a high performance *nationwide* 5G network, which in turn would incentivise BTEE and VMO2 to increase investment in their own mobile networks, this situation would only worsen in the counterfactual for two main reasons.

(i) First, average monthly demand for data is increasing exponentially (for example, usage has increased from 2.5GB per month in 2018 to 8.7GB per month in 2023) while weighted average monthly prices for average mobile use (excluding handset cost) are decreasing (from £17.12 per month in 2018 to £11.15 per month in 2023).[6] This has placed increasing pressure on MNOs' margins, undermining the ability of sub-scale MNOs to deliver the investment to meet that rising data demand.

(ii) Second, 5G SA / Advanced 5G also requires significantly larger investments compared to earlier technologies which sub-scale players are unable to fund.[7] As recognised by the UK Government, 5G has the potential to transform mobile connectivity, not only tackling the challenges of surging demand but also opening up new opportunities for consumers and businesses across the UK. The Transaction will unlock the benefits of 5G SA / Advanced 5G as a result of the Parties' committed investment in the MergeCo

[3] OpenSignal, 'Mobile network speeds leapt ahead in 2023 but some markets lag behind', 1 February 2024, available at: https://www.opensignal.com/2024/02/01/mobile-network-speeds-leaped-ahead-in-2023-but-some-markets-lag-behind (accessed 29 April 2024).

[4] MedUx, 'London's 5G Dilemma: EE Outshines locally, but London's Average Experience Is Worst Among European Cities', 17 January 2024, available at: https://medux.com/blog/londons-5g-dilemma-ee-outshines-locally-londons-average-experience-worst-among-european-cities (accessed 26 April 2024); Opensignal, 'Mobile network speeds leaped ahead in 2023, but some markets lag behind', 1 February 2024, available at: https://www.opensignal.com/2024/02/01/mobile-network-speeds-leaped-ahead-in-2023-but-some-markets-lag-behind (accessed 26 April 2024); MedUX, 'All 5G networks are not created equal: Unveiling the TRUE QoE of 5G in Europe (II)', 14 February 2024, available at: https://medux.com/blog/all-5g-networks-are-not-created-equal-unveiling-true-qoe-5g-europe-ii (accessed 26 April 2024); Ookla Speedtest, available at: https://www.speedtest.net/global-index (accessed 19 April 2024); ISPreview, 'UK Mobile Operators Fail to Win Any Awards in Global 5G Study UPDATE', 17 October 2023, available at: https://www.ispreview.co.uk/index.php/2023/10/uk-mobile-operators-fail-to-win-any-awards-in-global-5g-study.html (accessed 26 April 2024); and Opensignal, '5G Global Mobile Network Experience Awards 2023', October 2023, available at: https://cdn.opensignal.com/public/data/reports/national/data-2436/2023_5gglobalmobilenetworkexperienceawards_opensignal_2.pdf (accessed 29 April 2024).

[5] UK Government, 'UK Wireless Infrastructure Strategy', 11 April 2023, available at: https://www.gov.uk/government/publications/uk-wireless-infrastructure-strategy/uk-wireless-infrastructure-strategy (accessed 26 April 2024).

[6] Ofcom, 'Pricing trends for communications services in the UK', 12 December 2023, Figure 12, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0024/273138/pricingtrendsreport2023.pdf (accessed 15 April 2023).

[7] Merger Notice, Figure 2.6.

Joint Business Plan (the "**JBP**") and the wider investment this will stimulate across the entire market.

1.6 Further, the dynamics of competition are changing. As recognised by Ofcom and the UK Government, competition in the mobile sector is no longer driven solely by traditional MNOs and MVNOs: there is disintermediation risk at both the network and retail levels driven by the emergence and growth of new players such as: private 5G network providers, digital and cloud providers or 'hyperscalers' (e.g. [REDACTED],[8] [REDACTED]) and neutral infrastructure players. This trend will increase significantly with the further growth of eSIM and 5G and the arrival of 5G SA.

1.7 In this environment, the UK will continue to lag behind its peers in 5G performance, and mobile network performance (capacity and quality) will remain a significant priority for customers: Ofcom found that nearly 50% of "reasons to complain" about mobile phone providers related to "*the service not performing as it should*".[9]

The Phase 1 Decision does not reflect the real conditions of competition in the retail mobile market

1.8 As set out in **section 3**, the Phase 1 Decision does not reflect the real conditions of competition in the retail mobile market in the UK:

(i) Neither VUK nor 3UK is a significant competitive force in the market today. Each is constrained in its ability to invest sustainably due to lack of scale. This will [REDACTED] weaken their effectiveness as competitors in the absence of the Transaction.

(ii) The Phase 1 Decision concludes that 3UK and VUK are close competitors. In reality, the evidence shows that:

(a) The Parties' customers [REDACTED];[10] and

(b) The Parties are not close competitors in the business segment where there is limited, if any, overlap.

(iii) The Phase 1 Decision mischaracterises the market by downplaying the competitive constraints from other players:

(a) BTEE and VMO2 generated on average 87% of annual positive mobile cashflows between 2020 and 2022 due to their large mobile customer bases

[8] [REDACTED].

[9] Ofcom, 'Comparing customer service: mobile, landline and home broadband', 18 May 2023, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0014/261500/comparing-customer-service-report-2023.pdf (accessed 12 April 2023).

[10] Based on customer diversion ratios.

and large, fixed base to which they cross-sell. Nevertheless, as the CMA recognises, they have been slow to invest in their mobile networks and innovate – precisely because they currently lack competitive pressure from a third scaled network operator.

(b) MVNOs do not have to meet the cost of building and maintaining their own radio network, giving them the ability to compete aggressively on price. The Phase 1 Decision discounts the competitive significance of MVNOs whilst simultaneously showing that MVNOs offer some of the cheapest tariffs and are the fastest growing players in the consumer retail market (having grown from a [10-20]% aggregate share of supply in 2016 to [20-30]% in Q3 2023). They include large and well-known companies such as Sky Mobile (which has grown to be the second largest MVNO with a customer base of c. 3.2 million despite only launching in 2017), Lycamobile, Lebara, Tesco Mobile and many others. Market developments, including the growth of SIMO tariffs, improved wholesale access offers and the increased penetration of eSIMs will continue to position MVNOs as strong competitive constraints in the retail market on all parameters of competition.

(iv) The Phase 1 Decision is incorrect to conclude that the Parties, and in particular 3UK, have strong incentives to compete aggressively due to their smaller sale, whereas MergeCo would have lower incentives to do so due to its larger customer base.[11] The hypothesis that an operator's incentive to compete aggressively decreases with scale disregards that (i) all operators regardless of size offer differentiated tariffs (including through their sub-brands) and tailored incentives to attract and retain customers; and (ii) the amount of capacity deployed is a key determinant of an operator's ability and incentive to compete effectively in the market. Having invested in a much higher-capacity network upfront, MergeCo's marginal cost of serving additional customers on its network will be close to zero (as its capacity investment will have been incurred already), giving it a much stronger incentive to compete aggressively than either 3UK and VUK would have in the counterfactual. By contrast, the Parties' lack of scale limits their ability to challenge the market leaders. The Transaction will fundamentally change this to a more competitive dynamic to the benefit of UK consumers.

(v) The Transaction will add significant new capacity to the market and stimulate greater competition in the retail (and wholesale) mobile market, including increasing BTEE and VMO2's incentives to invest.

The Phase 1 Decision does not reflect the reality of competition in the wholesale mobile market

1.9 As set out in **section 4**, the Phase 1 Decision does not reflect the reality of competition in the wholesale mobile market:

[11] Phase 1 Decision, paragraphs 277(b) and 282.

(i) The Phase 1 Decision mischaracterises 3UK's market position and disregards the fundamental fact that [REDACTED].

(ii) The Parties are not close competitors. This is demonstrated by the limited overlap in the tenders that both Parties participated in and in internal documents.

(iii) The finding in the Phase 1 Decision that BTEE and VMO2 may have a more limited incentive than the Parties to win new wholesale business due to their larger customer base is not supported by the evidence:[12]

(a) BTEE and VMO2 collectively host 90% of all MVNOs;

(b) BTEE has won almost all of the recent tenders (including with large MVNOs) and hosts at least 50 MVNOs;[13] and

(c) VMO2 hosts and has retained the two largest MVNOs, Sky Mobile and Tesco Mobile. [REDACTED].

(iv) MVNOs have seen a substantial increase in their bargaining power as they have continued to grow their subscriber bases. Typically, MVNOs now have improved wholesale access terms, including more competitive pricing enabling them to offer [REDACTED] at the retail level and contractual rights giving them access to the latest technology / features available to the MNOs. MVNOs' bargaining power is expected to increase still further given their continued growth in the retail mobile market. It is also heightened by the increased ease of switching wholesale access provider, due to technological developments such as the increased penetration of eSIMs.

(v) The Phase 1 Decision is incorrect that larger MNOs are less incentivised than smaller MNOs to compete aggressively for MVNO contracts, due to the greater risk of retail cannibalisation,[14] and that therefore MergeCo will have a more limited incentive to compete than the standalone Parties would in the counterfactual.[15] Hosting MVNOs contributes incremental cashflows and helps the host MNO monetise its network investment. For example, if an MNO declines to bid for an MVNO, the MVNO will simply obtain wholesale services from another MNO. This amounts to a theory of vertical foreclosure against MVNOs, which the Phase 1 Decision fails to substantiate; no analysis of MergeCo's ability or incentive to act in this way is presented. In any event, the market evidence suggests the precise opposite: BTEE, the leading player (by revenue) in the retail market, has in recent years been the most successful competitor in wholesale and has won multiple new contracts.

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[12] Phase 1 Decision, paragraph 718(e).

[13] As defined in the Phase 1 Decision.

[14] Phase 1 Decision, paragraph 591.

[15] Phase 1 Decision, paragraph 719.

1.10 The Transaction will have a pro-competitive effect on the wholesale market. It cannot lead to a reduction in the number of credible wholesale players, [REDACTED]. On the contrary, the significant increase in MergeCo's capacity will give MergeCo the ability and the incentive to compete more aggressively to obtain more wholesale traffic to help fill its expanded network, whilst its significantly-improved network quality will make it a more attractive proposition for wholesale customers.

The Phase 1 Decision's potential concerns related to network sharing arrangements are unrealistic and based on incorrect assumptions

1.11 As set out in **section 5**, the potential mechanisms of harm with respect to network sharing described in the Phase 1 Decision are unrealistic.

1.12 The Phase 1 Decision finds that MergeCo may have the ability and incentive to disrupt the effective functioning of the existing network sharing arrangements, which may limit the competitive constraint exerted by BTEE and VMO2 in the retail and wholesale markets. These concerns do not align with the facts and are based on incorrect assumptions. The two network sharing arrangements, MBNL and Beacon, are fundamentally different. The presence of MergeCo in these arrangements would have no adverse impact on either of BTEE's or VMO2's networks:

(i) MBNL is almost entirely limited to passive sharing (i.e. it does not include the active radio equipment) and, as accepted by the CMA, BTEE has rolled out a superior network compared to all other MNOs whilst being part of MBNL.[16] It negotiated [REDACTED], that ensure that both parties in MBNL have complete freedom of operation.

(ii) Far from being obstructed, VMO2's network will be turbocharged by enhancements to the Beacon active sharing arrangements.

1.13 Separately, the Phase 1 Decision suggests that the participation of MergeCo in both network sharing arrangements may result in an increased sharing of commercially sensitive information between MergeCo and BTEE and VMO2 and that this might reduce or postpone investments by MergeCo and the other MNOs. The Phase 1 Decision suggests this could lead to a reduced investment in industry-wide network quality.[17] The Parties believe that these concerns are unfounded and that the Transaction will increase investment and network quality across the market:

(i) Both MBNL and Beacon have strict information sharing safeguards in place, ensuring that MergeCo will not receive any information capable of influencing investment decisions. It is incorrect for the Phase 1 Decision to place only "limited" weight on contractual protections which contain information sharing safeguards.[18] This fails to reflect the market reality that these sophisticated contractual safeguards and the

[16] Phase 1 Decision, paragraph 759.

[17] Phase 1 Decision, paragraph 721.

[18] Phase 1 Decision, paragraph 741.

protocols which implement them have been operating effectively for over 10 years, and are underpinned by the Parties' (and their network sharing partners') compliance obligations under general competition laws.

(ii) In addition, the Phase 1 Decision's finding that information sharing through the network sharing arrangements (in breach of contractual safeguards) could result in a reduction in investment incentives ignores the fundamental rationale of the Transaction: to achieve the scale necessary to increase network investment significantly. In any event, this conclusion is undermined by the CMA's finding elsewhere in the Decision that network sharing agreements do not impact an MNO's ability to differentiate itself from its network sharing partner,[19] and the varied rollout strategies and network performance of the MNOs.

The Transaction will deliver substantial rivalry-enhancing efficiencies and relevant customer benefits and is fundamentally pro-competitive

1.14 As set out in **section 6**, the Transaction will create an MNO with the scale necessary to build a best-in-class network to compete with rivals and win customers, whilst bringing about very substantial rivalry-enhancing efficiencies and customer benefits. The effects of the Transaction, both for the Parties and for competition in the market, are inseparable from the transformative effect of achieving a step-change in the capacity, quality and competitiveness of their combined mobile network. These rivalry-enhancing efficiencies, on which the Parties have provided extensive evidence, are so significant that there will clearly be no substantial lessening of competition compared to the market conditions that would prevail if the Transaction does not proceed – on the contrary, competition will be substantially increased.

1.15 The Transaction will deliver a best-in-class network in terms of capacity (delivering at least a [REDACTED]% uplift compared to the sum of the Parties' standalone network capacities as at [REDACTED]), coverage (covering 86% of the UK population with the highest-quality 5G service by 2032), speeds (achieving average throughput multiple times faster than either of the Parties' standalone networks, even where the network is most congested) and reliability (elimination of 25% of "not-spots" from Day 1,[20] as well as improvements in speeds in [REDACTED] areas). The customer benefits will start from Day 1 with at least seven million customers experiencing a performance boost.

1.16 Having invested in a much higher-capacity network upfront, MergeCo will be largely uncongested well into the 2030s and MergeCo's marginal cost of serving additional customers on its network will be close to zero (as its capacity investment will have been incurred already). This will result in a much better experience for customers and will give MergeCo an enduringly stronger ability and incentive to compete aggressively for new customers and to retain existing customers than the Parties would have in the counterfactual – and stronger than BTEE and

[19] Phase 1 Decision, paragraphs 752 and 760.

[20] Defined as within the first 12 months from closing of the Transaction.

VMO2 have today. Longer term, MergeCo will also find it cheaper to expand capacity on an ongoing basis than VUK and 3UK could do acting independently.

1.17 MergeCo will have a strong incentive to roll out a best-in-class network. The JBP presents a robust, credible view of how the MergeCo network will evolve. The JBP is not only a plan but has been agreed by the shareholders as part of the commercial arrangements in the Transaction documents.[21] As evidenced by detailed economic modelling provided by the Parties, reducing the scope of the network, for example by reducing site numbers or limiting investment in 5G equipment, is not a profit maximising strategy as the potential cost savings are much smaller than the loss in competitiveness and hence revenues from no longer being able to have the 'best network' differentiator.

1.18 In particular, the Parties will be strongly incentivised to integrate their standalone networks as quickly as operationally possible. This will allow the Parties to realise the cost synergies factored into the JBP and fully benefit from the "best network" status as soon as possible, thereby enabling MergeCo to compete more strongly and win customers.

1.19 The Transaction will deliver large benefits to consumers and businesses beyond the mobile telecoms market, in full support of the Government's ambitions in its Wireless Infrastructure Strategy. These include significant improvements in mobile connectivity nationwide, the enabling of new use cases that rely on 5G SA / Advanced 5G and the rollout of alternative broadband technologies such as 5G FWA.

[21] The Initial Business Plan (including the Initial Budget and the Initial Merger Integration Plan) will be adopted at Closing in accordance with the process set out in the Contribution Agreement – see Merger Notice, from paragraph 8.6.

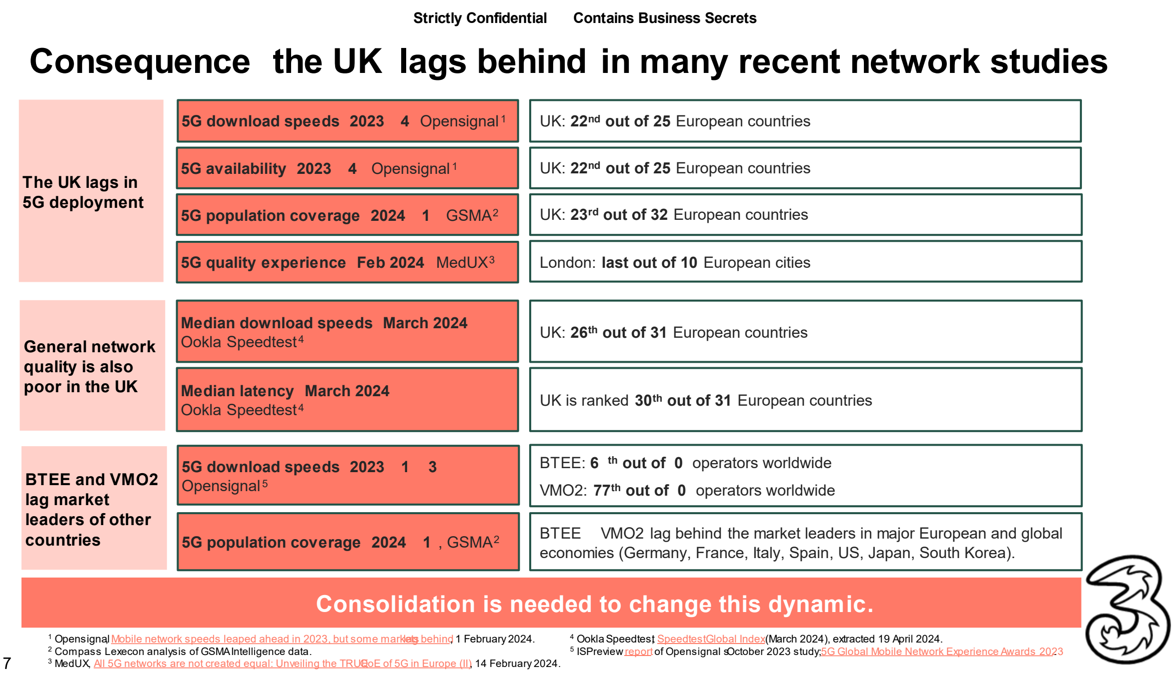
2. The "prevailing conditions of competition" are leading to the UK lagging behind international comparators in mobile network quality

The prevailing conditions of competition would see the UK continue to lag behind

2.1 The Phase 1 Decision does not take into account that the prevailing conditions of competition are not delivering good outcomes for UK consumers. Absent the Transaction, the UK will continue to lag behind other European countries in network quality metrics and will fall short of the UK Government's 5G ambitions.

2.2 Currently the UK ranks 22 out of 25 among European countries for both 5G download speeds and 5G availability (see Figure 2.1).[22] The latest 5G quality study by MedUx ranks London last for 5G quality in a comparison of ten major European cities, concluding that "*networks in London should improve across the board to offer the citizens a closer performance to the best-in-class Cities in Europe*".[23] This reality falls far short of the Government's ambitions for the UK to have world-class infrastructure fit for the digital age.

Figure 2.1
The UK lags behind on 5G



Source: 3UK site visit presentation (23 April 2024), slide 7

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[22] OpenSignal, 'Mobile network speeds leaped ahead in 2023, but some markets lag behind', 1 February 2024, available at: https://www.opensignal.com/2024/02/01/mobile-network-speeds-leaped-ahead-in-2023-but-some-markets-lag-behind (accessed 26 April 2024).

[23] MedUX, 'London's 5G Dilemma, EE Outshines locally, but London's Average Experience is Worst Among European Cities', 17 January 2024, available at: https://medux.com/blog/londons-5g-dilemma-ee-outshines-locally-londons-average-experience-worst-among-european-cities (accessed 26 April 2024).

2.3 This quality gap will progressively worsen in the future in the absence of the Transaction as technology continually advances and demand for data increases exponentially. 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*".[24] Ofcom's medium-growth scenario assumes that mobile data traffic will continue to grow by 40% per year up to 2035, with potentially faster growth depending on the availability of and demand for new, data-intensive use cases. This means that traffic could be 110 times greater in 2035 than in 2021, with capacity needs in UK mobile doubling every 25 months.[25] This pressure is exacerbated by the higher cost of 5G deployment compared to earlier technologies: deployment of a high-capacity 5G site to address demand growth in high-traffic areas is up to five times costlier than deploying 4G only.[26]

2.4 Neither Party currently has the scale to invest sufficiently to keep pace with this investment challenge resulting in a weakened ability to compete effectively which will [REDACTED] weaken [REDACTED] in the absence of the Transaction (in particular for 3UK given the high data use profile of its customer base).

2.5 As a consequence of the Parties' lack of scale the market has become increasingly bifurcated between:

(i) two MNOs (BTEE and VMO2) with the scale but not the incentive to invest sufficiently in mobile – each will continue to earn returns significantly above the cost of capital and generated on average 87% of annual positive mobile cashflows between 2020 and 2022, due in large part to their large mobile customer bases and large fixed bases to which they cross-sell; and

(ii) 3UK and VUK – whilst the positions of 3UK and VUK are distinct, what they have in common is that they are both sub-scale MNOs which would each continue to earn insufficient returns and generate a negligible share of mobile cashflows. This limits their ability to [REDACTED] and to challenge the market leaders to invest optimally in their networks.

2.6 Mobile is a capital-intensive industry characterised by economies of scale. Scale is therefore a critical driver of an MNO's ability to compete effectively. This significant gap in scale is demonstrated by financial performance: VUK and 3UK have been earning returns (economic ROCE) below the cost of capital (see Figure 2.2 below), with 3UK's returns even lower than VUK's. This reflects the fact that, as sub-scale players, the Parties face a disproportionately high cost base (relative to the size of their customer base and revenues), resulting in high unit

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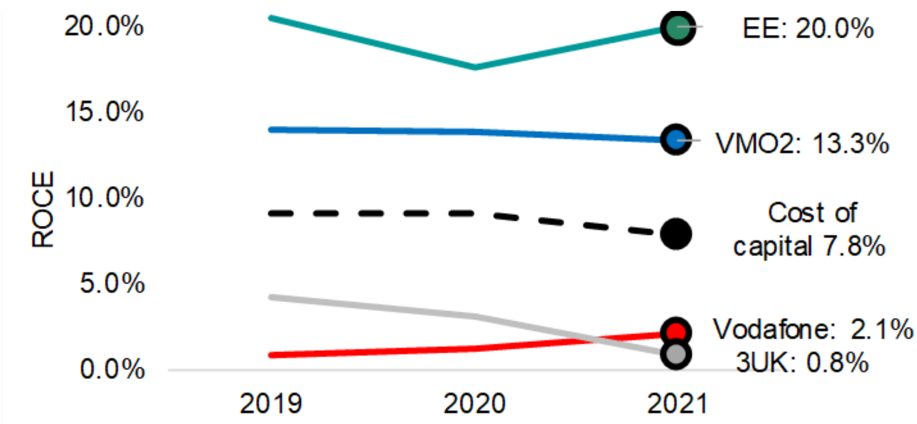
[24] Ofcom, 'Ofcom's future approach to mobile markets and spectrum – Conclusions paper', 6 December 2022, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0036/248769/conclusions-mobile-spectrum-demand-and-markets.pdf (accessed 26 April 2024).

