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Consultation Response

Which? response to the Competition and Markets Authority's issues statement on the anticipated joint venture between Vodafone Group plc and CK Hutchison Holdings Limited

Submission date: 16/05/2024

Summary

Which? welcomes this opportunity to respond to the CMA's issues statement on the proposed merger between Vodafone UK (VUK) and Three UK (3UK).

We previously raised concerns about the merger in our response to the CMA's initial invitation to comment during the Phase 1 inquiry. We have appended this prior response in full, including some updates to the analysis.[1]

Overall, we agree with the key areas of focus and theories of harm raised in the issues statement. We share the CMA's concerns of horizontal unilateral effects leading to higher prices and lower quality for consumers. Our own evidence shows that the two firms compete closely for end consumers, and therefore that the merger risks less intense competition in the market on both price and quality.

- Our analysis of four years of Ofcom switching tracker data shows significant proportions of recent switchers to either Three or Vodafone came from the other firm.
- Our June 2023 survey of customers shows that substantial proportions of consumers consider both Three and Vodafone at the point at which customers choose between offers on the market.
- Our analysis of Three and Vodafone store locations suggests they are commonly located very close to one another.

The CMA should consider this evidence in its competitive assessment. We are happy to engage further on these points and provide more information if helpful.

[1] We updated our analysis of Ofcom's switching data to include four waves of survey data from 2020-2023, giving us a total sample of more than 1,800 switchers.

Full response

Counterfactual

The prevailing conditions of competition are a good basis on which to undertake the analysis. Given the uncertainty around the firms' future plans, this appears to be the most credible counterfactual for the merger. We would expect the CMA to require highly compelling evidence to the contrary in order to change the counterfactual.

We understand that the CMA will analyse the companies' plans and abilities to invest and compete in its competitive assessment. It should also consider that there are alternatives to merging or exiting which can also provide efficiency benefits. Network sharing agreements can also be used to improve network efficiency, and the current agreements in the market show that they can credibly be entered into by the parties.

Theories of harm

We agree with the CMA's plans to focus on the three main theories of harm set out. Our main concerns are also around horizontal unilateral effects in both the supply of mobile services to end consumers and the supply of wholesale services. We have given relatively less consideration to the potential anti-competitive effects arising from network sharing agreements. However, the CMA's findings at Phase 1 were concerning. Credible preventative remedies must be found if the merger is to proceed.

Horizontal unilateral effects in the supply of mobile service to end consumers

We agree with the CMA's conclusions at Phase 1 that there is a substantial risk of horizontal unilateral effects leading to higher prices and lower quality for consumers. The evidence suggests the two firms provide a competitive constraint on one another and on VMO2 and BTEE, and that this constraint will be weakened by the merger.

The Issues Statement has set out what the CMA will consider at Phase 2 and the analysis it plans to undertake. We encourage the CMA to also consider the data and analysis that already exists and not just rely on the information it gathers itself and from the parties. In our response to the initial invitation to comment at Phase 1, we set out three areas of analysis and data, which can inform the assessment of closeness of competition between 3UK and VUK.[2] In summary:

- *A nationally representative survey of UK mobile customers*

We commissioned a nationally representative survey of UK individuals to ask consumers which providers they considered when they last switched, or considered switching. Amongst customers who had considered at least one other provider to their current one, 45% had considered at least one of Vodafone's brands and 42% at

[2] Please note that these results are set out in full detail in our response to the initial invitation to comment, which is included as an Appendix to this response.

least one of Three's brands. There was substantial overlap between customers considering the two firms. Of the customers who had considered Vodafone (and at least one other provider) as an option (n=192), 43% also considered a Three brand. Similarly, of the customers who considered Three, 46% also considered a Vodafone brand. Given the overlap in considerations between Three, Vodafone and the other two MNOs, we would also expect each of Three and Vodafone to currently provide a competitive constraint to VMO2 and BTEE as well as each other.

- *An analysis of MNO store locations*

All four UK MNOs operate physical stores from which they sell handsets and mobile