[25] *Ibid.,* Figure 4.1 at paragraph 4.5. Ofcom's medium-growth scenario assumes that mobile data traffic will continue to grow by 40% per year up to 2035, with potentially faster growth depending on the availability of and demand for new, data-intensive use cases. This means that traffic could be 110 times greater in 2035 than in 2021, with capacity needs in UK mobile doubling every 25 months.

[26] Merger Notice, paragraph 2.50 and Figure 2.6.

costs and low profitability. In contrast, Ofcom has estimated that VMO2 and BTEE earn returns (economic ROCE) significantly above their cost of capital.

Figure 2.2
Ofcom analysis of MNOs' economic ROCEs



Source: Ofcom (mobile-spectrum-roce-analysis.xlsm downloaded from [https://www.ofcom.org.uk/consultations-and-statements/category-3/ofcoms future-approach-to-mobile-markets on 9 May 2023](https://www.ofcom.org.uk/consultations-and-statements/category-3/ofcoms future-approach-to-mobile-markets)).

2.7 The scale disadvantage of the Parties vis-à-vis BTEE and VMO2 and its consequences are clear from Figure 2.3 below. This shows the four MNOs' mobile EBITDA, capex and "cashflows" (proxied by EBITDA minus capex and in each case excluding spectrum purchases), evidencing that:

(i) BTEE and VMO2's mobile EBITDAs have grown over time and are significantly larger than each of the Parties'. By contrast, VUK and 3UK's EBITDA has reduced over time.

(ii) At the same time, BTEE and VMO2's levels of capex are similar to VUK and significantly greater than 3UK (at least over the period 2017 to 2019).

(iii) VUK and 3UK's mobile capex does not proportionally scale down (relative to that of BTEE and VMO2) in accordance with the Parties' lower levels of mobile EBITDA. This reflects that a significant element of the investments that the MNOs need to make are fixed or semi-fixed.

Figure 2.3
[REDACTED]

[REDACTED]

Notes: [1] Source: VMO2, BTEE and 3UK data as per Enders Analysis. VUK data based on VUK's internal allocation.
[2] Capex figures exclude spectrum.
[3] Cash = EBITDA Less capex.
[4] VUK: reflects a mobile only view based on allocations and includes 'below the line' charges (excluding brand).

2.8 As a consequence, the Parties are not and will not be able to challenge BTEE and VMO2 on network investment. The Parties' standalone ambitions fall far short of delivering Advanced 5G in the foreseeable future due to these ongoing capital constraints.

2.9 The rest of this section sets out how the competitive contribution of 3UK and VUK would evolve absent the Transaction. It is clear that, under these conditions of competition, the counterfactual will see weaker conditions of competition in the mobile market in which the UK will fall further behind international comparators. Without the Transaction, neither UK consumers nor UK businesses will benefit from the mobile quality and services enjoyed in other countries, which are needed to support economic growth.

3UK is [REDACTED] in the counterfactual

2.10 Absent the Transaction, contrary to the conclusion in the Phase 1 Decision, under the prevailing conditions of competition 3UK will continue to [REDACTED]".[27] Over more than two decades, 3UK has developed a reputation for poor network quality resulting from [REDACTED], which results in high customer churn. 3UK is – and absent the Transaction will remain – sub-scale. Its subscriber base does not generate sufficient revenues to cover its costs, it continues to earn insufficient returns and is increasingly unable to sustainably fund the levels of investment [REDACTED]. As set out in further detail below, previous attempts to break out of this negative spiral have proven unsuccessful and, with the anticipated growth in mobile data traffic, the gap in network performance (capacity and quality) will only widen.

2.11 Without the ability to sustainably make the required investments [REDACTED] in its network, [REDACTED]. As a consequence, 3UK will increasingly become [REDACTED] in the market with [REDACTED].

3UK is trapped in a circle of low scale, low returns, under-investment and no share of supply growth

2.12 3UK lacks scale as the smallest MNO in the UK, generating only around 40% of the revenues generated by each of BTEE and VMO2 and only half of VUK's revenues in Q1-Q3 2023. Unlike the two scale players, 3UK's financial position has deteriorated significantly over time. The simple fact is that in 2022 3UK generated around a quarter of their EBITDA (23% of BTEE and 29% of VMO2) while still needing to invest similar levels of capex to build and maintain a nationwide network (see Figure 2.4 below). This has resulted in [REDACTED] and returns below the cost of capital for many years, preventing further network investments required to improve 3UK's network reputation.

[27] Phase 1 Decision, paragraph 67.

Figure 2.4
3UK's 2022 mobile financials

[REDACTED]

Source: 3UK.

2.13 While 3UK has "*seen improvement in its network quality*" more recently,[28] [REDACTED]. As a consequence, [REDACTED]. Therefore, consumers do not *perceive* 3UK as having good network quality or coverage either and continue to rank it the lowest of the MNOs. 3UK's historic strategy of offering large and unlimited data bundles has resulted in 3UK carrying the largest share of traffic in the industry (despite having the smallest subscriber base) and by far the most data traffic per subscriber. Historically, this has resulted in [REDACTED].

2.14 [REDACTED].[29]

3UK's market share has not grown despite £2.3 billion investment between 2020 and 2022 [REDACTED]

2.15 In an effort to address traffic growth and congestion and prevent the gap with the market leaders from growing further, 3UK significantly increased its total investment during 2020-2022 to levels similar to BTEE and VMO2 (approx. £2.3 billion in capex, excluding spectrum, over three years). This investment, funded by the proceeds of the one-off sale of passive towers to Cellnex, has delivered a good basic 5G service (i.e. 5G NSA) with good 5G speeds in localised areas covered by the sites that have been upgraded (approx. [REDACTED]% of the 3UK network), [REDACTED]%) reliant on legacy technology. However, rather than being a sign of momentum indicating a change in fortunes, these network improvements from 2020 to 2022 have had a minimal impact on growth:

(i) [REDACTED]; and

(ii) [REDACTED].

2.16 The Phase 1 Decision found that 3UK has seen significant recent growth, particularly in alternative and growing revenue streams, such as business and FWA.[30] However: (i) 3UK's core mobile business has shrunk over the past three financial years, [REDACTED] (see Figure 2.5); and (ii) 3UK's share has either marginally declined or stagnated over several years (see Figure 2.6). [REDACTED]. Indeed, Enders Analysis commented that 3UK's scale remains stubbornly low, despite 3UK making a concerted effort and sensible strategic decisions.[31]

[28] Phase 1 Decision, paragraph 334.

[29] 3UK site visit presentation (23 April 2024), slide 57.

[30] Phase 1 Decision, paragraph 63.

[31] Annex CKH RFI-1 6.087.

Figure 2.5
3UK's core business has [REDACTED] over the last three financial years

[REDACTED]

Source: 3UK.

Figure 2.6
3UK is not growing despite £2.3 billion investment between 2020 and 2022

[REDACTED]

Source: Compass Lexecon analysis based on data from GSMA, VUK and 3UK.

3UK's true financial position is [REDACTED]

2.17 Contrary to the assertion in the Phase 1 Decision that 3UK will have both the ability and incentive to make capital investments, including in maintaining and improving its network absent the Merger,[32] 3UK does not generate sufficient free cash flow ("**FCF**") to be [REDACTED]. Mobile is a capital-intensive industry with significant, increasing working capital requirements. Significant network investment is required to keep pace with the ever-increasing data and quality requirements of evolving mobile services. Therefore, cashflow and returns, and not just EBITDA (which disregards capex and working capital requirements), are the key financial metrics in an investment-intensive industry such as mobile telecoms.

2.18 As illustrated in Figure 2.7 below, 3UK's accounting profitability metrics have been in decline since 2018 and its net profit after tax ("**NPAT**") and EBIT were both negative in 2023 (-£[REDACTED] and -£[REDACTED], respectively) whilst EBITDA fell [REDACTED]%. [REDACTED] £[REDACTED], whilst cashflows [REDACTED] £[REDACTED] [REDACTED].

Figure 2.7
3UK's financial performance 2017 2023

[REDACTED]

Source: 3UK.

2.19 The Phase 1 Decision finds that 3UK's performance over the period FY17 – FY22 has been stable and consistently profitable.[33] This does not take into account that [REDACTED] [REDACTED]. Further, 3UK's cashflow for the full year 2023 has been negatively impacted by 3UK's significantly declining EBITDA profitability of over [REDACTED]%. Growth in underlying costs, driven by significant inflationary pressures on operating costs, has significantly outpaced

[32] Phase 1 Decision, paragraph 65.

[33] Phase 1 Decision, paragraph 58.

gross margin growth. This has been the case even when the operating costs [REDACTED], 3UK's underlying EBITDA fell by [REDACTED]% and is still [REDACTED]% lower than in 2018.

2.20 Critically, as shown in Figure 2.2 above, 3UK's return on capital employed (ROCE) has been declining and below the industry's cost of capital since at least 2019, according to Ofcom.[34]

2.21 A proper assessment of 3UK's financial position therefore shows that it does not provide a sustainable basis to support any increase in investment.

[REDACTED]

2.22 The 2020-2022 increase in 3UK's capex to a similar level of that of BTEE and VMO2 has led to a serious deterioration in 3UK's financial position. [REDACTED]. Contrary to the view in the Phase 1 Decision [REDACTED],[35] [REDACTED]– see Figure 2.8 below.

Figure 2.
3UK's 2023 actual performance compared to 2021 5YP

[REDACTED]

Source: 3UK site visit presentation (23 April 2024), slide 16.

2.23 [REDACTED].

2.24 [REDACTED]. [REDACTED][36] [REDACTED].

2.25 [REDACTED].

[REDACTED]

2.26 As explained in the Parties' previous submissions, 3UK's network capacity will need to [REDACTED].

2.27 The Phase 1 Decision suggests that 3UK has successfully reduced congestion on its network since 2021 by increasing capacity.[37] As explained in Section 4.2.2 of the Pro-Competitive Effects Paper ("PCEP"), [REDACTED]% of 3UK's sites are currently congested when

[34] Ofcom's assessment of economic returns reflects the opportunity cost of assets today (rather than the amounts spent historically). Ofcom valued 3UK's spectrum at current replacement values (instead of the much higher amounts actually paid by 3UK), which significantly reduces the size of 3UK's capital base and correspondingly inflates 3UK's actual returns (which are still negative).

[35] Phase 1 Decision, paragraph 60.

[36] Phase 1 Decision, paragraph 65.

[37] Phase 1 Decision, paragraph 62.

considering a [REDACTED] Mbps congestion threshold, and [REDACTED].[38] Section 4.3.2 of the PCEP explains how [REDACTED]. In particular:

(i) 3UK customer surveys suggest that 3UK is losing customers due to network quality issues. [REDACTED] (as explained in further detail at paragraph 3.4(ii) below).

(ii) Going forward, [REDACTED].

CK Hutchison [REDACTED]

2.28 The CMA claims 3UK contributes positively to the group's profitability and revenue growth and as such there is no reason for CK Hutchison to cease its support of 3UK.[39] [REDACTED].

2.29 [REDACTED].

2.30 [REDACTED].

2.31 [REDACTED]. This inability for 3UK to generate a return is recognised clearly by Ofcom, which highlights 3UK's economic ROCE being well below Ofcom's own (WACC) measure of the cost of capital for the industry (see Figure 2.2 above).

2.32 Therefore, in the absence of the Transaction, [REDACTED].

*VUK is sub-scale and its financial position is such that it cannot generate sufficient returns **[REDACTED]***

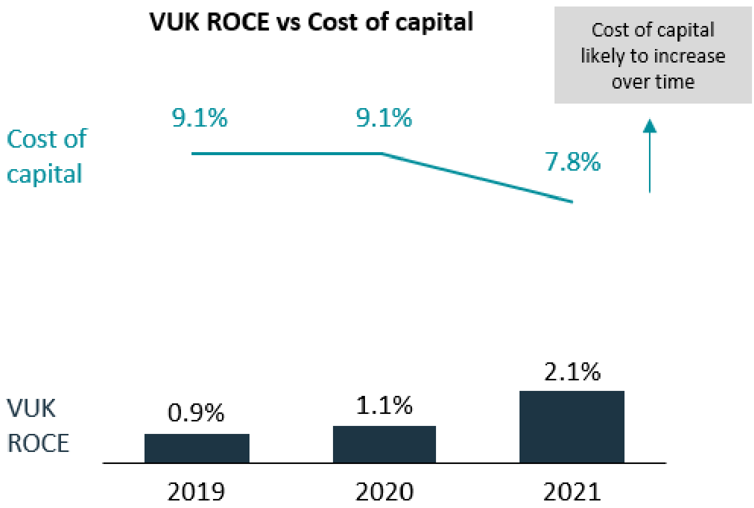
2.33 In the counterfactual, [REDACTED]. [REDACTED]. [REDACTED].

2.34 VUK's returns have failed to cover the cost of capital in recent years and, whilst they are slightly higher than 3UK, they are well below those achieved by BTEE and VMO2 (see Figure 2.9 below and Figure 2.2 above). It is against this background that VUK – as a sub-scale player – [REDACTED]. [REDACTED]– see Confidential Annex VF P1DR 2: VUK Internal Documents.

[38] [REDACTED], for the purposes of a comparison with the longer-term KPI forecasts for MergeCo, 3UK has prepared congestion forecasts up to 2034 as a standalone operator. See Figure 14 of the PCEP for further details.

[39] Phase 1 Decision, paragraph 66.

Figure 2.
VUK's unsustainable returns



Source: Ofcom research (2021).

2.35 For example, in FY22 and FY23, capex prioritisation resulted in the number of 5G sites to be deployed [REDACTED] – see Figure 2.10 below. Indeed, VUK's 5G SA rollout primarily targets large urban centres.[40]

Figure 2.10
Number of 5G high band sites forecasts and actuals[41]

[REDACTED]*Source: Frontier Economics analysis based on VUK data*

2.36 There are three key factors likely to make these constraints more severe over time:

(i) **Vodafone's inability to increase capital expenditure**. [REDACTED]. When Vodafone announced plans to increase investments in May 2021, the announcement led to an 8.9% drop in its share price (approx. £3.5 billion decline in market capitalisation) [REDACTED].[42]

(ii) **Competing demands for capital across the Vodafone group**. VUK is just one of several Vodafone businesses which compete for a share of the group's finite capex budget. [REDACTED]. The CMA's Phase 1 Decision also recognises that "*VUK has*

[40] Vodafone, 'Vodafone launches 5G Ultra, the UK's first 5G Standalone mobile network for consumers', 23 June 2023, available at: https://www.vodafone.co.uk/newscentre/press-release/launch-5g-ultra-uk-first-5g-standalone-network-for-consumers/ (accessed 27 March 2024).

[41] VUK internal data, Issues Meeting Presentation, slide 20.

[42] The Times, 'Investment plans spook shareholders at Vodafone', 19 May 2021, available at: https://www.thetimes.co.uk/article/investment-plans-spook-shareholders-at-vodafone-z5b0v0s72 (accessed 19 August 2023).

underperformed against Vodafone's other operating companies, and its margins have been in decline over recent periods".[43] [REDACTED] (see Confidential Annex VF P1DR 1: VUK Counterfactual, Section 2):

(a) the CMA's use of EBITDA as the appropriate measure of accounting profitability is flawed. The telecommunication industry is highly capital-intensive and therefore a focus on EBITDA wholly ignores the significant impact on network operators of the costs of capital investment (including the acquisition of spectrum) through depreciation and amortisation. Instead, the relevant measure of accounting profitability should be EBIT.

(b) In its assessment of VUK profitability, FCF and ROCE, the Phase 1 Decision ignores [REDACTED]:

(I) [REDACTED] (see Confidential Annex VF P1DR 1: VUK Counterfactual, Section 3 for more details).

(II) Contrary to the Phase 1 Decision, Vodafone does include BTL charges when assessing OpCos on their own (especially in relation to M A transactions) – see Confidential Annex VF P1DR 1: VUK Counterfactual, paragraph 2.2. Additionally, Ofcom correctly includes BTL charges when calculating VUK's ROCE – see Confidential Annex VF P1DR 1: VUK Counterfactual, paragraph 2.3.

In particular, within Vodafone group:

(c) [REDACTED][44] [REDACTED].

(d) [REDACTED].

(e) Indeed, Vodafone's FY23 results presentation identifies a strategy of reallocating capex from "*lower to higher ROCE markets*" with VUK highlighted as a business with ROCE below WACC. Vodafone Spain's ROCE has also been persistently negative, which contributed to a significant downsizing of Vodafone's investment plans in Spain and the eventual sale of Vodafone

[43] Phase 1 Decision, paragraph 70(b).

[44] Vodafone, 'Vodafone Group Plc Annual Report 2021', available at: https://investors.vodafone.com/sites/vodafone-ir/files/2021-05/vodafone-annual-report-2021.pdf (accessed 29 April 2024) stating, at page 20, "***Disciplined capital allocation to drive shareholder returns*** *[…] We are now a matrix of country operations, products and platforms and will continue to be disciplined in managing our portfolio, following three principles: (i) we aim to continue to focus on the converged connectivity markets in Europe, and mobile data and payments in Africa; (ii)* ***we aim to achieve returns above the local cost of capital in all of our markets; and (iii) we consider whether we are the best owner (i.e. whether the asset adds value to the Group and the Group adds value to the asset) and whether there are any pragmatic and value-creating alternatives****. Our capital allocation priorities are to support investment in connectivity infrastructure; maintain a robust balance sheet; and support improved shareholder distribution".*

Spain.[45] Similarly, on 15 March 2024, Vodafone announced the sale of Vodafone Italia to Swisscom (another OpCo reported to have had persistent ROCE below WACC).[46] [REDACTED].

(iii) **Competing non discretionary demands for capex within VUK**. VUK's 5G rollout also competes with non-discretionary expenditure, including:

(a) HRV compliance: VUK has budgeted between [REDACTED] for swapping out Huawei equipment in FY25 and FY26 – around [REDACTED]% of its network capex budget.

(b) Beacon unwind: VUK has budgeted £[REDACTED] in each of FY25 and FY26 – around [REDACTED]% of its network capex budget.

(c) Other compliance obligations: Over the next four years (FY24 – FY29), VUK has budgeted a total of c. £[REDACTED] capex investments (i.e. exclusive of any ongoing opex costs) to ensure compliance with Telecoms Security Regulations and SRN obligations.

2.37 Alongside VUK's 5G strategy, [REDACTED].[47] [REDACTED].

(i) [REDACTED].

(ii) [REDACTED].

(iii) [REDACTED].

Figure 2.11
Most cited reasons for leaving Vodafone that are network related

[REDACTED]

Source: Frontier Economics analysis based on GfK Tech 360 survey data (January – March 2023).

2.38 VUK's [REDACTED] as a result of its lack of scale and limited ability to invest. [REDACTED].

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[45] Vodafone, 'Sale of Vodafone Spain', 30 October 2023, available at: https://www.vodafone.com/news/corporate-and-financial/sale-of-vodafone-spain (accessed 26 April 2024).

[46] Vodafone, 'Reshaped European footprint, €8bn sale of Vodafone Italy €4bn capital return', 15 March 2024, available at: https://www.vodafone.com/news/corporate-and-financial/reshaped-european-footprint-e8bn-sale-of-vodafone-italy-and-e4bn-capital-return (accessed 26 April 2024).

[47] For the purposes VUK's ordinary course analysis of congestion today, congestion is defined as [REDACTED] Mbps. [REDACTED].

3. The Phase 1 Decision does not reflect the real conditions of competition in the retail mobile services market – the Transaction will not give rise to an SLC due to horizontal unilateral effects

3.1 The Phase 1 Decision finds that there is a realistic prospect the Transaction will result in a substantial lessening of competition in the retail mobile services market.[48] The CMA's concerns are unfounded. In summary, and as explained further below:

(i) **Neither party is a significant competitive force in retail and neither Party exerts a "strong competitive constraint on other operators in the supply of retail mobile services"**:[49]

(a) 3UK's lack of scale to invest sufficiently in nationwide network improvements has contributed to high levels of congestion and a longstanding reputation for poor network quality, thereby limiting its ability to win and retain customers. 3UK is the smallest MNO (by revenues and subscribers) and its market share has stagnated (despite projections from the European Commission to the contrary in 2016).[50] In the business segment, 3UK has a [REDACTED].

(b) VUK's ability to compete is [REDACTED] due to lack of scale [REDACTED].

(ii) **The Parties are not each other's closest competitors**: the Phase 1 Decision claims "*there is a material level of switching between the Parties*",[51] yet underplays that [REDACTED].

(iii) **The Phase 1 Decision mischaracterises the market by downplaying the competitive constraints from other players**:

(a) BTEE and VMO2 are mischaracterised in the Phase 1 Decision as competing less aggressively than 3UK and, in some respects, VUK.[52] In reality, they are clear market leaders, acting as strong competitive constraints on the Parties in terms of their retail mobile propositions. The evidence speaks for itself, as they are the most important rivals to which the Parties lose customers in retail mobile. As the Phase 1 Decision recognises, they have "*the ability to cross-sell to large, fixed customer bases*".[53]

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[48] Phase 1 Decision, paragraphs 553 – 556.

[49] Contrary to Phase 1 Decision, paragraph 341 and see also paragraph 274.

[50] Merger Notice, paragraph 11.27.

[51] Phase 1 Decision, paragraph 384(c).

[52] Phase 1 Decision, paragraph 398.

[53] Phase 1 Decision, paragraph 397.

(b) The Phase 1 Decision incorrectly claims that the market is dominated by the four MNOs and that MVNOs operate on the "fringe" and exert a very limited competitive constraint.[54] This is not reflective of the fact that MVNOs as a group account for the largest share of consumer retail gross adds ([20-30]%) in the market in 2023.[55] MVNOs are the fastest growing players in the consumer retail market (having grown from a [10-20]% aggregate share of supply in 2016 to [20-30]% in Q3 2023), exerting strong and growing competitive pressure. Even individually, the largest MVNOs (Tesco Mobile and Sky Mobile) account for similar shares of gross adds when compared to the Parties. The Decision shows that Sky Mobile, Tesco Mobile and other MVNOs had the strongest growth in net adds in the consumer retail segment (excluding pre-paid) since the start of 2022.[56] MVNOs are very effective competitors, and with the dynamic growth of the MVNO sector, will become even more so.

(iv) **Smaller MNOs do not have stronger incentives to compete aggressively** such that the increased scale of MergeCo will mean it is therefore less incentivised to compete. The Phase 1 Decision finds that smaller MNOs may "*have stronger incentives to increase their revenue, either through competing aggressively to achieve subscriber growth or seeking to find additional revenue streams*".[57] The hypothesis that an operator's incentive to compete aggressively decreases with scale disregards that (i) operators price-discriminate, targeting specific customer segments through the offer of differentiated tariffs, sub-brands, tailored discounts, "save offers", and "under-the-counter" deals; and (ii) the amount of capacity deployed is a key determinant of the intensity of competition in the market. The assertion in the Phase 1 Decision:

(a) ignores that it is the Parties' lack of scale that constrains their ability to compete in a meaningful way in the first place, due to the inability to fund sustainable investments to [REDACTED] to rival the large, converged players; and

(b) is inconsistent with the empirical evidence showing the constraint BTEE and VMO2 pose on the Parties today in terms of their retail mobile services.

Having invested in a much higher-capacity network upfront, MergeCo's marginal cost of serving additional customers on its network will be close to zero (as its capacity investment will have been incurred already), giving it a much stronger incentive to compete aggressively than 3UK and VUK would have in the counterfactual.

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54 Phase 1 Decision, paragraphs 427 and 554.

55 Confidential Annex S109-6 25.001.

56 Phase 1 Decision, Table 13 and paragraph 272. The Parties note that the heading of Table 13 appears to be incorrect, as we understand the Table excludes pre-paid (not post-paid).

57 Phase 1 Decision, paragraph 277(b).

(v) **The Transaction will have a pro competitive impact in retail mobile services** – it will add significant new capacity to the market and stimulate greater competition in the retail market, including increasing BTEE and VMO2's incentives to compete.

Neither of the Parties is a significant competitive force

3.2 Whilst the competitive positions of VUK and 3UK are distinct from each other in the retail mobile services market, both are increasingly unable to exert a strong competitive constraint on other competitors. Neither acts as a significant competitive force.

3.3 Each of VUK and 3UK is sub-scale and both have failed to achieve share of supply growth in retail mobile services.[58] They are earning insufficient returns, below the cost of capital (as Figure 2.2 shows), and are increasingly unable to invest sustainably to support further network investment. Indeed, Ofcom has acknowledged that MNOs "*face a challenging investment climate*" which may "*dampen MNOs' incentives to invest and could slow down the rollout of 5G*".[59] Neither VUK nor 3UK has the scale to meet this investment challenge.

3UK

3.4 There is no evidence to support a conclusion that 3UK exercises a stronger constraint on other players than its market share would suggest.[60] All the evidence points to the contrary:

(i) 3UK has an enduring reputation for poor network quality in retail mobile services, [REDACTED].

(ii) 3UK continues to have the highest churn of all MNOs, [REDACTED].[61]

(iii) [REDACTED].

Figure 3.1
5G sites 2020 vs current plans 2020[REDACTED]

[REDACTED]

Source: 3UK data.

(iv) 3UK's share of supply has stagnated at its low, sub-scale level for many years (see Figure 2.6 above). 3UK has not grown its core business and, in fact, its core subscriber base has reduced by [REDACTED]% since 2020. Evidence cited in the Phase 1

[58] Issues Meeting Presentation, slide 23.

[59] Ofcom, 'Ofcom's future approach to mobile markets and spectrum – Conclusions paper', 6 December 2022, paragraphs 1.9 – 1.10, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0036/248769/conclusions-mobile-spectrum-demand-and-markets.pdf (accessed 26 April 2024).

[60] Phase 1 Decision, paragraph 274.

[61] Merger Notice, Figures 11.3 and 11.5; and Confidential Annex CKH S109-5 1.265.

Decision indicates that 3UK does not exercise more of a constraint than its market share would suggest: the Phase 1 Decision notes that 3UK had modest net subscriber additions in the consumer retail segment (excluding pre-paid) since the start of 2022, including negative net adds in two of the six quarters.[62]

(v) 3UK's network [REDACTED]. Investment constraints will mean it is unable to improve its network capabilities, while customer needs are expected to increase over time.

(vi) [REDACTED]. Given the importance of network quality to competition in relation to mobile services, 3UK's [REDACTED].

(vii) 3UK has [REDACTED].[63]

(viii) 3UK's [REDACTED] growth in the SOHO segment [REDACTED]. [REDACTED] ([80-90]% [REDACTED]). 3UK has a share of supply of [REDACTED] [0-5]% by subscribers and [0-5]% by revenue in the business segment overall. Although 3UK has made some [REDACTED] in the SOHO segment, [REDACTED]. 3UK is [REDACTED].

VUK

3.5 Whilst VUK's position is distinct from 3UK, VUK also does not act as a strong competitive force in the market:

(i) [REDACTED].

(ii) VUK's low returns [REDACTED], worsening its competitive position in retail mobile services going forward. This is reflected in VUK's forecasts of the number of 5G sites it would deploy over the coming years [REDACTED] – see Figure 2.10 and Figure 3.1 above for further detail.

(iii) [REDACTED]. VUK analyses complaint drivers on an ongoing basis. For example, see Figure 2.11 above, which shows that the most cited reasons for leaving VUK are network related.

(iv) [REDACTED] ([REDACTED]) [REDACTED].[64]

No closeness of competition

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[62] Phase 1 Decision, paragraph 272 and Table 13.

[63] See evidence provided in response to RFI 7, question 4 and paragraph 15.267 of the Merger Notice.

[64] See evidence provided in response to RFI 7, question 3 and paragraph 15.270 of the Merger Notice.

The Parties are not close competitors in retail mobile services[65]

3.6 The Phase 1 Decision concludes that 3UK and VUK are close competitors.[66] The evidence suggests the contrary. In particular:

(i) The diversion ratios between the Parties do not indicate that they are close competitors – the Parties' customers are more likely to switch to VMO2 or BTEE or to one of the many MVNOs than to the respective other Party.

(ii) The Parties are not close competitors in business retail where there is limited, if any, overlap.

(iii) Internal documents evidence that they do not consider each other to be close competitors (see Confidential Annex VF P1DR 2: VUK Internal Documents and Confidential Annex CKH P1DR 1: CK Hutchison Internal Documents).

Switching data

3.7 For the purposes of assessing closeness of competition between the Parties and calculating switching ratios, the representativeness of the data is critical. For this reason the Parties consider that GfK data should be favoured (rather than the MNP data to which the Decision refers[67]) due to (i) the rigorous survey methodologies put in place by GfK to minimise inaccuracies and ensure that switching is representative of the UK population,[68] and (ii) MNP data being insufficiently representative of switching in the pre-paid segment, in particular (as only c. [0-5]% of pre-paid customers port their numbers).[69] Indeed, the CMA recognises that "*[t]he 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)*".[70]

3.8 Ultimately, irrespective of the choice to use MNP or GfK data, both datasets show that the Parties are not close competitors and MergeCo will continue to be constrained by BTEE, VMO2 and the MVNOs post-Transaction.

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65 Phase 1 Decision, paragraph 203 in which the CMA states: "*The Parties overlap in the supply of retail mobile telecommunications services to end consumers*".

66 Phase 1 Decision, paragraph 422.

67 Phase 1 Decision, paragraph 349.

68 The Parties strongly disagree with the Phase 1 Decision's statements that there may be a "*response error*" in the GfK figures, especially "*if recall is inaccurate*", and that the CMA is concerned about "*sample bias when respondents are drawn from a panel, in particular from an online panel, where sample recruitment does not rely on randomised methods*" (Phase 1 Decision, paragraph 349): (i) GfK employs rigorous survey methodologies to minimise inaccuracies and response errors – see Annex VF 15.00005. [REDACTED]. It is reasonable to assume that individuals qualifying for the survey based on recent switching are likely to recall accurately what their current and immediately preceding tariff plans were. [REDACTED].

69 Even if using MNP data, the switching rates also do not support the CMA's finding that the Parties are close competitors.

70 Phase 1 Decision, paragraph 349.

3.9 The GfK data for the consumer segment shows that VMO2, BTEE and the MVNOs (on aggregate) are more important switching destinations for the Parties' leavers than the respective other Party. Whilst the Phase 1 Decision at paragraph 353 states that switching ratios to the other Party do not need to be the highest "*to indicate that the Parties are close competitors*", the data shows:

(i) A [REDACTED] gap in switching from 3UK to VMO2 versus switching to VUK ([10-20] percentage points, for GfK data);

(ii) A [REDACTED] gap in switching from VUK to VMO2 versus switching to 3UK ([20-30] percentage points);

(iii) A [REDACTED] gap between BTEE and 3UK ([10-20] percentage points); and

(iv) More than [20-30]% of those switching away from VUK and 3UK went to MVNOs ([REDACTED]).

See Figure 3.2 below for further detail.

Figure 3.2
Switching from VUK and 3UK to MNOs and MVNOs – Total consumer – FY23

[REDACTED]

Source: Frontier Economics analysis based on GfK Tech360 data.

[REDACTED].

3.10 The CMA's assessment that the Parties might be close competitors relies on three subsegments of the mobile retail market, namely consumer tariffs with unlimited data allowances, pre-paid tariffs and SOHO customers.[71] These concerns are unfounded:

(i) **Unlimited**: [50-60]% of VUK's leavers joined BTEE ([20-30]%) or VMO2 ([20-30]%) and [20-30]% joined MVNOs, with [REDACTED] [10-20]% joining 3UK. Similarly, [50-60]% of 3UK's leavers joined BTEE ([20-30]%) or VMO2 ([20-30]%), [20-30]% joined MVNOs and [REDACTED] [20-30]% joined VUK.[72]

(ii) **Pre paid**: [40-50]% of VOXI's leavers joined BTEE ([10-20]%) or VMO2 ([30-40]%), [20-30]% joined the Vodafone brand and [REDACTED] [10-20]% joined 3UK ([5-10]% joined Three and [0-5]% joined SMARTY). [30-40]% of SMARTY's leavers joined BTEE

[71] Phase 1 Decision, paragraph 359.

[72] Frontier Economics analysis, MNP data as at FY 2023 (April 2022 – March 2023) and Issues Meeting Presentation, slide 28.

or VMO2, with [20-30]% joining other MVNOs and [20-30]% joining VUK ([10-20]% joined the Vodafone brand, [0-5]% joined VOXI and [0-5]% joined Talkmobile).[73]

(iii) **SOHO**: [60-70]% of VUK's leavers joined BTEE ([30-40]%) or VMO2 ([20-30]%) and [20-30]% joined MVNOs, with [REDACTED] [10-20]% joining 3UK.[74] Similarly, [50-60]% of 3UK's business customer leavers joined BTEE or VMO2 and [20-30]% joined MVNOs, with [20-30]% joining VUK.[75]

The Parties are not close competitors in business retail where there is limited, if any, overlap

3.11 The Phase 1 Decision finds "*signs of [the Parties] competing more closely in the retail business segment in the near future*".[76] 3UK introduced a [REDACTED] business offering in 2020, focusing on SOHO / micro businesses (which is an adjacent segment to the consumer retail market), whereas VUK's longstanding focus is on large businesses (corporates and the public sector, from which it generates the majority of its business revenue). In consequence, there is extremely limited competitive interaction between the Parties. This is supported by the CMA's questionnaire to business customers of the Parties, where 3UK was not listed as a mobile operator considered or approached by any current VUK customer.[77]

3.12 The only segment in which both Parties are present, albeit to very different degrees and with different propositions, is SOHO, where, as explained above, switching data demonstrates the lack of closeness of competition between the Parties. 3UK will not become a closer competitor to VUK absent the Transaction, for the reasons set out at paragraph 3.4 above.

Internal documents evidence that the Parties are not close competitors

3.13 The Parties summarise how their internal documents show that they do not consider each other to be close competitors in Confidential Annex VF P1DR 2: VUK Internal Documents and Confidential Annex CKH P1DR 1: CK Hutchison Internal Documents.

The Phase 1 Decision mischaracterises the competitive dynamics for retail mobile services by downplaying the constraints from other players

3.14 The Phase 1 Decision downplays the competitive constraints placed on the Parties by BTEE, VMO2 and MVNOs. The constraints posed by each are explained in the paragraphs that follow but, first, it is important to recall the overall dynamics of competition in retail mobile services.

[73] Frontier Economics analysis, GfK data as at FY23 (April 2022 – March 2023) and Issues Meeting Presentation, slide 29.

[74] Merger Notice, Table 15.29.

[75] Merger Notice, Table 15.30. As explained in the response to RFI 3, question 27, 3UK does not split its business porting data by business sub-segment in the ordinary course of business.

[76] Phase 1 Decision, paragraph 383.

[77] Phase 1 Decision, paragraphs 363 – 364.

3.15 Two key parameters of competition in the retail mobile services market are price and quality. This is recognised by the CMA at paragraph 490 of the Phase 1 Decision: "*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*".

3.16 Investment in an MNO's network has an impact on its competitiveness in retail mobile services both in terms of the price and quality parameters. See paragraph 3.31 *et seq.* and 6.21 *et seq.* below for a further explanation of how MergeCo will *increase* competitive rivalry from BTEE and VMO2 post-Transaction.

BTEE and VMO2

3.17 The Phase 1 Decision is incorrect to characterise BTEE and VMO2 as "*compet[ing] less aggressively than 3UK and, in some respects, VUK*",[78] and to suggest that competition is driven by VUK and 3UK alone.[79]

3.18 In reality, BTEE and VMO2 impose strong competitive constraints on the Parties in the supply of retail mobile services. The evidence, in addition to their sheer size and financial strength, speaks for itself:

(i) BTEE and VMO2 are the market leaders in retail mobile services. BTEE has the highest share of supply in the retail mobile services market by revenue ([20-30]%) and the second highest share by subscribers ([20-30]%). VMO2 is the largest MNO in terms of subscribers and the second largest in terms of revenue, with a share of supply of approximately [20-30]% by revenue and subscribers.

(ii) BTEE and VMO2 are the most important rivals to which the Parties lose customers. This is evidenced by the switching data presented in Figure 3.2 above, which shows that the two most popular destinations for switchers away from VUK and 3UK are BTEE and VMO2. For VUK customers, [20-30]% and [30-40]% switch to BTEE and VMO2, respectively. For 3UK customers, [20-30]% and [30-40]% switch to BTEE and VMO2, respectively.

(iii) BTEE and VMO2 have strong brands, which contribute to their competitive strength. Their brands are strengthened by their substantial positions in fixed telecoms services and influenced by customer perceptions of their network quality:

(a) BTEE has consistently been ranked as having the best network amongst the UK MNOs, and this has been a prominent feature of its marketing over the last 10 years. BTEE even has a specific webpage dedicated to this topic citing the

[78] Phase 1 Decision, paragraph 422(b).

[79] See for example Phase 1 Decision, paragraph 398, which states "*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*."

evidence of its claims.[80] BTEE frequently cites the rankings of RootMetrics, and in particular the fact that RootMetrics has rated EE as the UK's best network 21 times in a row. See Figure 3.3 below:

Figure 3.3
Example of EE marketing dated 2 January 2024

Source:https://newsroom.ee.co.uk/ee-named-the-uks-best-mobile-network-21-times-in-a-row--what-does-it-mean-for-you/.

BTEE's claim that is has the best network is sometimes made without qualification, but is often made with reference to specific metrics, use cases or technology – for example, see Figure 3.4.

Figure 3.4
Example of EE marketing dated 2 January 2024

Here is a snapshot of the mobile awards EE has won following the independent testing conducted by RootMetrics® throughout the UK:

1. The UK's best network 21 times in a row
2. The UK's most reliable network
3. The UK's fastest network
4. The UK's best network for mobile gaming
5. The UK's most reliable network for mobile gaming
6. The UK's best network for video performance
7. The UK's best network for calls, data, and accessibility

Source: https://newsroom.ee.co.uk/ee-named-the-uks-best-mobile-network-21-times-in-a-row--what-does-it-mean-for-you/

As explained further below (see paragraph 3.19), BTEE has been able to maintain this status without having to compete aggressively at the network investment level.

[80] EE, 'EE Network Claims Recognition – read the evidence behind our claims', available at: https://ee.co.uk/why-ee/claims (accessed 25 April 2024).

(b) The strength of VMO2's brand has been an important driver of its competitive strength and its position as the largest MNO in the consumer segment over the last few years. VMO2's network is competitive in terms of the important parameters of coverage, reliability and consistency. For example, VMO2 has been named the most reliable network (based on voice coverage and retainability and data success rates) in several surveys.[81] This performance is based on it having the largest holding of low-band spectrum, which are the best frequencies for wide-area and indoor coverage (i.e., reliability).

(iv) BTEE and VMO2 are both large, converged players. The Phase 1 Decision erroneously finds that "*a converged entity … will potentially have less incentive to disrupt the market, and this could potentially result in higher retail prices over time*".[82] As a matter of fact, each of BTEE and VMO2 clearly has an aggressive convergence strategy and can and do leverage their fixed customer bases to increase the competitive constraints they pose on the Parties by cross-selling fixed and mobile services. As the CMA recognises, they have "*the supply of retail mobile services and the ability to cross-sell to large, fixed customer bases*".[83]

(a) VMO2 is focused on the integration and building of its national FTTP network, while introducing more aggressive converged offers to the market via its Volt proposition.

(b) BTEE is introducing more aggressive converged offers which the Parties believe will drive an accelerated rate of convergence in the near term. For instance, as of April 2024, BTEE offers customers £20 per month off on new unlimited data handset or SIM Only plans to customers who choose or switch to EE broadband.[84]

(v) Although the UK has historically lagged behind other countries in terms of the uptake of converged offers, the evidence suggests that uptake is increasing as a result of the BTEE and VMO2 mergers (and Sky's entry into mobile). The share of households taking fixed-mobile deals is now around 25%.[85] Analysys Mason forecasts show the UK moving into line with EU average, reaching 40% by 2028. Accordingly, BTEE, VMO2 and Sky have significant potential to further grow their converged customer bases, as they have a large existing base of fixed customers to which they can cross-sell. In contrast, the Parties do not have strong fixed positions – VUK has a small fixed offering that caters for a fixed customer base of [REDACTED] acquired over eight years

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[81] GWS, 'UK mobile network performance', 24 April 2018, available at: https://gwsolutions.com/most-reliable-operators-in-uk/ (accessed 20 December 2023).

[82] Phase 1 Decision, paragraph 418(f).

[83] Phase 1 Decision, paragraph 397.

[84] EE, 'Choose or switch to EE broadband', available at: https://ee.co.uk/unlock-unlimited?CTTag=CT_Sal_HP_WTEE_C2_UnlockUnlimited_2023 (accessed 19 April 2024).

[85] Analysys Mason DataHub; Analysys Mason Fixed-Mobile Convergence quarterly metrics, April 2023.

through reselling fixed network access (along with a very limited FWA mobile product), while 3UK does not supply any fixed products (its limited FWA offering relies on mobile technology).

3.19 Despite this strong competition at the retail level, BTEE and VMO2 currently do not face a third scale network competitor and are not incentivised to invest fully in their networks. BTEE and VMO2 invest "just enough" to retain their positions in the mobile market, and instead focus their investment on broadband services.[86]

MVNOs exercise a strong and growing competitive constraint

3.20 The CMA claims that the market is oligopolistic and that it is dominated by the four MNOs, with Sky Mobile exerting some constraint whilst the constraint from other MVNOs is very limited (due to their inability to compete on quality and dependence on wholesale terms offered by MNOs).[87] This is incorrect – the Parties and the other MNOs face significant competition from many strong MVNO players in the retail mobile market.

3.21 MVNOs are, in fact, the **fastest growing players** in the retail mobile services market, exerting strong and growing competitive pressure.

(i) Consumer retail net adds in Figure 3.5 below show that Sky Mobile, Lebara, other MVNOs, iD Mobile and Tesco Mobile (in that order) are the fastest growing operators since 2020 and have added significantly more subscribers than the Parties (and indeed than any other MNO) over that period. This evidence is inconsistent with the view in the Phase 1 Decision that MVNOs exert a weak competitive constraint and cannot compete on price due to the wholesale terms they are offered.

Figure 3.5
Net adds consumer retail 1 2020 – 4 202 3

[REDACTED]

[REDACTED].

(ii) The competitive constraint provided by MVNOs has been recognised by the UK Government in its Wireless Infrastructure Strategy Report which states that "*[t]he affordability of MVNO services and the range of tailored products MVNOs offer has helped support competition in the market*".[88] Enders Analysis recognises that MVNOs

86 Merger Notice, paragraphs 15.208 and 15.211.

87 Phase 1 Decision, paragraphs 416 and 431.

88 UK Government, 'UK Wireless Infrastructure Strategy Report', 11 April 2023, page 40, available at: https://assets.publishing.service.gov.uk/media/64357c81877741001368d7fd/uk_wireless_infrastructure_strategy.pdf (accessed 26 April 2024).

"*have been performing particularly strongly of late, easily surpassing the mobile network operators … in terms of net subscriber additions since 2021*".[89]

(iii) MVNOs' overall customer base has grown by 85% from c.9.1 million connections at the end of March 2016 to c.16.8 million connections by the end of 2023, reaching a combined share of supply of [10-20]% of the total retail market (an increase of 8 percentage points since March 2016).[90] This trend is the inverse of the Parties', which have lost a significant number of customers to MVNOs, [REDACTED].[91]

(iv) In particular, compared with the MNOs, Lebara and Sky Mobile had stronger net growth than any of the MNOs since the start of 2022. Lebara has had the strongest net growth since the start of 2022, recently surpassing Sky Mobile.[92]

(v) Contrary to the finding in the Phase 1 Decision,[93] Tesco Mobile – which is the largest MVNO in the UK – operates entirely *independently* of VMO2, and should therefore be treated as a separate strategic rival that will constrain MergeCo.[94]

3.22 The evidence shows that **MVNOs compete aggressively on price**. According to the Phase 1 Decision, the monthly prices for PAYM SIMO 12-month tariffs were cheapest for Tesco Mobile, Sky Mobile and iD Mobile.[95] According to the Phase 1 Decision, MVNOs offered the lowest prices for unlimited data pre-paid tariffs, 12-month PAYM SIMO tariffs and 24-month PAYM SIMO tariffs.[96] This is clear evidence that they are able to receive good terms from MNOs in the wholesale market (see further section 4 below).

3.23 Many MVNOs (such as Tesco Mobile, Lebara, Lycamobile and iD Mobile) supply a **full range of service offerings** including tariffs with unlimited data allowances.[97] They can offer

[89] Confidential Annex ILR 1 and Enders Analysis, 'A strengthening force: MVNOs in UK mobile', 8 February 2024, available at: https://www.endersanalysis.com/reports/strengthening-force-mvnos-uk-mobile (accessed 26 April 2024).

[90] Tesco Mobile is included in this analysis as it operates independently from VMO2 (its 50% shareholder) with a different management team, brand and commercial and pricing strategy. Analysis excludes Virgin Mobile.

[91] Merger Notice, paragraph 15.217; Figure 15.11; and Figure 15.12.

[92] Issues Letter Response, paragraph 3.16. Since the start of 2022 net adds in the consumer retail market for Lebara (~[REDACTED]) and Sky Mobile ([REDACTED]) have surpassed net adds for each of the MNOs.

[93] Phase 1 Decision, paragraph 429(c).

[94] Tesco Mobile has a different management team, a strong and distinct brand and a diffe rent and differentiated commercial and pricing strategy to VMO2. Tesco Mobile operates entirely separately to VMO2, with ring-fenced employees and no visibility over VMO2's mobile propositions. This is supported by the Parties' internal documents. [REDACTED] (see CKH_00005321) [REDACTED] (see CKH_00004347).

[95] Phase 1 Decision, paragraphs 242(a) and 325(a).

[96] Phase 1 Decision, Figures 7; 8; 9; and 10.

[97] Confidential Annex ILR A, number 113.

differentiated and innovative propositions based on a range of services and benefits – for example:

(i) Tesco Mobile can link Tesco Clubcard vouchers to a Tesco Mobile code;

(ii) Lebara and Lycamobile offer inclusive roaming services;

(iii) iD Mobile allows customers to roll over unused data to the next month for free; and

(iv) Many MVNOs, such as Sky Mobile, offer zero-rated data services (which offer customers the ability to consume content from certain apps or services without that consumption counting against their data plans).

3.24 MVNOs have the competitive advantage of **not having to maintain their own physical networks**. Unlike the MNOs, they are not constrained by the requirement to fund significant (and growing) network investments. This means that – in contrast to the Parties – their scale does not impact their competitiveness at the retail mobile level.

3.25 The constraint posed by MVNOs on the Parties is also demonstrated by how their internal documents [REDACTED] monitor MVNOs. Whilst the Phase 1 Decision contends that MNOs only measure themselves against other MNOs, it omits that MNOs also measure themselves against MVNOs.[98] See further Confidential Annex VF P1DR 2: VUK Internal Documents and Confidential Annex CKH P1DR 1: CK Hutchison Internal Documents. In particular:

(i) Vodafone has [REDACTED] (as referred to in the Phase 1 Decision at paragraph 365(b)(iii)). [REDACTED].[99] [REDACTED].[100] [REDACTED].[101] [REDACTED].

(ii) In its monitoring of its competitors, 3UK consistently includes [REDACTED]. This is reflected in internal documents presented to a senior audience.[102]

Sky Mobile poses a particularly strong constraint

3.26 The Parties agree with the Phase 1 Decision's assessment that Sky Mobile provides a competitive constraint "*given that it benefits from a strong brand, the ability to cross-sell to its large, fixed customer base and strong growth*".[103] Sky Mobile is pursuing an innovation/quality and content-focused strategy to drive cross-sell of its mobile products to its large existing Pay

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[98] Phase 1 Decision, paragraphs 365(c); 376; and 378.

[99] Phase 1 Decision, paragraph 368.

[100] Please see Confidential Annex VF P1DR 2: VUK Internal Documents for more detail on these documents.

[101] As the Parties have explained, pricing in the retail mobile services market is dynamic and ever changing, with hundreds of different offers present in the market at any moment. Vodafone considers its pricing frequently, which reflects the frequency and detail of the weekly reports that feed into this decision making.

[102] Confidential Annex ILR A, rows 96 and 97.

[103] Phase 1 Decision, paragraph 417.

TV customer base. Notably, 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.[104]

3.27 The Parties strongly disagree with the Phase 1 Decision's statement that – despite these acknowledged strengths – Sky Mobile is not *"able to compete on network quality and ultimately being dependent on its wholesale contract terms with regards to its ability to compete on price*".[105] This finding is flawed, as the wholesale market works effectively today and will work even more effectively post-Transaction (as explained in section 4 below), ensuring that Sky Mobile gets and will continue to get the terms it wants and needs to maintain and improve its competitiveness. Sky Mobile has substantial bargaining power in the wholesale market, which will facilitate its ability to select the MNO which offers the network quality and pricing it desires as part of its retail mobile services proposition (in its own marketing Sky Mobile often suggests that it provides the same network quality as MNOs for a cheaper price[106]). Indeed, the Phase 1 Decision recognises that Sky Mobile's status means it has particular leverage in wholesale negotiations.[107]

3.28 The evidence is therefore clear that MVNOs exert an independent, strong and growing competitive constraint in the retail market.

Lack of scale does <u>not</u> mean that smaller MNOs have stronger incentives to compete aggressively such that the increased scale of MergeCo will mean it is less incentivised to compete

3.29 The Phase 1 Decision states that the cost structure of the industry "*may create strong incentives for smaller MNOs to adopt aggressive growth strategies and innovate to win subscribers*",[108] and that "*[i]n 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*".[109] The Phase 1 Decision then notes that, as MergeCo would have a "*significantly larger customer base*", this means it may have lower incentives to compete aggressively compared to each Party on a standalone basis.[110] These statements are not supported by the market reality.

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[104] Phase 1 Decision, paragraph 403(a).

[105] Phase 1 Decision, paragraph 417.

[106] See, for instance, Sky, 'Millions of Brits could be missing out on more than £100 every year by not switching mobile provider', 14 June 2023, available at: https://www.skygroup.sky/article/-millions-of-brits-could-be-missing-out-on-more-than-100-every-year-by-not-switching-mobile-provider-- (accessed 29 April 2024), "*However, mobile network operators that are disrupting the market - those outside of these four players - often offer much cheaper tariffs and actually use the same networks, with Sky Mobile providing 99% coverage across the UK. The same as EE, Vodafone, O2 and Three.*"

[107] Phase 1 Decision, paragraph 417.

[108] Phase 1 Decision, paragraph 277.

[109] Phase 1 Decision, paragraph 280.

[110] Phase 1 Decision, paragraph 282.

(i) The description in the Phase 1 Decision of a simple trade-off between reducing prices to win new customers and losing margins on existing subscribers is a mischaracterisation of the conditions of competition in the mobile telecoms market. As a matter of daily practice, mobile operators use price discrimination to make targeted offers to different customer segments. This also allows them, even in the long term, to offer lower prices to new customers than to their existing subscriber bases. For example:

(a) Mobile operators offer large and varied tariff portfolios (including prepay and contract tariffs, different types of handset and upfront costs, contract lengths, volume of minutes, texts and data allowances, add-ons, etc.) that cater for different customer segments with different preferences with respect to quality and value for money.

(b) Mobile operators use sub-brands to price significantly lower than their "main" brands [REDACTED] (see Figure 3.6 below).[111]

(c) [REDACTED]. For example, as explained in the Parties' response to Q27 of RFI # 6 (Table 27.1), [REDACTED]% of customers who contacted 3UK intending to leave in 2023 received an offer to stay. [REDACTED]% of Three customers and [REDACTED]% of Vodafone customers pay a discounted price.[112]

(d) As a result of the above, [REDACTED].

(ii) As sub-scale MNOs, the Parties do not have the ability to compete as hard as the larger MNOs, BTEE and VMO2, in terms of network investments. The Phase 1 Decision fundamentally misunderstands that scale is key to providing the ability for an MNO to compete aggressively at the network investment level in a sustainable way. As the Parties lack scale and therefore cannot invest as much as would be necessary, [REDACTED]. In other words, being sub-scale makes it hard to grow meaningfully by beating the larger MNOs on price and quality, [REDACTED].

(iii) For example, Figure 3.6 below shows that, despite being the smallest MNO, [REDACTED], directly contradicting the view in the Phase 1 Decision that smaller MNOs have stronger incentives to compete aggressively.

[111] This is further supported by Figure 16 of Ofcom's 2023 Pricing Trends Report which shows that giffgaff, SMARTY and Virgin Mobile have historically been the lowest priced operators, Ofcom, 'Pricing trends for communications services in the UK', 12 December 2023, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0024/273138/pricingtrendsreport2023.pdf (accessed 29 April 2024).

[112] Parties' response to RFI 3, question 18.

Figure 3.6
Conditional prices for SIMO tariffs 2020 – 2023

[REDACTED]

Source: Compass Lexecon analysis based on Pure Pricing data. [REDACTED].

(iv) The notion that larger scale operators do not compete aggressively is inconsistent with the empirical evidence showing the constraint which BTEE and VMOE – the scaled market leaders – place on the Parties today (see from paragraph 3.17 above).

3.30 By comparison, post-Transaction MergeCo will have the ability and incentive to invest further and deliver a much higher-capacity network. This means that MergeCo's marginal cost of serving additional customers on its network will be close to zero (as its capacity investment will have been incurred already), giving it a much stronger incentive to compete aggressively in terms of its retail mobile propositions.

The Transaction will stimulate further competition to and from BTEE and VMO2

3.31 Post-Transaction, BTEE and VMO2's incentives to compete will increase. As explained further below at paragraph **Error! Reference source not found.**, it is standard economic theory to expect rivals (i.e. BTEE and VMO2) to improve their offers, as the rational competitive response to MergeCo's best-in-class network. This is because MergeCo's network investment will allow it to leapfrog the current market leaders in terms of network quality. MergeCo's selling point will be its best-in-class mobile network quality, taking away BTEE's long-held network claims which are core to its brand – as evidenced in paragraph 3.18(iii)(a) above. BTEE and VMO2 will then face stronger incentives to increase their mobile network investments, so that they can limit the loss of customers switching to MergeCo's better network. Increased network investment will in turn enable BTEE and VMO2 to compete even harder than they do today in the supply of retail mobile services. This is because, as the Phase 1 Decision recognises,[113] network quality is an important parameter of competition at the retail mobile level, and BTEE and VMO2's network quality will increase as a result of increased network investments. An increase in network capacity will create incentives for BTEE and VMO2 to set lower quality-adjusted prices.

3.32 VMO2's ability to compete in terms of network quality will be enhanced by MergeCo's plans to make substantial investments in its network through the [REDACTED]. At the same time, VMO2 will face increased competitive pressure from MergeCo's best-in-class network, including in the unwind areas, incentivising it to step up its levels of investment.

3.33 As a result, the Transaction will stimulate greater competition from BTEE and VMO2 than either generates today. MergeCo's increased capacity will therefore create a high-investment equilibrium, stimulating a pro-competitive response from BTEE and VMO2 and boosting dynamic competition.

[113] Phase 1 Decision, paragraph 127.

4. The Transaction will not result in an SLC due to horizontal unilateral effects in the supply of wholesale mobile services

4.1 The Phase 1 Decision finds that there is a realistic prospect that the Transaction will result in a substantial lessening of competition in the supply of wholesale mobile services (i.e. the supply of mobile services by MNOs to MVNOs).[114] The CMA's concerns are unfounded. In summary, and as explained further below:

(i) The Phase 1 Decision overstates 3UK's market position by stating that "*3UK is an active participant in the supply of wholesale mobile services and exerts a competitive constraint on the other MNOs*."[115] The Phase 1 Decision disregards the fundamental fact that 3UK [REDACTED] in recent years [REDACTED].

(ii) The Parties are not close competitors in the supply of wholesale mobile services.

(iii) The Phase 1 Decision does not appear to take fully into account the competitive constraints that would exist post-Transaction, including from:

(a) BTEE, which has won almost all of the recent wholesale tenders (including those of large MVNOs);[116]

(b) VMO2, which hosts the largest MVNOs on its network, and will have an enhanced ability and increased capacity to compete more aggressively in the wholesale market post-Transaction as a result of [REDACTED]; and

(c) MVNOs, which have a strong bargaining position and the proven ability to negotiate competitive deals. Advances in technology such as eSIMs and over-the-air switches have also reduced the barriers to switching for MVNOs, and will continue to do so, such that their negotiating power will only grow. MVNOs can use the threat of switching MNO host to further secure commercially advantageous deals.

(iv) The Phase 1 Decision states that (i) MVNOs face "limited competition when negotiating wholesale access contracts"[117]; and (ii) larger MNOs are less incentivised than smaller MNOs to compete aggressively for MVNO contracts due to the risk of retail cannibalisation.[118] This is incorrect. As set out above, MVNOs offer some of the cheapest tariffs and are the fastest growing operators in the market. The CMA's finding is disproved by the empirical evidence:

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[114] Phase 1 Decision, paragraphs 718 – 720.

[115] Phase 1 Decision, paragraph 718(d).

[116] As defined in the Phase 1 Decision.

[117] Phase 1 Decision, paragraph 616.

[118] Phase 1 Decision, paragraph 603.

(a) The larger MNOs (BTEE and VMO2) host some of the largest MVNOs in the marketplace today. In particular:

(I) BTEE very recently won the tender for Lycamobile in 2023, a large MVNO with a subscriber base of approximately [REDACTED] as at September 2023, and it has more generally been resurgent in the wholesale market in recent years with a number of wins. It now hosts more than 50 MVNOs on its network.[119]

(II) VMO2 hosts the largest MVNOs, Sky Mobile and Tesco Mobile, on its network. The evidence does not therefore support the view that VMO2 is disinterested in the market.

(b) Although the smaller MNOs (VUK and 3UK) are – like the larger MNOs – incentivised to secure the additional revenues offered by MVNO contracts, their ability to do so is constrained. [REDACTED].

(v) The Transaction will have a pro-competitive effect on the wholesale market:

(a) Currently, [REDACTED] absent the Transaction. The significant increase in MergeCo's capacity and network quality will result in the creation of an MNO that is both able and incentivised to compete <u>more</u> aggressively to obtain more wholesale traffic to help fill its expanded network.

(b) The creation of MergeCo will facilitate improvements to VMO2's network through [REDACTED].

(c) The increased competitiveness of MergeCo in the wholesale market will trigger a competitive reaction from both BTEE and VMO2 which will increase the competitiveness of the terms they offer to MVNOs further.

[REDACTED] in the wholesale market

4.2 Contrary to the position set out in the Phase 1 Decision,[120] [REDACTED]. 3UK cannot be [REDACTED] in the wholesale market. [REDACTED].[121] This explains why 3UK [REDACTED] of all MVNO tenders that 3UK is aware of in the period 2020 to 2023, including significant recent tenders such as [REDACTED].[122] Indeed, 3UK's poor network quality has been publicly cited

[119] Merger Notice, paragraph 15.405(ii).

[120] Phase 1 Decision, paragraph 635 and Table 21.

[121] Phase 1 Decision, paragraph 620(b).

[122] Merger Notice, paragraph 15.461.

by comparison websites for consumers as a reason not to choose iD Mobile at the retail level.[123] In the case of Gamma, it allocates its wholesale services between 3UK and [REDACTED].[124]

4.3 The CMA mischaracterises 3UK as winning [5-10]% of tenders [REDACTED][125] [REDACTED]. 3UK would again clarify that:

(i) [REDACTED] cannot be characterised as a "win" in any competitive process. [REDACTED].

(ii) Whilst the Phase 1 Decision accepts that, given "*the unique circumstances*" it places "*less weight*" on [REDACTED] "win",[126] it should in fact be completely disregarded as it cannot reasonably be regarded as an MVNO tender. [REDACTED].[127] [REDACTED]. In no sense can this be considered a "win" by 3UK in the wholesale market.

(iii) The Parties welcome the CMA's conclusion that [REDACTED] should not be regarded a tender win for 3UK. However, the Parties disagree that [REDACTED] decision to supply its customers using 3UK's network nevertheless indicates that [REDACTED].[128] [REDACTED].

4.4 In short, 3UK is not [REDACTED]. [REDACTED].

4.5 The Parties therefore consider that [REDACTED] in the wholesale market today: [REDACTED]). Post-Transaction, there will [REDACTED] be three effective competitors: BTEE, VMO2 and MergeCo, with MergeCo and VMO2 substantially more competitive than currently. The persistent growth of MVNOs in recent years proves that three effective suppliers form the basis for intense competition. Indeed, the Phase 1 Decision finds that "*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*".[129] Post-Transaction, MVNOs will have three <u>better</u> options than they do today.

The Parties are not close competitors

<u>The tender data demonstrates a lack of closeness of competition between the Parties</u>

[123] Merger Notice, paragraph 15.464(ii) and Talk Home, 'A Complete Guide to the Best Mobile Virtual Network Operator (MVNO) in UK', 4 August 2021, available at: https://blog.talkhome.co.uk/technology/mvnos-in-uk/ (accessed 04 March 2024).

[124] Merger Notice, paragraph 15.458(iv).

[125] Phase 1 Decision, paragraph 635 and Table 21.

[126] Phase 1 Decision, paragraph 635(b).

[127] [REDACTED].

[128] Phase 1 Decision, paragraph 635(c).

[129] Phase 1 Decision, paragraph 607.

4.6 The Phase 1 Decision states that in the period from 2020 to 2023 there were only [REDACTED] tenders where both Parties were invited to bid – equivalent to [REDACTED]% of all tenders as per the CMA's analysis.[130] Whilst this low number would be strong evidence in itself against any suggestion of closeness of competition, the actual number is <u>even smaller</u>, as the CMA's figure incorrectly includes [REDACTED]. VUK's interactions with [REDACTED] did not move beyond [REDACTED].[131] [REDACTED].

<u>The Parties were not each other's closest competitor for the Sky Mobile tender</u>

4.7 The Phase 1 Decision places weight on the tender for the Sky Mobile contract but errs in finding that this tender saw "*particularly close competition between the Parties*".[132] In fact, the Parties were <u>not</u> close competitors in the Sky Mobile process. [REDACTED], with neither VUK nor 3UK ultimately winning. Importantly, they lost for different reasons:

(i) In the case of 3UK, its internal documents as cited in the Phase 1 Decision support that [REDACTED] was the key reason that Sky Mobile did not proceed with 3UK's bid.[133]

(ii) In the case of VUK, its internal documents as cited in the Phase 1 Decision support that the decision was based on [REDACTED].[134]

4.8 The Phase 1 Decision recognises that the Parties competed [REDACTED] for the Sky Mobile tender.[135] However, contrary to the CMA's conclusion, it does not follow that losing a tender for different reasons provides evidence of particularly close competition between two parties (if anything, it suggests that they were not close competitors). The Phase 1 Decision acknowledges that VUK's internal documents assessing the Sky Mobile contract "[REDACTED]" and that "[REDACTED]".[136]

<u>The Parties are not close competitors in the wholesale market more generally</u>

4.9 The Parties welcome the Phase 1 Decision's finding that "*the Parties' internal documents for other MVNO* tenders demonstrate less emphasis on one another".[137] The CMA's review of the Parties' internal documents indicates "that they have an incentive to compete against one another and third-party MNOs to defend their overall mobile revenues".[138] This simply reflects

[130] Phase 1 Decision, paragraph 638(b). This number is actually overstated given that [REDACTED]

[131] Phase 1 Decision, paragraph 635(a).

[132] Phase 1 Decision, paragraph 657.

[133] Phase 1 Decision, paragraphs 651 and 653(a).

[134] Phase 1 Decision, paragraph 653(b).

[135] Phase 1 Decision, paragraph 654.

[136] Phase 1 Decision, paragraphs 652 and 690 and Confidential Annex ILR A at rows 210; 211; and 213.

[137] Phase 1 Decision, paragraphs 657 – 658.

[138] Phase 1 Decision, paragraph 641.

the fact that the Parties compete with all MNOs and cannot be considered to be each other's closest competitors.

BTEE and VMO2 will provide a very strong constraint on MergeCo

4.10 The Phase 1 Decision is incorrect to suggest that BTEE and VMO2 would not be sufficient to constrain MergeCo.[139] BTEE and VMO2 currently host 90% of all MVNOs and have a combined share of [70-80]% by hosted subscribers. The Phase 1 Decision recognises how "[REDACTED]".[140]

4.11 BTEE has won the majority of new contracts since 2018 and now hosts at least 50 MVNOs. BTEE has a strong competitive advantage by having the UK's best network – see further paragraph 3.18(iii)(a) above. By way of example, BTEE's recent 2023 win of Lycamobile from VMO2 was described as a "major new deal" and reflecting the "ongoing importance of wholesale to BTEE".[141]

4.12 VMO2 is the largest provider in the wholesale market by some way, hosting the largest MVNO customers and renewing wholesale contracts with the two largest MVNOs – Sky Mobile and Tesco Mobile (serving 8.7 million subscribers).

4.13 The Parties note that the Phase 1 Decision has not reflected the fact that the Parties' visibility as to the participation and wins of BTEE and VMO2 is only partial. It is possible that BTEE and VMO2 have participated in and won more MVNO tenders than is reflected in the tender analysis submitted by the Parties.

MVNOs have a strong bargaining position which will constrain MergeCo

4.14 MVNOs have substantial and increasing bargaining power, which constrains MNOs today and will continue to constrain MergeCo post-Transaction:

(i) This is demonstrated by the tender data summarised in the Phase 1 Decision.[142] MVNOs frequently look to switch hosts, or use the threat of switching hosts, to extract better wholesale terms. The Phase 1 Decision notes comments from a large MVNO that it is able to use tenders to play MNO bidders off each other, "*resulting in continually improved terms*".[143]

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[139] Phase 1 Decision, paragraph 718(e).

[140] Phase 1 Decision, paragraph 688.

[141] BT, 'Lyca Mobile partners with BT Wholesale, levelling up connectivity, speed, and coverage for customers', 27 June 2023, available at: https://newsroom.bt.com/lyca-mobile-partners-with-bt-wholesale-levelling-up-connectivity-speed-and-coverage-for-customers/ (accessed 1 March 2024).

[142] Phase 1 Decision, paragraphs 680 – 687.

[143] Phase 1 Decision, paragraph 696.

(ii) As recognised in the Phase 1 Decision,[144] there is a trend of larger MVNOs, [REDACTED], moving from light to full MVNO models to enable them to take advantage of the increased ease of switching in the industry and their increased bargaining power.

(iii) As found in the Phase 1 Decision, when MVNOs put their contracts up for tender, "*[t]here is limited transparency over who is bidding and the terms offered*".[145] This allows MVNOs to increase uncertainty and extract better terms. However, when it suits the MVNO, it can choose to refer to other bidders. The Phase 1 Decision noted comments from a large MVNO that "*it was able to use the comparative bids to indicate to rivals how far off the bidders were from others*".

(iv) MVNOs typically obtain access to new technologies and features, including access to 5G, at the same time as they become available to the host MNO's customers during the contract term. MVNOs are able to obtain the benefit of these new technologies without incurring the upfront investment costs which MNOs face, which allows the MVNO to price retail mobile services competitively. Internal documents support the importance of these technological advancements to MVNOs.[146]

(v) The expected significant uptake in eSIMs will further lower barriers for light MVNOs to switch host MNOs. eSIMs do not require light MVNOs to ask end-customers to switch out their physical SIM card when transferring to a new host MNO network. As the Phase 1 Decision notes, in Ofcom's future approach to mobile markets and spectrum paper, Ofcom 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*".[147] However, the Phase 1 Decision disregards the role of eSIMs when assessing the ease with which light MVNOs can switch both now and in the future.[148]

(vi) As the CMA's own pricing analysis shows, many MVNOs undercut MNOs on price, including the MNOs that host them on their networks. The highly competitive pricing of MVNOs in the retail mobile services market confirms that they have competitive cost bases which could not be the case without extracting commercially advantageous wholesale terms from the MNOs.

[144] Phase 1 Decision, paragraph 111.

[145] Phase 1 Decision, paragraph 576.

[146] See, for example, section 6 of Confidential Annex VF P1DR 2: VUK Internal Documents.

[147] Phase 1 Decision, paragraph 157 and Ofcom, 'Ofcom's future approach to mobile markets and spectrum – Conclusions paper', 6 December 2022, Box A3, available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0036/248769/conclusions-mobile-spectrum-demand-and-markets.pdf (accessed 26 April 2024).

[148] Phase 1 Decision, paragraph 611.

(vii) The greater MVNO subscriber numbers and increased traffic volumes have increased MVNOs' bargaining position. For example, Lebara has had the strongest net growth since the start of 2022, recently surpassing Sky Mobile.[149]

(viii) The reality of the wholesale market is that hosting MVNOs contributes incremental cashflows and helps the host MNO monetise its network investment. This is accepted in the Phase 1 Decision, which finds that "*[s]upplying wholesale mobile services allows MNOs to generate additional revenue and therefore spread network costs across a larger customer base*".[150] If an MNO declines to bid for an MVNO (e.g. due to the costs involved in bidding), the MVNO will almost certainly obtain wholesale services from another MNO.[151] The Phase 1 Decision recognises that this view is supported across VUK's internal documents.[152]

4.15 Although the Phase 1 Decision acknowledges a number of these matters of fact, it appears to completely disregard evidence of MVNOs' buyer power as part of the competition assessment. Instead, it finds that "*a customer's buyer power depends on the availability of good alternatives it can switch to*" and "*post-Merger the CMA does not believe that sufficient good alternatives will remain and so [buyer power] is not considered further*".[153] It is unclear why the CMA finds that BTEE and VMO2 will not be "*good alternatives*" to MergeCo, especially given:

(i) BTEE's recent aggressive competition and success in the wholesale market today, in particular, its recent win of Lycamobile; and

(ii) VMO2's current ability and incentive to compete, which will be further boosted by the increase in capacity driven by the updated Beacon agreements.

4.16 The reality is that post-Transaction, MergeCo will be highly incentivised to bid for MVNO contracts to fill its increased spare capacity. The Parties expect that BTEE and VMO2 will react to this increased competition and compete more aggressively to secure both existing and new wholesale revenues post-Transaction. As such, the CMA's conclusion that there will not be sufficient good alternatives post-Transaction is unfounded.

Large MNOs are incentivised to win MVNO contracts – the risk of retail cannibalisation does not prevent MNOs from bidding

4.17 The Phase 1 Decision mischaracterises a key feature of competition in the wholesale market, by finding that (i) larger MNOs (with a larger customer base at risk of cannibalisation) may have

[149] Issues letter Response, paragraph 3.16. Since the start of 2022 net adds in the consumer retail market for Lebara (~[REDACTED]) and Sky Mobile ([REDACTED]) have surpassed net adds for each of the MNOs.

[150] Phase 1 Decision, paragraph 589.

[151] The Phase 1 Decision cites VUK internal documents that support this finding, as it cites a document assessing the Sky Mobile bid, which states *[REDACTED]*. Vodafone Internal Document VF_00006310_001.

[152] The Phase 1 Decision finds: "*[REDACTED], VUK's internal documents suggest that [REDACTED]*", paragraph 595.

[153] Phase 1 Decision, paragraph 706.

less incentive to increase scale and compete aggressively for MVNO tenders than smaller MNOs,[154] and (ii) that MergeCo will have less incentive to compete for MVNO tenders on the ground that its "*extended retail presence*" may increase "*the risk of cannibalisation of the MNO's existing customer base*".[155]

4.18 The Phase 1 Decision does not contain any economic analysis to support the theory that larger MNOs are not incentivised to bid for MVNO contracts due to the risk of retail cannibalisation, nor does it contain any economic analysis that MergeCo will be less incentivised than either 3UK or VUK. On the latter point, the CMA's "cannibalisation" argument amounts to a prediction that MergeCo will engage in input foreclosure against MVNOs. It would have to be proved that MergeCo would have the ability and incentive to foreclose MVNOs, and that this would have a detrimental effect for consumers. This is a vertical theory of harm which is unsupported by evidence or analysis on ability, incentive or effect.

4.19 The allegation of a threat of cannibalisation is not supported by the evidence:

(i) MNOs regularly accept a cannibalisation effect to win wholesale business (see also paragraph 4.14(viii)). Securing MVNOs provides predictable revenues and cashflows, and having a wider subscriber base allows the MNO to spread network costs across that larger base. The commercial logic is straightforward: if it chooses not to bid, the MNO will still lose retail customers (since the MVNO will simply contract with another MNO) and will forgo wholesale revenues from hosting the MVNO. In other words, experiencing cannibalisation and securing wholesale revenue is more profitable than experiencing cannibalisation and not making any wholesale revenue. [REDACTED].[156] MVNOs draw retail customers from across the market, so that many will be new end-customers from which the host network may not otherwise have earned any revenues in the retail mobile services market. The Phase 1 Decision acknowledges that wholesale revenues may outweigh the risk of cannibalisation when it finds that the MNOs compete particularly aggressively for larger, mass-market MVNOs like Sky, despite the cannibalisation risk logically being higher for these larger MVNOs.[157]

(ii) One of the two scale players – BTEE – has won almost all of the recent tenders (including with large MVNOs as defined in the Phase 1 Decision).[158] BTEE services at least 50 MVNOs and has explicitly stated that wholesale is important to its market strategy. In the words of Alex Tempest (Managing Director of BT Wholesale), following

[154] Phase 1 Decision, paragraphs 591 and 718(e).

[155] Phase 1 Decision, paragraph 719.

[156] Phase 1 Decision, paragraph 595.

[157] Phase 1 Decision, paragraph 590.

[158] Phase 1 Decision, paragraph 681.

the securing of Lycamobile as an MVNO customer: "*This major new MVNO deal with Lycamobile reflects the ongoing importance of wholesale to BTEE*".[159]

(iii) The other large MNO – VMO2 – hosts the largest MVNOs on its network (Sky Mobile and Tesco Mobile), including securing the recent renewal of Tesco Mobile.[160]

(iv) The smaller MNOs – i.e., VUK and 3UK – have been less successful in winning MVNOs – as demonstrated above ([REDACTED]).

The Transaction will in fact be pro-competitive for the wholesale market

4.20 The Phase 1 Decision is incorrect to assert that as a larger MNO (due to its number of subscribers) MergeCo will be less incentivised to bid for MVNOs.[161] In fact, both its incentives and ability to compete will increase given the significant increase in its network capacity relative to the sum of 3UK and VUK on a standalone basis. Monetising spare capacity is a competitive imperative in the mobile sector, and the amount of spare capacity is an important determinant of how aggressively an MNO can and does compete in the wholesale market. The key consequence of the Transaction for the wholesale market is that MergeCo's improved quality and additional network capacity will make it more attractive to MVNOs and it will be able to offer highly competitive pricing. MergeCo will therefore have the ability and incentive to compete for more wholesale traffic to help fill its expanded network, add incremental revenues and deliver sustainable cashflows from MVNO customers as well as retail customers.

4.21 The increased competitiveness of MergeCo in the wholesale market will trigger a competitive reaction from both BTEE and VMO2, as explained further in paragraphs 4.10- 4.12 above. As regards VMO2 (which has historically won some of the largest MVNOs onto its network) in particular, [REDACTED] (see paragraph 5.2 below). The increase in industry-wide capacity will increase the bargaining power of MVNOs and put downward pressure on prices.

5. The Transaction will not result in an SLC due to MergeCo's presence in the MBNL and Beacon Network sharing arrangements

5.1 The concerns raised across the three theories of harm in relation to MergeCo's presence in the MBNL and Beacon network sharing arrangements are unfounded.

Theories of Harm 1 and 2

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159 BT Newsroom, 'Lyca Mobile partners with BT Wholesale, levelling up connectivity, speed, and coverage for customers', 27 June 2023, available at: https://newsroom.bt.com/lyca-mobile-partners-with-bt-wholesale-levelling-up-connectivity-speed-and-coverage-for-customers/ (accessed 1 March 2024).

160 Phase 1 Decision, paragraph 681 and VMO2, 'Virgin Media O2 and Tesco agree 10-year renewable of Tesco Mobile joint venture', 31 January 2024, available at: https://news.virginmediao2.co.uk/virgin-media-o2-and-tesco-agree-10-year-renewal-of-tesco-mobile-joint-venture/#:~:text=Tesco%20Mobile%20is%20a%20joint,Media%20on%201%20June%202021 (accessed 16 April 2024).

161 Phase 1 Decision, paragraph 603.

5.2 As part of Theories of Harm 1 and 2 (retail and wholesale markets), the Phase 1 Decision finds that MergeCo may have the ability and incentive to disrupt the effective functioning of the network sharing arrangements which may have the effect of limiting the competitive constraint exerted by BTEE and VMO2 in the retail and wholesale markets. These concerns are unfounded. In summary, and as explained further below:

(i) As regards MBNL, MergeCo will have no ability to disrupt BTEE's network strategy. MBNL is a passive sharing arrangement (with active sharing now limited to 3G [REDACTED]). MBNL has always been a very different arrangement to Beacon and has now been significantly scaled back to an "EstatesCo", with very limited activities (largely, managing the shared estate of sites and passive infrastructure). MBNL has been designed to facilitate operational independence as between the shareholders and BTEE currently has, and will continue to have, full freedom to develop its network entirely independently of 3UK.[162] In fact, BTEE's [REDACTED]% share of MBNL capex accounts for less than [REDACTED]% of BTEE's overall annual mobile capex spend.[163] Furthermore, contractual agreements with Cellnex as part of the 2022 sale of CK Hutchison's UK towers assets to Cellnex mean that [REDACTED]. Under the terms of the agreement with Cellnex, [REDACTED] of the Enhanced Economic Benefit Agreement ("**EEBA**"). [REDACTED].[164] [REDACTED].

(ii) As regards Beacon, which unlike MBNL is an active sharing arrangement, MergeCo will have no ability or incentive to disrupt VMO2's network development. MergeCo will need to work closely with VMO2 in the context of Beacon to achieve its Joint Network Plan ("**JNP**") as VUK already does today in respect of its existing standalone business plan. The proposed MergeCo site grid [REDACTED], [REDACTED]. The need to carry out [REDACTED], is critical to delivering the benefits of the Transaction:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

<u>MBNL</u>

No ability to disrupt BTEE through MBNL

[162] Phase 1 Decision, paragraph 759.

[163] 3UK site visit presentation (23 April 2024), slide 49.

[164] Final Merger Notice, paragraph 15.618.

5.3 The Phase 1 Decision is incorrect to find that MergeCo's presence in MBNL will give MergeCo the ability (and incentive) to disrupt the functioning of MBNL, with the effect of limiting BTEE's competitive constraint in the retail and wholesale markets.[165]

5.4 The MBNL agreements are non-exclusive and have always given shareholders the flexibility to pursue unilateral network deployments. This has enabled BTEE to roll out its 4G and 5G networks in advance and independently of 3UK, and to become recognised as the best quality mobile network in the UK with very different network characteristics to 3UK. BTEE currently has, and will continue to have, full freedom to develop its network entirely independently of MergeCo.

5.5 The Phase 1 Decision has not taken account of the nature of the MBNL agreements and how the agreements expressly cater for freedom of operation, ensuring that neither party is in a position to hinder or disrupt the other. Over time, the network strategies and assets of BTEE and 3UK have diverged materially. Today there is no alignment between the strategies of BTEE and 3UK with regard to MBNL.

5.6 In this context, BTEE and 3UK agreed to reform and further scale back MBNL. The current arrangements for MBNL (known as "[REDACTED]") were agreed between BTEE and 3UK very recently – in January 2023 - at a time when a potential merger of 3UK and VUK was in the public domain. The purpose of revising the arrangements was to ensure that, for the limited remaining lifespan of MBNL, each shareholder could continue to develop their own respective networks independently of, and with reduced dependence on, the other.[166] As was publicised at the time of the agreement, the aim of [REDACTED] was to allow each shareholder to "*just look after [itself]*" and "*focus on its own needs*", rather than having to engage with the other MBNL partner and potentially "*compromise on a different build, a different timescale that's more complex, and more expensive build in itself*" and requiring the other partner to "*agree and accept what we're doing, when we do it and how we do it*".[167] Greg McCall (BTEE's chief network officer) describes [REDACTED] as a "good move" providing BTEE with the ability to focus on its own priority areas independently of 3UK and notes that it provides "*more autonomy and flexibility to roll out our infrastructure where we and our customers need it*". Both MBNL shareholders therefore agreed to revised arrangements that they were fully satisfied would ensure that neither party could be blocked or hindered by the other in the development of their future network investments. There is no conceivable ability for 3UK to unilaterally block or roll back BTEE's unilateral deployments on MBNL sites. Any such theoretical possibility has already been addressed in the currently applicable MBNL arrangements.

5.7 Given the limited scope of its activities, MBNL has a [REDACTED] capex budget for the maintenance of the shared site estate and related passive assets, which is shared [REDACTED] between BTEE and 3UK. Under the current 2024 budget, this was

[165] Phase 1 Decision, paragraph 455.

[166] Confidential Annex CKH S109-1 6.110, [REDACTED].

[167] Mobile World Live, 'BT, 3 UK refocus network joint venture', 29 March 2023, available at: https://www.mobileworldlive.com/featured-content/home-banner/bt-3-uk-refocus-network-joint-venture/ (accessed 19 April 2024) and TelcoTitans, 'BT and Three go "unilateral" in MBNL refocus', 30 March 2023, available at: https://www.telcotitans.com/btwatch/bt-and-three-go-unilateral-in-mbnl-refocus/6406.article (accessed 19 April 2024).

£[REDACTED] in 2024 (£[REDACTED] per shareholder). Under the [REDACTED] (see also paragraph 5.9(ii)(b) below), [REDACTED].[168] In 2022 BTEE's mobile capex was £832 million, which has been assumed to be constant in 2024. BTEE's share of 2023 MBNL capex was only £[REDACTED] –BTEE's [REDACTED]% share of MBNL's annual capex accounts for less than [REDACTED]% of BTEE's overall annual mobile capex.[169] The Parties disagree with the Phase 1 Decision's finding that this is a "*material proportion*" of BTEE's network spend.[170] [REDACTED]% of BTEE's mobile capex is allocated outside MBNL via unilateral deployment programmes. Any theoretical ability (which does not exist in reality) to affect less than [REDACTED]% of BTEE's capex accounted for by MBNL could not realistically affect BTEE's ability to compete effectively. The Phase 1 Decision does not contain any analysis to the contrary.

5.8 For many years the clear direction of travel for MBNL has been a reduction, rather than expansion, of its scope. Rather than being expanded to cover "new activities", MBNL will terminate in 2031 and this is reflected in [REDACTED].

5.9 The Phase 1 Decision is incorrect to conclude that MergeCo has the ability to limit or block the funding of MBNL:[171]

(i) The Phase 1 decision alleges that MergeCo:

(a) Could deliberately breach its contractual obligations and refuse to fund previously agreed amounts under [REDACTED];

(b) Could refuse to agree the same level of spending post-Transaction and/or changes to [REDACTED] – for example, refusing to fund certain <u>new</u> activities that require spending that has not previously been anticipated or agreed;[172] and

(c) Would be able to block or substantially delay <u>new deployment programmes</u> (for example, relating to "*new technology launches*").[173]

(ii) The evidence demonstrates that these concerns are unrealistic and will not materialise:

(a) The Phase 1 Decision's concerns around deliberate breach does not take into account the fact that the MBNL JV has been successfully operating for over 16 years. It has been in both shareholders' best interests for it to do so, and to

[168] Confidential Annex CKH S109-6 46.001, sheet "Capex", row 37.

[169] 3UK site visit presentation (23 April 2024), slide 49.

[170] Phase 1 Decision, paragraph 504.

[171] Phase 1 Decision, paragraphs 456 – 458.

[172] Phase 1 Decision, paragraph 458.

[173] Phase 1 Decision, paragraph 464.

this end [REDACTED]. This will continue to be the case post-Transaction. However, notwithstanding any conclusion on ability, MergeCo will not have the incentive to deliberately breach the MBNL agreements – for the reasons set out at paragraph 5.12.

(b) [REDACTED] was submitted to the CMA in response to Question 46 of the CMA's s.109 notice dated 17 April 2024.[174] [REDACTED].

(c) Given that MBNL is largely a passive network sharing arrangement (which involves sharing only the basic physical site infrastructure, as opposed to the active radio equipment), the deployment of "*new technology launches*" within MBNL is not envisaged by either party and is not a credible possibility. New technologies would be focused on active equipment and not passive infrastructure. Both BTEE and 3UK have rolled out their active networks independently since the rollout of their respective 4G networks and are currently investing in 5G independently. Neither shareholder has any expectation that they would cooperate more closely on new technologies given their long history of acting independently and their recent agreement to scale back MBNL. [REDACTED]. As the CMA recognises elsewhere in the Phase 1 Decision, [REDACTED],[175] [REDACTED].[176] There are no new shared deployment programmes or new technology launches contemplated by the revised Business Plan approved by 3UK.

(d) Upon dissolution of MBNL, [REDACTED]. As the CMA is aware from its in-depth review of Cellnex / CK Hutchison UK towers, conditionally cleared on 3 March 2022, 3UK is contractually committed 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 to Cellnex. BTEE will therefore obtain access to these sites from Cellnex. Cellnex has no ability to frustrate BTEE's access to these sites (nor would frustration by Cellnex make any commercial sense given Cellnex revenues are dependent on hosting MNOs on its passive infrastructure).

5.10 The Phase 1 Decision is likewise incorrect to allege that MergeCo could unilaterally block or roll back BTEE's unilateral deployments on MBNL sites [REDACTED]:

(i) [REDACTED].[177] [REDACTED].

[174] Confidential Annex CKH S109-6 46.001.

[175] Phase 1 Decision, paragraph 185(a).

[176] Phase 1 Decision, paragraph 458(a).

[177] For example, as noted in paragraph 502 of the Phase 1 Decision, [REDACTED].

(ii) Contrary to the Phase 1 Decision's findings,[178] the Parties expect [REDACTED]. This is because - given that MergeCo [REDACTED] - there will be fewer instances of MergeCo and MBNL planning an upgrade on the same shared network site.

5.11 BTEE is a sophisticated commercial counterparty and would have ensured that the protections it negotiated as part of the recent [REDACTED] amendments were entirely future-proof and appropriate. For example, despite being raised in the Phase 1 Decision, BTEE did not consider it necessary to have what is described by the Phase 1 Decision as a [REDACTED].[179] BTEE clearly considered the extensive protections it negotiated in the MBNL agreement to be sufficient, including the ability to invoke the escalation process without 3UK's consent, in full awareness of the proposed Transaction. Moreover, as set out at paragraph 5.12(ii)(b), [REDACTED].

No incentive to disrupt BTEE through MBNL

5.12 MergeCo will not have any **incentive** to disrupt BTEE through the MBNL network sharing arrangements:

(i) [REDACTED]. There would be no benefit to MergeCo in taking any actions relating to not funding MBNL since this would have adverse consequences for its own network.

(ii) The costs and consequences of failing to comply with MergeCo's MBNL obligations would be substantial and outweigh any alleged benefit:

(a) A failure by 3UK [REDACTED].[180] [REDACTED].[181]

(b) [REDACTED].[182] [REDACTED].[183] [REDACTED]. Given the financial and operational consequences of any failure to fund are so significant, MergeCo will be very strongly incentivised to ensure that it complies with all funding obligations.

(c) [REDACTED],[184] [REDACTED],[185][REDACTED].[186] [REDACTED].

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178 Phase 1 Decision, paragraphs 463 – 464.

179 Phase 1 Decision, paragraphs 463(b) and 464.

180 Confidential Annex CKH S109-1 6.001, [REDACTED].

181 Confidential Annex CKH S109-1 6.001, [REDACTED].

182 Confidential Annex CKH S109-1 6.001, [REDACTED].

183 Confidential Annex CKH S109-1 6.001, [REDACTED].

184 Confidential Annex CKH S109-1 6.001, [REDACTED].

185 Confidential Annex CKH S109-1 6.062, [REDACTED].

186 Confidential Annex CKH S109-1 6.001, [REDACTED].

(iii) Under the terms of the agreements with Cellnex, 3UK is [REDACTED] the MBNL sites that are subject to the exit provisions in the MBNL JV agreements (a portion of which will transfer to Cellnex following the division of the MBNL network assets in 2031 in accordance with the allocation and transfer provisions in the EEBA).

<u>Beacon</u>

5.13 The finding that MergeCo would have the ability or incentive to disrupt the effective functioning of the Beacon network sharing agreements with the effect of limiting the constraint exerted by VMO2 is unfounded.[187]

No ability to disrupt VMO2 through Beacon

5.14 There is **no ability for MergeCo to disrupt VMO2's network rollout**:

(i) As an initial point, VMO2 and MergeCo do not have any active sharing in a material part of the country, as VMO2 deploys for itself in London and in other major population centres, which are described as being in the "unwind" area (covering [REDACTED]% of the UK population). VMO2 also deploys for itself in the East region and will only be reliant on MergeCo for deployment in the West region, where VUK is "host". VUK is (and MergeCo will be) reciprocally reliant on VMO2 in the East region, where VMO2 is "host".

(ii) In these shared regions, there is a well-established process in the Beacon agreements through which the "sharer" can require the "host" to deploy new sites and upgrades on its behalf. The Beacon agreements provide robust protections for the "sharer" including [REDACTED] VUK and VMO2 are incentivised to work together as part of their long-term collaboration (and, for the reasons explained in paragraphs 5.16 et seq. below, will continue to be so incentivised), and does not accept the Phase 1 Decision's assertion that these are of limited comfort to the parties.[188]

(iii) [REDACTED].

5.15 Contrary to the Phase 1 Decision's findings, there is no ability to increase charges to VMO2, and therefore disrupt VMO2's network rollout in that way.[189] This is because, [REDACTED],[190] [REDACTED]:

(i) [REDACTED];

[187] Phase 1 Decision, paragraphs 541 – 545.

[188] Phase 1 Decision, paragraph 545.

[189] Phase 1 Decision, paragraph 531.

[190] Phase 1 Decision, paragraph 518.

(ii) [REDACTED] – [REDACTED]; and

(iii) [REDACTED].

No incentive to disrupt VMO2 through Beacon

5.16 The Phase 1 Decision mischaracterises MergeCo's intentions for Beacon post-Transaction. The Phase 1 Decision finds that, post-Transaction, given MergeCo's increased spectrum holdings and larger site portfolio, it would have a reduced need for shared deployments within Beacon, leaving VMO2 more reliant on unilateral deployment which could be disrupted by MergeCo. Rather than being incentivised to disrupt Beacon, there will be a **high degree of interdependence between MergeCo and VMO2** which will incentivise them to work together:

(i) **MergeCo will be reliant on VMO2 in the East.** Given the geographical divide of Beacon, MergeCo would be reliant on VMO2 in the East as VUK currently uses approximately [REDACTED] sites hosted by VMO2 in the East (VMO2 uses [REDACTED] of the sites hosted by VUK in the West), [REDACTED]. As such, even if it were possible, it would not be in MergeCo's interest to seek to frustrate the rollout of upgrades to the shared MORAN sites in the West – in such a hypothetical scenario, VMO2 could then seek to frustrate the rollout of upgrades to the shared MORAN sites [REDACTED] in the East to the detriment of both parties.

(ii) [REDACTED], MergeCo will be strongly incentivised to engage in a strategy of mutual co-operation. [REDACTED] (as discussed in paragraph 5.2(ii) above) [REDACTED]:

(a) [REDACTED]:

(I) [REDACTED].

(II) [REDACTED][191] [REDACTED].

(III) [REDACTED].

(IV) [REDACTED]. Concerns in the Phase 1 Decision about contractual protections not being followed post-Transaction are incorrect – see further paragraph 5.23 below.

5.17 Separately, **any changes in symmetry between the Beacon parties will not increase MergeCo's incentives to disrupt VMO2's network**. The Phase 1 Decision finds that the Transaction could impact the symmetry between VMO2 and MergeCo causing imbalances and reducing incentives of MergeCo to co-operate.[192] The Parties strongly disagree for the following reasons:

[191] Final Merger Notice, paragraph 15.655(i).

[192] Phase 1 Decision, paragraphs 527 – 529.

(i) First, the Phase 1 Decision **fails to take into account** three key relevant facts, which it must take into account when considering the extent of symmetry between VMO2 and MergeCo:

(a) [REDACTED].

(b) Contrary to the Phase 1 Decision's statements, MergeCo will not "*have access to an additional* [REDACTED] *sites than VMO2, resulting from the fact that it will also have access to 3UK's sites*".[193] [REDACTED] [REDACTED] [REDACTED] ([REDACTED] [REDACTED];[194] and

(c) [REDACTED].

(ii) Second, the CMA Decision **overstates the degree of symmetry between VMO2 and VUK today.**[195] Currently, VMO2 has much higher demand requests than VUK given: (i) the larger number of subscribers resulting from the Liberty Global / Telefónica merger and (ii) the Virgin Media MVNO moving from VUK onto VMO2's UK network and the required additional capacity. VUK has not been able to match VMO2's demand in the MORAN areas and, as such, VMO2 has had to resort to more unilateral demand requests. [REDACTED].

(iii) Third, Beacon has always allowed (and indeed was so designed, in consultation with Ofcom) the parties to promote network independence and the ability of parties to pursue asymmetry where their network strategies and/or capex commitments diverge. This is an important feature of Beacon that VUK understands has always been valued by Ofcom.

5.18 This is supported by the CMA's conclusion that network sharing agreements (including Beacon and MBNL) do not significantly impact an MNO's ability to differentiate itself from its competitors (including its network sharing partner), given: (i) the scope of network sharing arrangements; (ii) the use of unilateral deployments within network sharing arrangements; and (iii) the fact that spectrum, core and backhaul networks are not shared between MNOs. This conclusion is not merely theoretical; as noted by the CMA, it is demonstrated by the divergence in network quality outcomes between MNOs and their network sharing partners.[196]

Theory of Harm 3

5.19 Theory of Harm 3 alleges that the participation of MergeCo in both network sharing arrangements may result in an increased sharing of commercially sensitive information between MergeCo and BTEE and VMO2 which could reduce or postpone investments by

[193] Phase 1 Decision, paragraph 528(a).

[194] Final Merger Notice, Tables 15.40 and 15.44.

[195] Phase 1 Decision, paragraph 527.

[196] Phase 1 Decision, paragraphs 757 – 760.

MergeCo and the other MNOs. The Phase 1 Decision alleges this could lead to a reduced investment in industry-wide network quality.[197] The evidence demonstrates that these concerns are unrealistic and will not materialise (but rather the Transaction will facilitate an industry-wide enhancement of network quality):

(i) The Phase 1 Decision fails to acknowledge that information sharing is extremely limited under MBNL, given that it is largely limited to information shared to facilitate MBNL's coordination role relating to passive infrastructure [REDACTED]. In these circumstances, the factual premise on which Theory of Harm 3 is based is incorrect as the "clash" is only identified after the investment decision is made.

(ii) As regards Beacon, which is an active sharing arrangement, detailed safeguards ensure that information sharing is appropriately ringfenced and documented. These safeguards were developed in consultation with Ofcom (so as to ensure the Beacon parties' compliance with Chapter I Competition Act 1998), with details of the appropriate safeguards included in multiple briefing papers submitted to both Ofcom and the CMA over the years (and in respect of which no concern has ever been raised by Ofcom or the CMA).

(iii) The Phase 1 Decision fails to place any material weight on contractual information safeguards in both MBNL and Beacon, despite the clear evidence that these safeguards already operate effectively today, and in an industry where network collaboration and interconnection are commonplace, contractual safeguards are standard practice.

(iv) This theory of harm does not take into account the reality that – far from reducing investments on industry-wide network quality – the Transaction will in fact lead to an increase in network investments across the industry, as evidenced by the comprehensive pre-agreed network strategy for MergeCo on which the future commercial success of MergeCo will be dependent. [REDACTED] (see paragraph 5.16(ii)(a) above). This reflects the strong commercial incentive of MergeCo to compete by rolling out a best-in-class network, as explained further in Section 6 below.

MBNL

5.20 Contrary to the concerns set out in the Phase 1 Decision,[198] 3UK (and, in the future, MergeCo) does not receive information on BTEE's network rollout plans via MBNL:

(i) First, [REDACTED]. BTEE does not notify or coordinate its network deployment activities on non-MBNL sites via MBNL. There is no scope for advantage arising in the manner contemplated by the CMA.

[197] Phase 1 Decision, paragraph 721.

[198] Phase 1 Decision, paragraph 737.

(ii) Second, for upgrades within MBNL (i.e. unilateral upgrades on shared MBNL sites), [REDACTED]. Without reference to any supporting evidence, the Phase 1 Decision concludes that information about BTEE's site builds may still be useful to 3UK without necessarily understanding BTEE's macro level strategy or commercial rationale. The Parties disagree with this view. [REDACTED][REDACTED], as explained in paragraph 5.2(ii) above, [REDACTED]. Any information shared within MBNL is closely controlled and subject to robust safeguards which the shareholders are incentivised to continue to comply with.

5.21 Notwithstanding the very limited scope of information shared with MBNL and even more limited information made available by MBNL to shareholders including 3UK, without knowledge of the underlying commercial rationale this limited information would provide no actionable insight that could substantiate any network investment decision for MergeCo. MNOs have different investment requirements due to different spectrum, sites, customers and utilisation; MergeCo would not be in a position to know (just as 3UK is not currently in a position to know) why BTEE is undertaking investment activity with respect to specific passively shared sites.

Beacon

5.22 The Phase 1 Decision is wrong to conclude that MergeCo will be able to use Beacon to gain significant visibility as to the network upgrades and/or launches of new technologies planned by VMO2.[199]

5.23 There are strict safeguards in place to control the sharing of information in respect of the MORAN areas. It is incorrect for the Phase 1 Decision to simply find that these safeguards only provide "*some protection*", and that the CMA therefore places "*limited weight*" on them, on the basis that MergeCo could breach these contractual safeguards or that "*the contracts may be of limited duration and over time may be renegotiated or terminated*".[200] As acknowledged by the CMA,[201] the CMA must consider the effectiveness of the safeguards in context:

(i) First, whilst these safeguards are contractual, they are designed to ensure VUK and VMO2 comply with their Chapter I, Competition Act 1998obligations. If the Beacon parties breach these safeguards, not only would they be breaching their contractual obligations, but they could potentially be breaching competition laws. It is not therefore realistic to suggest that MergeCo would choose simply to breach these safeguards. Indeed, MergeCo has a strong public law obligation to continue to comply with them, in addition to its contractual obligations. For the same reasons, it is not realistic to suggest that the Beacon contracts might be renegotiated or terminated to remove the safeguards.

[199] Phase 1 Decision, paragraph 734.

[200] Phase 1 Decision, paragraphs 741 – 742.

[201] CMA, 'Martin Coleman: UK merger control in the post-Brexit era', 20 November 2023, available at: https://www.gov.uk/government/speeches/martin-coleman-uk-merger-control-in-the-post-brexit-era (accessed 26 April 2024).

(ii) Second, in addition to being commonplace in the European telecoms industry where network sharing is widely used, contractual information sharing safeguards are widespread across multiple industries, as they allow customers to benefit from the efficiencies generated by controlled collaborations between competitors. In other contexts, the CMA has indeed acknowledged the effectiveness of regulations and contractual provisions in preventing sharing of confidential information.[202] This effectiveness is increased when the contractual provisions serve to ensure compliance with the parties' Chapter I, Competition Act 1998 obligations.

(iii) Third, the information sharing safeguards have been part of the Beacon arrangements since the outset. They were developed in 2012 in consultation with Ofcom and have operated effectively since then. Details of these safeguards have been referenced in multiple briefing papers submitted to Ofcom and the CMA over the years,[203] and no questions as to the effectiveness of the contractual information safeguards have been received from the CMA before now. The CMA has no basis for, and has shown no evidence to support, now saying that MergeCo might simply choose to breach this long-standing agreement.

(iv) Fourth, a contractual breach of this nature would cause significant damage to MergeCo's own business and reputation. MergeCo will have a strong incentive to comply with the contract, particularly given its commitments to both the CMA and Ofcom to uphold the information sharing safeguards as well as the public scrutiny that would follow any regulatory investigation for illegal exchange of information.

(v) Finally, it is a fundamental principle of English law that contracts are binding and must be complied with. The CMA's default position should therefore have been to treat the agreements as binding and enforceable. The CMA should make its assessment on the basis that MergeCo will (as VUK has done to date) continue to meet its obligations under the safeguarding provisions in the agreement.

5.24 It is also incorrect for the Phase 1 Decision to find that – even if the Beacon parties were not to breach the contractual safeguards – there is still scope for problematic information sharing to happen in compliance with the safeguards, given the safeguards are drafted in a "*general manner*".[204] On the contrary, the Project Beacon Competition Guidelines contain extensive detail of the information that can be shared, [REDACTED]).[205] Indeed – as mentioned above

[202] ME/6495-14, Esure plc / Gocompare.com Holdings Limited, 2 March 2015, paragraph 74, available at: https://assets.publishing.service.gov.uk/media/54f43f52ed915d1374000007/Full_text_decision_esure_Gocompare.pdf (accessed 29 April 2024) .

[203] 'Anticipated Amendments to UK Network Sharing Arrangements Between Each of Telefonica UK Limited and Vodafone Limited and Cornerstone Telecommunications Infrastructure Limited', joint briefing paper to the CMA, 5 January 2021, which is provided as Confidential Annex VF ILR 3. A self-assessment briefing paper was also shared with Ofcom on 12 July 2019 and a copy of that paper was provided to the CMA as an attachment to its joint briefing paper entitled 'Anticipated Amendments to the Project Beacon JV by Telefonica UK Limited and Vodafone Limited',16 July 2019 (specifically, Annex 6), both of which are provided as Confidential Annex VF ILR 2 and Confidential Annex VF ILR 1.

[204] Phase 1 Decision, paragraph 742.

[205] Parties' Response to Issues Letter, Annex ILR A, row 243.

– these detailed guidelines were drafted in consultation with Ofcom (and previously shared with the CMA). [REDACTED]. In addition, there are compliance specialists at CTIL, VUK and VMO2 who advise on compliance, including reviewing agendas and slides to be shared at governance meetings, as well as meeting minutes where relevant. Key Beacon meetings have an antitrust lawyer / compliance specialist present from one or more of the parties specifically to monitor information sharing.

5.25 The Phase 1 Decision is incorrect to find that – outside of the above types of information that would be shared within the contractual safeguards – MergeCo's retail, wholesale or strategy units can still learn non-public information concerning VMO2's rollout strategy:

(i) The Phase 1 Decision states that VUK informed the CMA "*it is able to make a reasonably good guess of [REDACTED]*".[206] The CMA's inference –[REDACTED]– is incorrect. As explained by VUK in the meeting with the CMA on 27 October 2023, [REDACTED]:

(a) [REDACTED];

(b) [REDACTED]; and

(c) [REDACTED].

(ii) By contrast to the CMA's assertion, VUK's "guess" does not allow VUK to determine non-public information concerning VMO2's overall roll out strategy or, on a localised basis, what technology upgrades they may want to make over what timeframe.

(iii) The Phase 1 Decision states that – once a deployment is agreed (within the safeguard regime as set out above), and the contract is signed – then the information is subsequently shared with the deployment teams.[207] The Phase 1 Decision finds that this may be "*commercially useful information*", as it could provide an indication of the areas in which VMO2 is planning to rollout NSA 5G.[208] The information shared with the deployment teams would not lead to a reduction in uncertainty between VUK and VMO2 as regards their network strategy because:

(a) The site-level information provided to VUK's deployment teams does not provide any basis upon which VUK can make reliable inferences about VMO2's network strategy on a macro level. Furthermore, VUK's deployment teams only receive information about VMO2's deployments in the West of the UK but have no visibility over VMO2's deployments in the East, which are managed by VMO2; and

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206 Phase 1 Decision, paragraph 733.

207 Phase 1 Decision, paragraphs 732; 738; and 744.

208 Phase 1 Decision, paragraphs 737 – 738.

(b) The deployment teams that receive this information in order for VUK to meet its delivery obligations to VMO2 are not responsible for VUK's network strategy – they receive the information on a "need to know" basis and are bound not to share this information more widely.

Industry-wide effect on investments

5.26 Theory of Harm 3 does not take into account the reality that – rather than the Transaction dampening MergeCo's incentives to invest, the Transaction and the [REDACTED] will instead lead to an increase in network investments across the industry.

5.27 As explained in paragraph 1.15 above, the Transaction will result in the creation of a best-in-class network that will enable MergeCo to better compete against its rivals. This in turn will upset BTEE and VMO2's current low-investment equilibrium and incentivise them to improve their network quality in response. MergeCo is committed to the JNP and has a strong commercial incentive to make the investment set out in the JNP. This is demonstrated by the incentives modelling in the PCEP submitted to the CMA on 15 February 2024 and as explained in paragraph 1.17 above and 6.28 below.[209] That modelling shows that an alternative strategy – where MergeCo attempts to reduce network investment– would not be optimally profitable for MergeCo. Indeed, when compared to the JBP, the costs savings that could be achieved through such a strategy would be significantly smaller than the value to MergeCo of the revenue benefits that would be foregone. [REDACTED].

5.28 The Parties welcome the Phase 1 Decision's findings that the network sharing arrangements do not significantly impact an MNO's ability to differentiate itself from competitors, and that this is demonstrated in the divergence of network quality outcomes between MNOs and their network sharing partners.[210] These conclusions show that the CMA's assertion in Theory of Harm 3 that MergeCo's participation in network sharing arrangements could lead to sharing of commercially sensitive information, that will in turn lead to alignment of network rollout strategies and reduce incentives to invest, is not credible. This is because the levels of information sharing in Beacon and MBNL historically and today have clearly not impacted incentives to invest in divergent network strategies. In spite of 3UK and BTEE sharing limited information within MBNL, the Phase 1 Decision finds that they have had divergent network outcomes / strategies; and – in spite of VUK and VMO2 sharing information within Beacon, the Phase 1 Decision finds that they have also had divergent network outcomes.[211]

5.29 Finally, the European Commission (the "**Commission**") examined the potential competition effects of a network plan which was based on the Beacon network as a "base grid" with supplemental sites from the MBNL network in its assessment of *Hutchison 3G UK / Telefonica UK* in 2016. This was described in the Commission's decision as the "Preferred Plan". Relevantly, the Commission found that there was no concern that the merged entity's presence on two network sharing agreements could reduce overall network investments (see recital

[209] Frontier Economics, 'The Pro-Competitive Effects of the Vodafone / Three Merger', 15 February 2024, Section 6.

[210] Phase 1 Decision, paragraphs 758 – 761.

[211] Phase 1 Decision, paragraph 760.

1562): *"… the situation arising under the Preferred Plan … will likely increase the visibility of investments by other MNOs in the market. However, this visibility is unlikely to reach a point where it will incentivise all competitors to delay investments*".[212]

6. The Transaction will deliver substantial rivalry enhancing efficiencies and relevant customer benefits which will enhance competition and network quality in the UK

6.1 The effects of the Transaction, both for the Parties and for competition in the market, are inseparable from the transformative effect of achieving a step change in the capacity, quality and competitiveness of the combined MergeCo network. The Transaction can only be analysed, on any dimension or in any market segment, by taking into account the substantial positive impact on MergeCo's network and on the market more broadly.

6.2 The Parties submitted extensive evidence substantiating these efficiency benefits in Phase 1. The Phase 1 Decision notes that it was not possible for the CMA to fully consider and test that evidence in the context of the Phase 1 process and that the detailed network modelling supporting the efficiencies analysis requires a certain level of technical understanding.[213] Phase 2 now provides the opportunity to examine this evidence in greater depth.

6.3 This section 6 is structured as follows:

(i) **The JNP will deliver a substantial step change in network capacity and quality which will make MergeCo a much more effective competitor than 3UK and VUK would be in the counterfactual**:

(a) The JNP will deliver substantial and timely improvements in network quality in terms of coverage, performance and reliability, from Day 1 and beyond;

(I) The Transaction will provide a transformational uplift in terms of network KPIs and customer experience; and

(II) The quality efficiencies are timely and will begin immediately post-Transaction.

(b) The quality efficiencies will benefit customers directly.

(c) The step change in network quality is verifiable.

[212] It is important to note that this observation was made at a point in time (2016) when the MBNL shareholders were still planning to jointly roll out a shared 4G network and before the significant scaling back of MBNL under Project Stanley. Since that time, the scope of MBNL's joint activities has drastically reduced meaning that the degree of information sharing and visibility of the other shareholders' investments in the market is even more limited.

[213] Phase 1 Decision, paragraph 816.

(ii) **MergeCo's best in class network will incentivise rivals in particular BTEE and VMO2 to compete more effectively**:

(a) MergeCo's best-in-class network will bring better quality offers and additional capacity into the market:

(I) MergeCo's capacity uplift will incentivise it to price aggressively; and

(II) MergeCo's capacity increase will not be short-lived.

(b) MergeCo's best-in-class network will substantially increase competitive rivalry:

(I) The merger efficiencies will have a pro-competitive effect on rivals' price responses; and

(II) The merger efficiencies will have a pro-competitive effect on rivals' incentives to invest.

(iii) MergeCo will have **a strong incentive to roll out a best in class network**;

(iv) The rivalry-enhancing efficiencies are **specific to the Transaction** and **cannot be delivered by other alternatives to the Transaction**; and

(v) The Transaction will generate **substantial relevant customer benefits** ("**RCBs**").

The JNP will deliver a substantial step change in network capacity and quality, which will make MergeCo a much more effective competitor than 3UK and VUK would be in the counterfactual

6.4 The JNP will deliver substantial and timely improvements of network quality in terms of coverage, performance and reliability which are of real value to customers. As set out below, these efficiencies are:

(i) substantial, timely and benefit customers directly; and

(ii) verifiable, quantifiable and supported by the Parties' detailed economic modelling.

The JNP will deliver substantial and timely improvements in network quality in terms of coverage, performance and reliability, from Day 1 and beyond

The Transaction gives rise to a step change in terms of network KPIs and customer experience

6.5 As detailed in Table 6.1 below, the JNP will deliver a best-in-class network for MergeCo, with a transformational uplift in capacity unlocking a wide range of improvements in network quality (in terms of download speeds, consistency of service and access to 5G SA, supporting new use cases) bringing extensive customer benefits:

(i) **5G SA coverage**: As indicated under the column heading "*5G SA Coverage*" in Table 6.1, MergeCo will be able to offer 86% of the UK population (in high traffic areas) the highest-quality 5G SA coverage by 2032 through its extensive C-band deployment. This surpasses coverage by VUK and 3UK's standalone networks by at least [REDACTED] percentage points. The remaining approximately 14% of the population (in MergeCo's mid / low traffic areas) will receive superior quality coverage compared to the counterfactual, due to an approximately [REDACTED]% increase in site density by 2032 and more spectrum deployed across all these sites.

(ii) **Throughput**: As indicated under the column heading "*Average speeds (Mbps)*" in Table 6.1, MergeCo customers in high traffic areas will enjoy average speeds of [REDACTED] Mbps ([REDACTED] times faster than the Parties' standalone performance), while those in mid / low traffic areas will receive speeds of [REDACTED] Mbps ([REDACTED] times faster than either of the standalone networks' expected average speeds) (see Figure 6.1 below). Further, as indicated under the column heading "*Customer downlink* speed close to cell edge (Mbps)" in Table 6.1, MergeCo's expected average throughput in high traffic areas by 2032 is expected to reach [REDACTED] Mbps, which is [REDACTED]-[REDACTED] times faster than the Parties' standalone performance.

(iii) **Reliability**: MergeCo will deploy more spectrum over many more sites than VUK or 3UK, reducing the average distance of customers from the sites serving them. This minimises the drop-off in performance close to the "cell edge" and during peak hours, providing more reliable indoor and outdoor coverage and significantly improving user experience.

Table 6.1

MergeCo's forecast network quality KPIs 2032

<table>
<tr><th rowspan="2">Type of area</th><th colspan="3">5G SA Coverage</th><th rowspan="2" colspan="3">Average speeds (Mbps)</th><th colspan="2">Customer downlink speed close to cell edge (Mbps)</th></tr>
<tr><th>Geo</th><th colspan="2">Pop</th><th>C-band and mid band</th><th>Low band</th></tr>
<tr><td>High traffic[214]</td><td rowspan="2">[REDA-CTED]</td><td colspan="2">[REDACTED]</td><td colspan="2">[REDACTED]</td><td rowspan="2">[REDA-CTED]</td><td>[REDACTED]</td><td>[REDACTED]</td></tr>
<tr><td>Mid traffic[215]</td><td>[REDA-CTED]</td><td>[REDA-CTED]</td><td>[REDA-CTED]</td><td>[REDA-CTED]</td><td>[REDACTED]</td><td>[REDACTED]</td></tr>
</table>

214 "High traffic areas" refers to areas [REDACTED]. "C-band" indicates spectrum located within the 3.4GHz to 4.2GHz frequency range; "mid-band" indicates spectrum above the 1400Mhz band and below C-band spectrum; "low-band" indicates spectrum up to and including the 1400MHz band.

215 "Mid traffic areas" refers to areas [REDACTED].

Type of area	5G SA Coverage		Average speeds (Mbps)	Customer downlink speed close to cell edge (Mbps)	
	Geo	Pop		C-band and mid band	Low band
Low traffic[216]		[REDA-CTED]	[REDA-CTED]	[REDACTED]	[REDACTED]

Source: The Parties' internal estimates.

Figure 6.1
MergeCo will deliver faster and more reliable speeds

[REDACTED]

Source: Teach-in Presentation 10 April 2024, slide 16.

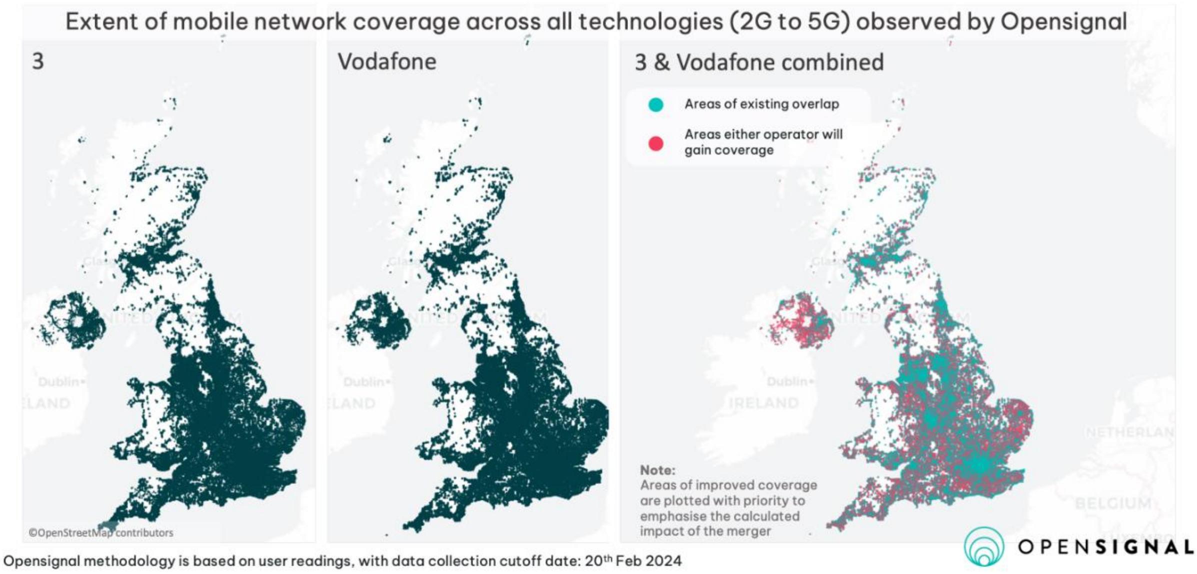
The efficiencies are timely and will begin immediately post-Transaction

6.6 Whilst network integration and investment is a multi-year programme, the programme will begin immediately post-Transaction and the most important pro-competitive effects on network quality and capacity will be delivered early on in [REDACTED] areas (see Figure 24.1 of the Merger Notice). In particular, the use of VUK's 1800 MHz spectrum on 3UK sites will provide at least seven million 3UK customers with improved network performance from Day 1. Initially, MergeCo will implement Multi-Operator Core Network ("**MOCN**") sharing, which will eliminate 25% of not-spots according to the Parties' estimates. The scope for significantly improved coverage is illustrated by Opensignal's view of the Parties' combined coverage post-Transaction at Figure 6.2 below.[217]

216 "Low traffic areas" refers to areas [REDACTED].

217 While the Parties consider Opensignal's view is a possible outcome, they note that the precise Day 1 coverage will depend on the precise implementation and timing of MOCN by site, which is currently being developed.

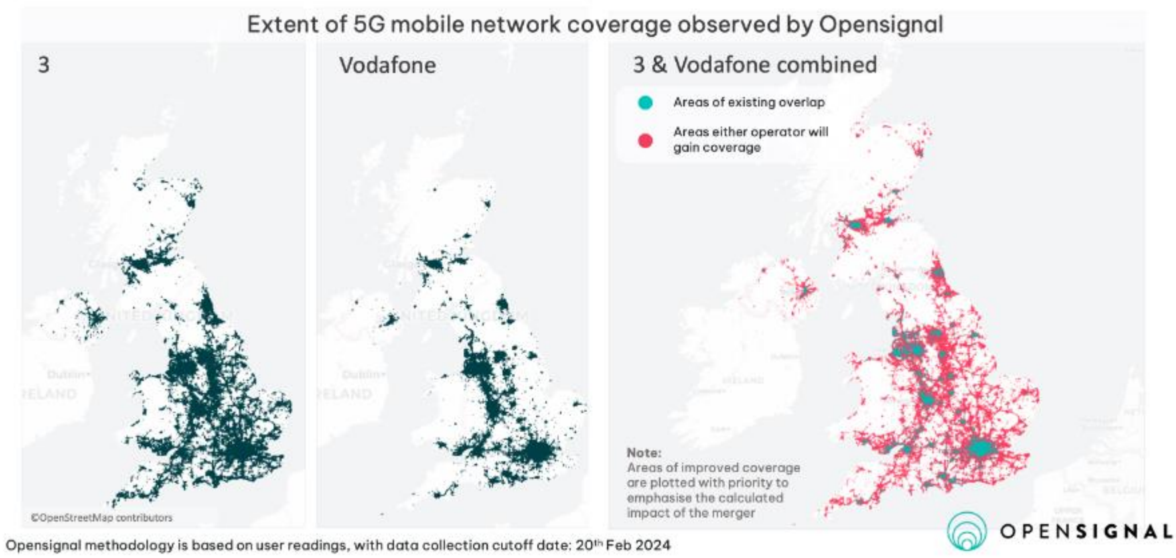
Figure 6.2
Illustrative example Opensignal's view of coverage post merger



Source: Opensignal, Vodafone and 3 set to create UK's leading mobile coverage network post-merger (26 March 2024), available at: https://www.opensignal.com/2024/03/26/vodafone-and-3-set-to-create-uks-leading-mobile-coverage-network-post-merger. This example is illustrative only.

6.7 Opensignal also illustrates the potential for the merger to deliver significantly improved 5G coverage from Day 1, particularly for VUK customers outside major cities, as shown in Figure 6.3 below.

Figure 6.3
Illustrative example Opensignal's view of 5G coverage post merger



Source: Opensignal, Vodafone and 3 set to create UK's leading mobile coverage network post-merger (26 March 2024), available at: https://www.opensignal.com/2024/03/26/vodafone-and-3-set-to-create-uks-leading-mobile-coverage-network-post-merger. This example is illustrative only.

6.8 More fundamentally, the integration of the VUK and 3UK networks (starting in [REDACTED] areas) will progressively unlock additional capacity over time, with [REDACTED]% of the network fully integrated and upgraded by 2030 (see Figure 6.4 below).

Figure 6.4
MergeCo site upgrade programme

[REDACTED]

Source: Teach-in Presentation 10 April 2024, slide 17.

6.9 Network investment decisions made today are a critical part of how competition takes place tomorrow. Competitive behaviour in the market (by both MergeCo and its rivals BTEE and VMO2) will change immediately post-Transaction, in the knowledge that MergeCo has a committed investment plan for the next 10 years to deliver a best-in-class network with a transformational capacity uplift.

The efficiencies will benefit customers directly

6.10 The assessment of the Transaction therefore needs to fully factor in the quality benefits to be enjoyed by customers. As explained in the PCEP and recognised in the Phase 1 Decision, mobile competition takes place to a large extent on quality.[218] Evidence demonstrates that the quality efficiencies matter to customers, as they base their purchasing decisions on network quality experience:

(i) A survey conducted by Which? in May 2023 on mobile network satisfaction found that signal and network issues were the most common source of dissatisfaction: "*Problems with signal and network connection were reported by 20% of mobile users, with their complaints focused on three main issues: (i) Constantly poor phone signal, (ii) Continuous but brief network dropouts, (iii) Network outages that have lasted more than a whole day*".[219]

(ii) A Bloomberg Intelligence survey in 2024 found that network coverage was considered very important by 77% of UK respondents when choosing a mobile-service provider, compared with 68% of respondents considering mobile-plan cost very important.[220]

[218] Section 3 of the PCEP and Phase 1 Decision, paragraph 127.

[219] Which?, 'The most common mobile network complaints (and what to do about them)', 31 May 2023, available at https://www.which.co.uk/news/article/the-most-common-mobile-network-complaints-and-what-to-do-about-them-aA81X7w4KQL9 (accessed 26 April 2024).

[220] Bloomberg Intelligence, 'BI Survey: Vodafone-3 must prioritize network', 25 April 2024.

81% of respondents considered data speed either very important or somewhat important.

(iii) In its May 2023 report, Ofcom indicated that the most common reason (47%) for complaints among mobile customers in 2022 were network quality issues (including poor connection quality and loss of service). This was followed by billing, pricing and payment issues (36%) and dissatisfaction with customer service (22%).[221]

(iv) The GfK Tech 360 survey shows that [REDACTED]. Figure 6.5 below reports the top 10 most cited reasons for joining an MNO (noting that survey respondents were allowed to select more than one reason). It shows that [REDACTED] and were each cited by [20-30]% of survey respondents. In addition, [REDACTED] of the top five reasons selected by customers relate to network quality.

Figure 6.5
10 most cited reasons for joining an MNO

[REDACTED]

Source: Frontier Economics analysis based on GfK Tech 360 survey data (April 2022- March 2023).

(v) This is consistent with evidence from the same survey on why customers chose to leave an MNO. As illustrated in Figure 6.6 below, [REDACTED], cited by [20-30]% of survey respondents. Similarly, [REDACTED], with [10-20]% and [10-20]% of survey respondents citing these reasons, respectively. [REDACTED], which is cited by [20-30]% of survey respondents, is also tied to an inconsistent network experience as well as price.

Figure 6.6
10 most cited reasons for leaving an MNO

[REDACTED]

Source: Frontier Economics analysis based on GfK Tech 360 survey data (April 2022- March 2023).

(vi) As described at paragraph 3.4(ii) above, [REDACTED].

<u>*The step change in network quality is verifiable and supported by detailed economic modelling*</u>

6.11 The capacity uplift bringing about the efficiencies set out in paragraph 6.5 above is transformational. MergeCo will benefit from at least a [REDACTED]% capacity uplift compared to the sum of the standalone networks by [REDACTED]. This means that MergeCo will face a very low incremental cost of adding additional customers to its base, which in turn will incentivise MergeCo to compete aggressively to fill that capacity. This will trigger a competitive response from rival MNOs in terms of both pricing and investment, as explained in paragraphs 6.21 to 6.24 below, significantly enhancing competition in the UK mobile market compared with the counterfactual.

6.12 The [REDACTED]% capacity uplift means that MergeCo's network will experience virtually no congestion until at least 2034 (see paragraph 6.13(i) below) with a much lower incremental cost of adding capacity. MergeCo's network will therefore be able to support increasing traffic demands and extremely data-intensive applications across its whole network, in a reliable and consistent manner, irrespective of the customer location (e.g. whether at cell edge or closer to a mast).

6.13 The efficiencies set out above are supported by the detailed economic modelling the Parties have put forward.

(i) **Capacity uplift modelling**: The [REDACTED]% capacity uplift by [REDACTED] referred to above is produced on the basis of detailed calculations as explained in the Parties' response of 26 January 2024 to the CMA's question of 18 January 2024. In summary, it is based on a comparison of the total capacity units (or "**CU**s") of the MergeCo network against the sum of the CUs of the two standalone networks, whereby: (a) capacity is the product of the number of cell sites on a network, the amount of spectrum deployed on each cell site, and spectral efficiency; (b) capacity is measured in megabits per second and normalised to a common CU; and (c) 10 MHz equals 1 CU. [REDACTED], the capacity uplift by [REDACTED] is estimated to be [REDACTED]%.[222]

(ii) **Congestion modelling**: As set out in section 4.4.2 of the PCEP, and illustrated in Figure 6.7 below, using VUK's capacity model, congestion on the MergeCo network is expected to remain below [REDACTED]% (measured in terms of percentage of sites congested on the MergeCo network) at the 5Mbps threshold in FY30 and below [REDACTED]% in FY34; 3UK's capacity modelling produces similar results – [REDACTED]% in FY30 and [REDACTED]% in FY34 respectively.[223] Even assuming a further 10% increase in demand, MergeCo's forecast congestion would remain low ([REDACTED]% under the VUK capacity model and [REDACTED]% under the 3UK capacity model in FY34) and would not rise to a level that would require incremental spending to relieve congestion (see Figures 20 and 21 of the PCEP). 3UK's modelling forecasts similar levels congestion for MergeCo.

Figure 6.7
MergeCo congestion modelling

[REDACTED]

Source: The Parties.

(iii) By contrast, in the counterfactual:

(a) 3UK expects [REDACTED] of congestion into future years. Optimistically, assuming that 3UK can maintain its ongoing level of network investment, [REDACTED] of 3UK sites will be congested in 2030.

(b) VUK expects congestion to rise sharply based on its current rate of capacity investments (reflecting that VUK has deployed C-band less extensively than 3UK). VUK anticipates that the proportion of its sites congested will [REDACTED] by 2030 compared to today.

(iv) **Incremental cost modelling**: The Parties have estimated the congestion-driven incremental costs of serving additional customers in the counterfactual and post-Transaction. The analysis indicates that the incremental cost per additional subscriber in the Parties' standalone networks amounts to [REDACTED]% and [REDACTED]% of VUK's and 3UK's retail consumer mobile ARPUs respectively (see section 4.3 of the PCEP). Such incremental cost will be effectively eliminated as a result of the Transaction. As set out in section 4.4.3 of the PCEP (citing paragraphs 24.27 to 24.35 of the Merger Notice), there are structural reasons why MergeCo's cost of adding incremental capacity is likely to be lower than that of the two standalone networks in the counterfactual. These include: (i) the ability to deploy spectrum, new sites and new technology more efficiently, given MergeCo's larger site grid and spectrum portfolio (which means a larger capacity boost by commissioning a new macro site than either of the two standalone networks, and a larger capacity boost from having more spectrum available on existing sites than either of the two standalone networks); and (ii) the larger capacity boost allows MergeCo to sustain a higher level of demand before breaching a congestion threshold, so that MergeCo is less likely to need to build costly solutions in response to demand conditions.

MergeCo's best-in-class network will incentivise rivals (in particular, BTEE and VMO2) to compete more effectively

<u>MergeCo's best-in-class network will bring better quality offers and additional capacity from MergeCo into the market</u>

MergeCo's capacity uplift will incentivise it to compete aggressively

6.14 MergeCo's network will deliver a substantial uplift in capacity that will increase its own incentive to compete aggressively to win customers. The impact of this additional capacity increase represents a "gold standard" efficiency effect within the CMA's Merger Assessment Guidelines as it involves the elimination of marginal costs of serving additional customers that would be otherwise faced by the Parties in the counterfactual.

6.15 As stated by the CMA, "*[n]etwork 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)*".[224] Available capacity (or the lack thereof) determines an MNO's marginal cost of serving additional customers. Monetising available capacity is a competitive imperative in mobile. In the Phase 1 Decision the CMA agrees with the Parties' view that "*combining the Parties' networks enables more spectrum to be deployed at each site*", leading to lower unit costs for expanding capacity and resulting in "*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)*".[225]

6.16 In addition to the step change in network performance (capacity and quality) achieved by relieving MergeCo's network from congestion – which will enable higher speeds and increased responsiveness – the large increase in capacity significantly lowers MergeCo's marginal costs of serving additional customers.

6.17 Absent the Transaction, the Parties are capacity constrained. Their small scale inhibits their ability and incentive to invest [REDACTED]. This means that any increase in margins from adding more customers and data traffic to the Parties' networks must be balanced against the incremental costs necessary to relieve the congestion resulting from adding these customers. The incremental cost of capacity is estimated to be £[REDACTED] for VUK[226] and £[REDACTED] for 3UK[227] per subscriber per year (in FY25 costs). This shows that 3UK's network is already [REDACTED], leading to a higher incremental cost of adding new customers. This limits its ability to compete as aggressively as it could absent these constraints.

6.18 By contrast, the Transaction will largely avoid this balancing exercise between, on the one hand, increased revenues and margins from additional customers and data traffic and, on the other, the incremental costs of relieving the resulting congestion. The large capacity uplift the Transaction delivers reduces the amount of congestion on MergeCo's network, thereby effectively reducing the incremental cost of capacity to zero.

6.19 Relieved from growing congestion, with available capacity already built and able to offer a consistently reliable mobile service to a much larger customer base, MergeCo will be able to bring more competitive offers to the market and win customers from rivals. In addition, by virtue of the improvement in network, quality-adjusted prices will go down: customers will receive more capacity and a far superior service at any given price point.[228]

MergeCo's capacity increase will not be short-lived

[224] Phase 1 Decision, paragraph 330.

[225] Phase 1 Decision, paragraph 824.

[226] This is the cost for VUK to expand capacity to accommodate a hypothetical one-off but enduring 10% increase to its retail subscriber base in FY25 while maintaining congestion at the same level as before the 10% increase.

[227] This is the cost to 3UK of accommodating a permanent 10% increase in retail subscribers between FY25 to FY34.

[228] Standard economic theory indicates that a firm's quality-adjusted prices will fall when the firm is able to offer better quality without its marginal costs increasing.

6.20 MergeCo's capacity increase will not be short-lived. The JNP will allow MergeCo to differentiate itself from its rivals, with the investment leading to significant improvements in capacity, network quality and capability. The JNP delivers these benefits by combining the Parties' sites and spectrum through a significant investment in network integration. The benefits of network integration will ensure that MergeCo's network remains virtually congestion-free until well into the mid-2030s. Even when this capacity is fully utilised, MergeCo will benefit from lower unit costs to expand capacity (as comprehensively explained in section 4.4.3 of the PCEP) and, as such, it will be far better positioned to deal with mobile traffic growth than either of the Parties on a standalone basis. The long-term strategic benefits of this repositioning as the best network which uses all of the Parties' combined assets clearly outweigh any potential cost savings from attempting to limit capacity unilaterally.

MergeCo's best-in-class network will substantially increase competitive rivalry

6.21 As explained in sections 4, 5 and 6 above, the Transaction will not lead to a loss of competition. MergeCo's capacity uplift will trigger a competitive response from rival MNOs, both in terms of pricing and network investments, leading to lower quality-adjusted prices for MergeCo's customers. As explained in section 5.1 of the PCEP, standard economic theory predicts that, in response to MergeCo's improved offering and increased capacity, rival MNOs will reduce their prices in order to increase their competitiveness and stem loss of share. Section 5.2 of the PCEP further explains that, in line with the economic literature and relevant past case studies, MergeCo's best-in-class network will upset BTEE's and VMO2's current low investment equilibrium and compel them to improve their network quality in response.

6.22 The Transaction will therefore have a positive impact on dynamic competition. There will be three nationwide MNOs with the ability and incentive to compete at the network level. It will enable the Parties, through MergeCo, to offer better quality and, with greater capacity, a lower price per GB than the Parties would offer as standalone operators. This in turn will incentivise BTEE and VMO2 to react, by:

(i) investing more in their networks; and/or

(ii) reducing their prices,

leading to stronger and more intense competition.

The merger efficiencies will have a pro-competitive effect on rivals' price responses

The merger efficiencies will have a pro-competitive effect on rivals' incentives to invest

6.23 As explained at paragraph 2.1 above, the UK is performing poorly compared to European and international peers based on a number of network indicators. BTEE and VMO2 are not currently facing strong competitive pressure to invest in their mobile networks at the level that would be required for the UK to compete globally on 5G rollout and network quality.

6.24 MergeCo's best-in-class network will upset this current low investment equilibrium and compel BTEE and VMO2 to improve their network quality in response (see PCEP, section 5.2):

(i) While BTEE performs poorly relative to international comparators, it is the UK's market leader in terms of network quality and this position has been unchallenged for many years. BTEE (and VMO2) enjoy a significantly higher ROCE compared to the Parties: as shown in Figure 2.2 above, BTEE had a 20% ROCE as opposed to VUK's 2.1% and 3UK's 0.8%. However, despite this better financial positioning, BTEE's (and VMO2's) investments in mobile are similar to those of the Parties (see Figure 2.3 above). BTEE (and VMO2) are underinvesting in mobile, instead focusing its (their) investment in the fixed market (Fibre to the Home). Being challenged by MergeCo's best-in-class mobile network will incentivise BTEE to invest more in mobile. BTEE will be incentivised to defend its reputation for having the UK's best network (see further paragraph 3.18(iii)(a) above), and the significant profit stream that comes from that. BTEE is likely to adopt a 'high investment strategy' in response (where it tries to close the network gap with MergeCo) given the risks involved in maintaining its current low investment strategy.

(ii) VMO2's network quality will improve in the shared areas through the changes to the Beacon agreements but will, absent an increase in network investment, lag behind MergeCo in the unwind areas. Post-Transaction, VMO2 will be incentivised to invest independently in the unwind areas to close the network quality gap with MergeCo.

MergeCo will have a strong incentive to roll out a best-in-class network

6.25 The Phase 1 Decision notes that "*the Merged Entity may have the incentive to maximise its profits by rationalising and limiting investment in its network*".[229] This is incorrect. The Parties will have a strong commercial incentive to roll out the best-in-class network that generates the rivalry-enhancing efficiencies set out above, in line with the assumptions underpinning the JBP / JNP and the rationale for the Transaction.

6.26 The Transaction is underpinned by the JBP. This has been agreed by the shareholders as part of the commercial arrangements in the Transaction documents.[230] The CMA must give the JBP, together with the JNP (i.e., the two documents underpinning the rollout of the best-in-class network and the efficiencies) **full evidential weight.** Contrary to what is suggested by the Phase 1 Decision,[231] the JBP was not prepared for the purposes of merger control review. It is a detailed commercial plan negotiated at length by the Parties as a core part of the Transaction.

6.27 Reducing the scope of the network, for example by reducing site numbers or limiting investment in 5G equipment, is not a profit-maximising strategy as the potential cost savings are much smaller than the loss in competitiveness and hence revenues from no longer being able to have the "best network" differentiator.

[229] Phase 1 Decision, paragraph 842.

[230] The Initial Business Plan (including the Initial Budget and the Initial Merger Integration Plan) will be adopted at Closing in accordance with the process set out in the Contribution Agreement – see Merger Notice, from paragraph 8.6.

[231] Phase 1 Decision, paragraph 838.

6.28 Detailed economic modelling provided by the Parties supports their commercial conviction – namely that the commercial benefits of pursuing the plan to be recognised as the best-in-class network far exceed the costs that could be saved by scaling back to a less ambitious plan that does not deliver the same rivalry-enhancing efficiencies as set out above in this section 6. The Parties have modelled a detailed "scaled back" scenario where the Parties' networks are combined just to maximise cost synergies, whilst the performance of the scaled-back network is maintained to a standard broadly in line with that of the Parties' counterfactual networks. The scaled back scenario would deliver cost savings of around [REDACTED] – significantly smaller than the value to MergeCo of the [REDACTED] worth of foregone revenue benefits and cost synergies that a best-in-class network will deliver.

6.29 Failure to complete the network integration plan on time would delay both cost and revenue synergies and hence undermine the JNP. It is commercially better to upgrade and integrate the Parties' sites and spectrum in "one go" – generating the large "automatic" capacity uplift set out above – rather than adopting a staggered approach:

(i) **Operational efficiency**: operationally it is more efficient to upgrade a site in a single visit than doing a partial upgrade to integrate the networks and revisiting the site at a later date to add further capacity, given the significant planning and resources involved in the upgrade operations (e.g., obtain access permits, negotiate design and delivery with site owners and execution timing). At the same time, each upgrade will give rise to some network / service disruption (e.g., taking a site down while work is being undertaken). Integrating and upgrading a site in a single step significantly streamlines the process and minimises the scope for disruption and delay compared to multiple interventions.

(ii) **Cost savings**: a single-step integration and upgrade is cheaper due to lower installation costs (e.g., reduced passive upgrade costs (such as avoiding the need to upgrade the same site and related passive infrastructure twice), reduced integration and commissioning costs (e.g., each time additional spectrum is deployed at a site, adjustments may be required at surrounding sites in order to address potential interference) and the potential for vendor discounts (e.g., deploying higher-capability equipment in larger volumes over a shorter timeframe will allow MergeCo to secure discounts from vendors).

(iii) **Commercial benefits**: the revenue synergies of the Transaction, on which the JBP relies, are contingent on MergeCo's ability to deploy and compete on the basis of a best-in-class network. Achieving a best network status quickly through a quicker single-step approach delivers a higher quality of service earlier and is the economically rational strategy.

The rivalry-enhancing efficiencies are specific to the Transaction and cannot be delivered by other alternatives to the Transaction

6.30 The rivalry-enhancing efficiencies set out above are **specific to the Transaction and underpinned by the JBP**. The Phase 1 Decision recognises that other alternatives to the merger, for instance an enhanced network sharing agreement (a "**NetCo**"), would be challenging to execute and in any event would not deliver the same level of efficiencies – therefore, they are not a viable option for achieving the step-change improvement in network quality and capacity that MergeCo will deliver. Specifically with respect to NetCo, the CMA 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*".[232]

The Transaction will generate substantial relevant customer benefits

6.31 In addition to the significant rivalry-enhancing benefits arising from MergeCo's best-in-class network, the Transaction will generate significant, additional relevant customer benefits ("**RCB**"s) both within and beyond the mobile market, in full support of the Government's ambitions in its UK Wireless Infrastructure Strategy.

6.32 The rest of this sub-section discusses each RCB below and the benefits to UK consumers and businesses. The Transaction will create three categories of RCBs:

(i) Improved mobile connectivity;

(ii) Accelerated 5G SA and advanced 5G use cases; and

(iii) Improved Fixed Wireless Access (FWA) service.

6.33 MergeCo's best-in-class network will deliver:

(i) **Improved mobile connectivity in the UK**: network quality is currently poor across all four UK networks, resulting in low-grade customer experience (see paragraph 1.4 above). The Transaction will deliver a market-wide step-change in network performance (capacity and quality) that cannot be achieved by the Parties on a standalone basis or through any other means (e.g., a NetCo). MergeCo's network will have much greater coverage of 5G SA and C-band compared to the Parties' standalone forecasts. This denser site grid and extensive spectrum deployment will enable the UK to benefit from a far better quality network with substantially increased capacity and capabilities (see Table 6.1 and Figure 6.1 above) and will force the two larger operators to improve their own network quality.

(ii) **Accelerated 5G SA and Advanced 5G use cases**: new transformative services for enterprise and industry, as well as individual consumers and households. These services are expected to support transformation and innovation in key business sectors, such as healthcare, advanced manufacturing, transport and logistics.

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[232] Phase 1 Decision, paragraph 849.

(iii) **Improved FWA**: expand 3UK's FWA offering, boosting the capacity of the service and improving the existing offering in the fixed broadband market.[233]

6.34 The Phase 1 Decision states that the CMA agrees that the Transaction "*may, in principle, lead to an increase in quality for customers in the UK*".[234] The Phase 1 Decision, however, raises questions around the verifiability of these RCBs and, with respect to 5G SA and Advanced 5G use cases, the level of future demand. The RCBs flow naturally from the rivalry-enhancing efficiencies set out in paragraph 6.5, which, as demonstrated in paragraphs 6.11 to 6.13, are verifiable. The remainder of this section 6 provides a qualitative overview of the RCBs that will arise from the Transaction and their timeliness, likelihood and extent.

6.35 As recognised by the Phase 1 Decision, these RCBs are based on similar underlying factors relating to the rivalry-enhancing efficiencies, as set out in paragraph 6.5. In other words, all such benefits derive from MergeCo's best-in-class network, which the Parties are strongly incentivised to deliver in a timely manner, as explained above at paragraphs 6.25 to 6.29.[235]

6.36 We set out further detail on each RCB below.

Improved mobile connectivity

6.37 UK network quality is poor, resulting in low-grade customer experience. MergeCo will deliver a best-in-class network capable of meeting customers' current and future needs. As shown in paragraph 6.5 above, the MergeCo network will greatly outperform the Parties' standalone forecasts on a variety of parameters, including capacity (with a [REDACTED]% capacity uplift), coverage, speed and latency.

6.38 MergeCo's improved connectivity (as summarised in Table 6.1 and Figure 6.1 above) will deliver a wide range of benefits to UK consumers and businesses including:

(i) **Tackling the rural divide**: MergeCo's network will align with the Government's ambition to extend 5G coverage well beyond the larger cities and towns to all populated areas of the UK, including transport routes, rural villages and communities:

(a) Nearly half (48%) of constituencies that are both rural and amongst the 40% most deprived areas in the country are classified as 5G total not-spots (on a constituency-by-constituency basis). This compares to just 2.7% in predominantly urban constituencies with a similar degree of deprivation.

[233] VUK has a very small FWA base, currently counting fewer than 30,000 customers. VUK focuses on broadband products delivered using copper and fibre-based networks, relying on last-mile wholesale access to Openreach and CityFibre networks.

[234] Phase 1 Decision, paragraph 863.

[235] Phase 1 Decision, paragraph 859.

(b) The vast majority (99.4%) of rural constituencies are classed as total or partial not-spots for 5G coverage - compared to 66% of urban constituencies.[236]

(c) Over 800,000 people living in the most deprived rural communities in Great Britain will see huge benefits from MergeCo's faster roll out of 5G SA. The Transaction will help close down the existing divide between rural and urban areas in Britain by delivering, by 2032, 5G SA to [REDACTED]% of the UK in geographic terms and almost [REDACTED]% in terms of population.[237]

(d) MergeCo's site densification in rural areas (c. [REDACTED]% more sites than the counterfactual), alongside the deployment of MergeCo spectrum, will enable customers in these areas to be provided with higher network quality, with average user speeds of above [REDACTED] on average by 2032 (c. [REDACTED] times the Parties' standalone forecasts). Within the same timeframe, these customers will still be receiving speeds of [REDACTED] even in areas with relatively poor coverage (for example, in deep indoor locations or far away from the closest base station).

(ii) **Closing the connectivity gap among the UK's nations**: MergeCo will help close the connectivity gap among the UK's nations:

(a) In Scotland, MergeCo will provide 5G SA connectivity to nearly 90% of Scotland by 2034 – this is a significant improvement compared to the current situation with only [REDACTED]% of Scotland covered by VUK's 5G SA, especially for the rural areas (91% of Scotland's rural areas are total 5G not-spots).[238]

(b) In Wales, MergeCo will provide [REDACTED]% 5G SA geographic coverage by 2034, compared to the current situation where VUK's 5G SA geographic coverage is only [REDACTED]%.[239]

(c) In Northern Ireland, MergeCo will provide [REDACTED]% 5G SA geographic coverage by 2034, compared to the current situation where VUK's 5G SA geographic coverage is only [REDACTED]%.[240]

Accelerated 5G SA and Advanced 5G Use Cases

[236] WPI Strategy and Vodafone UK, 'Connecting the Countryside', November 2023, available at: https://www.vodafone.co.uk/newscentre/app/uploads/2023/11/Connecting-the-Countryside.pdf (accessed 26 April 2024).

[237] *Ibid*.

[238] Vodafone UK, 'Vodafone commits to extending 5G Standalone technology across Scotland', 19 March 2024, available at: https://www.vodafone.co.uk/newscentre/press-release/5g-sa-committment-across-scotland/ (accessed 26 April 2024).

[239] VUK's internal estimates.

[240] VUK's internal estimates.

6.39 The deployment of high-quality, 5G networks to ensure the future growth of the UK economy is a Government priority.[241] The CMA cites "general recognition" that the rollout of 5G SA / Advanced 5G may be characterised by a "hold-up" investment problem due to the uncertain nature of returns.[242] It is correct that 5G SA / Advanced 5G requires significantly larger investments compared with earlier technologies,[243] but the Transaction will unlock the benefits of 5G SA / Advanced 5G as a result of the Parties' committed investment in the MergeCo Joint Business Plan and the wider investment this will stimulate across the entire market.

6.40 As explained in the Merger Notice, assuming that the wider benefits of 5G to the UK economy estimated by DCMS are brought forward by only one year, then the MergeCo network would generate economic benefits to the UK by 2030 in the range of £[REDACTED] to £5 billion.[244]

6.41 MergeCo's best-in-class network, with greater capacity, reliability and speed and latency, are essential to unlock Advanced 5G use cases. Benefits arising from Advanced 5G use cases are merger specific - they rely on improvements to MergeCo's network across the following dimensions:

(i) **Capacity** Advanced 5G use cases require the ability to transmit much larger volumes of data.

(ii) **Reliability**: 5G SA customers require the ability to use a service consistently without interruptions and deteriorations in the user experience. For example, real-time, mission-critical use cases such as remote machine operation (for instance, remote surgery or remote drone operation) are highly sensitive to small disruptions in the quality of connectivity. Reliability must be delivered on a national scale in order to deliver use cases focused on mobility, including logistics and autonomous vehicles.[245]

(iii) **Speed and latency**: the ability to offer faster rates of data throughput with near real-time responsiveness. This is required today, for emerging use cases such as augmented and virtual reality (which require download speeds of 100 – 200 Mbps) and for future developments, such as remote assisted surgery or enterprise remote workforce services, where any material latency would preclude their adoption.[246]

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[241] UK Government, 'UK Wireless Infrastructure Strategy Report', 11 April 2023, pages 12 and 35 – 36, available at: https://www.gov.uk/government/publications/uk-wireless-infrastructure-strategy/uk-wireless-infrastructure-strategy (accessed 26 April 2024).

[242] Phase 1 Decision – paragraph 869.

[243] Merger Notice, Figure 2.6.

[244] Merger Notice, paragraph 24.54.

[245] Cambridge Econometrics and Analysys Mason, 'Realising the Benefits of 5G', August 2021, available at: https://assets.publishing.service.gov.uk/media/6426a1f43d885d000cdadff3/realising_the_benefits_of_5G.pdf (accessed 26 April 2024).

[246] Ericsson, 'What do next wave 5G consumers want?', available at: https://www.ericsson.com/en/reports-and-papers/consumerlab/reports/5g-next-wave (accessed 26 April 2024).

6.42 The new 5G SA and Advanced 5G use cases can benefit a wide range of sectors and applications across various customer groups (including individual consumers, households, businesses and the public sector).

Table 6.2
Example of Advanced 5G Use Cases

Sector	5G Use Case	Enablers
Healthcare	Care coordination and creation of a digital health care journey, which includes: connected ambulances, video consultations, digital triage, remote teaching, remote patient monitoring, remote surgery assistance via augmented reality, robotics for assisted living, drone flights to deliver medicine, precision medicine, rehabilitation robotics	High throughput, low latency, high availability, consistent network performance, 5G SA slicing capability, additional security features
Public sector	Real-time smart surveillance, real-time location of fire-arm usage, inter-agency communications, body cameras for front-line services	High throughput, low latency, high availability, consistent network performance
Broadcast and streaming	Remote broadcast and production, ad-hoc temporary mass events, on-site live experience, second-scene broadcast, broadcast from high-population areas	High throughput, 5G SA slicing, consistent network performance
Energy	Connected windfarms, drone support, grid monitoring, digital twin infrastructure mapping, real-time monitoring and communications	High throughput, high availability, low latency, consistent network performance
Automotive	Tele-operated driving, platooning (i.e. linking vehicles in convoy via 5G connected automated driving support),	High throughput, low latency, high availability, consistent network performance

Sector	5G Use Case	Enablers
	automated lane change, real-time situational awareness	
Railways	Drone track inspections, tele-operated driving, real-time sensors and predictive maintenance	High throughput, low latency

Source: Parties' assessment of use cases.

6.43 MergeCo will be able to leverage its best-in-class network to deploy new 5G SA capabilities, including **network slicing**[247] which will facilitate a wider set of use cases that require ubiquitous coverage and consistent network performance. This will be made possible at a large scale by MergeCo's extensive high throughput network, which will be built on a denser radio site grid, and its high capacity, enabled by extensive spectrum deployment. Network slicing will be used in combination with the improved mobile connectivity described above, to tailor services according to specific quality requirements which are essential for each use case. Slicing has already been piloted for energy and broadcast industries, including a UK-first in the broadcast of the King's Coronation.[248] In future, network slicing can support dedicated independent networks for:

(a) ultra-reliable services for mission-critical use cases such as prioritised connectivity for critical communications (e.g. emergency services or the [REDACTED]);

(b) ultra-high-bandwidth communication to high data users for surveillance and real-time monitoring, e.g. for those working in high risk situations (such as at height or in dangerous conditions), premium connectivity for security cameras (such as live surveillance during network congestion), routers for temporary base stations; and

(c) extremely low latency to users of real-time remote operations such as remote surgery or driverless cars.

[247] Network slicing uses 5G SA technologies to operate multiple independent and dedicated virtual networks across a single platform, with each tailored to serve a specific communication requirement. This offers significant efficiency improvements over the status quo, in which a common network is used to serve a diverse, and even conflicting, set of requirements. For more details, see GSMA, 'An Introduction to Network Slicing', 20 January 2010, available at: https://www.gsma.com/futurenetworks/wp-content/uploads/2020/01/1.0_An-Introduction-to-Network-Slicing.pdf (accessed 6 April 2024).

[248] Vodafone UK, 'Vodafone and ITN make TV broadcast history during King's Coronation', 4 May 2023, available at: https://www.vodafone.co.uk/newscentre/viewpoint/vodafone-and-itn-make-tv-broadcast-history-during-kings-coronation/ (accessed 26 April 2024).

6.44 To illustrate the economic benefits of 5G enabled technologies, such as the use cases set out in Table 6.2, set out below is a selection of examples of the substantial productivity gains that 5G SA will deliver across a wide range of sectors:

(i) **Improving access to health and social care delivering better patient outcomes and relieving the pressure on public services**: 5G SA technology would enable more patient care to be done remotely by providing high-speed and high-quality video connections, enabling doctors and other health and social care professionals to deliver quality care quickly and efficiently, improving patient outcomes while alleviating staff burnout. Sharing data between care providers and hospitals becomes easier, faster and more secure. Use of 5G SA enabled technology in health and social care settings could save the NHS up to £1 billion per year - equivalent to employing 15,400 full-time nurses – helping to reduce pressure on front-line staff.[249]

(ii) **Enhancing productivity for SMEs**: 5G SA reliant use cases are estimated to generate significant productivity gains, resulting in lower working time per employee and significant savings (up to £8.6 billion per year) for SMEs:[250]

(a) **Agriculture**: 5G SA enabled technology (real-time data sensors assessing weather, soil quality and crop health, AI-powered farming schedule for maximum crop yields, precision unmanned machines) could help farmers in the UK, saving up to three working weeks a year and delivering productivity savings of £112 million per year.[251]

(b) **Construction**: thanks to 5G SA, construction workers will benefit from a more reliable and faster information exchange system for project delivery, saving up to 1.8 working weeks per year per worker. This would translate to productivity savings of c. £1.28 billion per year. This will be achieved by helping the construction sector in terms of connectivity, supporting communications among teams across different physical locations, virtual modelling by reducing the time required to update projects digitally, and equipment tracking.[252]

(iii) **Enhancing wind farms to generate additional clean energy**: As illustrated in Figure 6.8 below, it is estimated that 5G SA enabled technology will help generate additional

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[249] Vodafone UK and Three UK, 'NHS set to lose out on £1 bn of savings each year if 5G rollout slows', 14 September 2023, available at: https://vodafoneandthree.uk/news/nhs-set-to-lose-out-on-1bn-of-savings-each-year-if-5g-rollout-slows (accessed 26 April 2024).

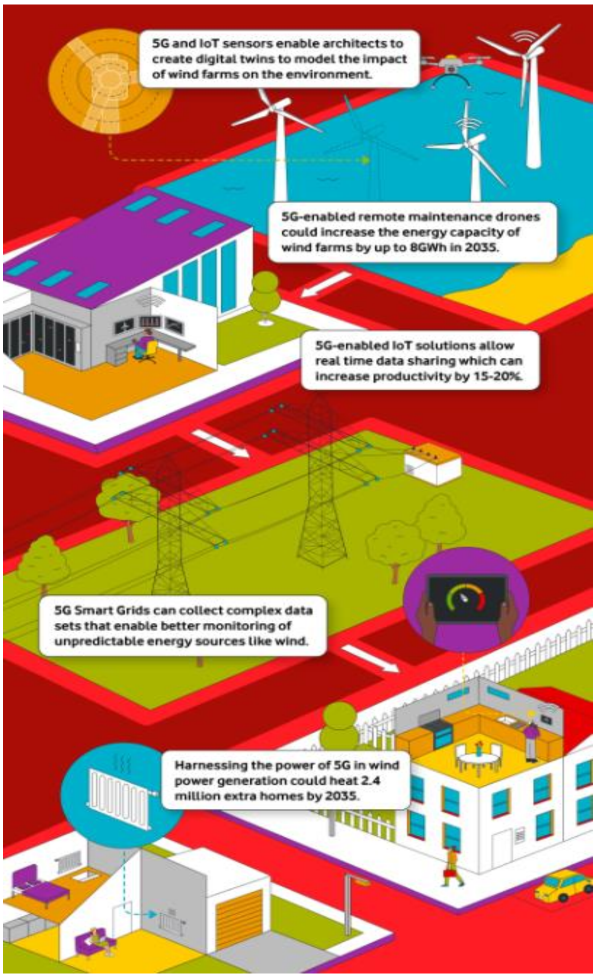
[250] WPI Strategy and Vodafone UK, 'Supercharging Small Businesses', 1 March 2024, available at: https://assets.ctfassets.net/q7ob9vms4z5k/vhWxa9XdXdaJhLHqU5NbT/fa85f340b52593329200daacd9f1633f/supercharging-small-businesses.pdf (accessed 26 April 2024). Please note that estimates for Advanced 5G use cases in paragraph 7.32(ii)-(v) reflect Vodafone's perspective.

[251] *Ibid*., page 12.

[252] *Ibid*., page 14.

wind power energy to heat 2.4 million UK homes (enough to heat every home in Scotland) and reduce total CO_2 emissions by 63 million tonnes by 2035.[253]

Figure 6.
Benefits of 5G SA technology to wind power generated energy



Source: Data sourced by WPI Economics for Vodafone in November 2023.

(iv) **Energy efficient networks** As set out in the Government's Wireless Infrastructure Strategy Report, 5G can "*reduce overall energy consumption across the economy by increasing industrial energy efficiency and resilience and enabling the transformation of energy networks for [the] generation, distribution and storage of power*."[254] The 5G

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[253] Vodafone UK, 'Transforming wind farms with 5G could help generate enough additional clean energy to heat 2.4 million UK homes, enough to heat every home in Scotland', 6 December 2023, available at: https://www.vodafone.co.uk/newscentre/press-release/5g-wind-farms-could-help-heat-2-4-million-uk-homes/ (accessed 26 April 2024).

[254] UK Government, 'UK Wireless Infrastructure Strategy Report', 11 April 2023, page 86, available at: https://data.parliament.uk/DepositedPapers/Files/DEP2023-0343/WIRELESS_INFRASTRUCTURE_STRATEGY_PDF_version_v3_2.pdf (accessed 30 April 2024).

SA network will operate far more efficiently, noting that 5G networks are up to 90% more energy efficient per GB than 4G.[255]

(v) **Increase business opportunities from live events**: while 5G mobile connectivity will allow audiences to enjoy an improved live experience by enabling a smooth social media use, 5G-enabled technology will create new opportunities for businesses linked to live events, such as sports and concerts. For instance, it has been estimated that 5G-powered technologies could add a total of £139 million to the UK rugby economy per season from 2029:[256]

(a) Sales of VR "seats" at sold-out rugby matches could generate up to £115 million in annual ticket sales per year from 2029.

(b) More efficient food and drinks sales at rugby stadiums could shorten queues and generate an additional £24 million revenue from 2029.

Fixed Wireless Access (FWA)

6.45 FWA is a broadband product that uses mobile networks to provide broadband solutions in fixed locations (e.g. at a residential address). FWA's advantages vis-à-vis fixed-line broadband solutions include: (i) speedier and easier installation; (ii) higher flexibility; given that it does not require physical cable installations; (iii) the potential to avoid long-term contracts; and (iv) availability in areas where traditional broadbands are still not feasible, affordable or desirable, such as Areas of Outstanding Natural Beauty, remote or rural communities.

6.46 MergeCo's much wider C-band deployment will provide the capacity that would be needed to support more customers having access to FWA.

6.47 At present, FWA is offered by 3UK[257] over the same network infrastructure as its mobile network and, as such, 3UK's FWA service suffers from the same issues affecting the 3UK network (i.e., congestion and limited capacity). [REDACTED] FWA offering. Indeed, as illustrated at Figure 6.9 below, 3UK's current network gives it an addressable market of [REDACTED] million homes through to 2028. Even with aggressive growth assumptions, [REDACTED] a [REDACTED]% [REDACTED].

Figure 6.
3UK 5G FWA addressable market forecasts

[REDACTED]

[255] UK Government, 'UK Wireless Infrastructure Strategy Report', 11 April 2023, page 85, available at: https://data.parliament.uk/DepositedPapers/Files/DEP2023-0343/WIRELESS_INFRASTRUCTURE_STRATEGY_PDF_version_v3_2.pdf (accessed 30 April 2024).

[256] Vodafone UK, 'Accelerating 5G could add £139 million to rugby's matchday economy', 10 April 2024, available at: https://www.vodafone.co.uk/newscentre/press-release/5g-139m-quid-to-rugby-matchday-economy/ (accessed 26 April 2024).

[257] VUK does not have a FWA offering.

Source: 3UK.

6.48 MergeCo's best-in-class network will significantly improve this FWA offering, compared to the counterfactual, through:

(i) **Increased coverage**: [REDACTED]. By contrast, by 2030, MergeCo will have rolled out C-band to around [REDACTED] more sites than 3UK, equating to a [REDACTED]-percentage point increase in coverage; in combination with the substantially increased capacity this will give MergeCo the potential to offer FWA to many more customers.

(ii) **Increased quality**: [REDACTED], MergeCo will be able to offer (i) significantly higher speeds allowing it to compete more closely with existing full fibre and fixed gigabit-capable offerings; and (ii) lower latency as a result of MergeCo's reduction in latency by half.

(iii) **Increased reliability**: MergeCo will deploy more spectrum over many more sites than VUK or 3UK. This means customers will, on average, be closer to the site they are being served from, minimising the drop-off in performance during peak hours.

(iv) **The potential for network slicing**: MergeCo's 5G SA core will give MergeCo the opportunity to designate dedicated "slices" of its network to FWA, which will allow it to offer guaranteed minimum speeds for FWA.

7. Conclusion

7.1 The Transaction will enable the creation of a best-in-class network which will deliver the network quality, coverage and capacity that is required to sustainably challenge the current market leaders. MergeCo's committed network investments and strong incentive to compete aggressively to fill its increased capacity in the retail and wholesale markets will trigger a pro-competitive reaction from BTEE and VMO2, boosting dynamic competition on both network quality and price. This will allow the UK to move to a high-investment equilibrium and achieve the UK Government's 5G ambitions as set out in its Wireless Infrastructure Strategy Report.

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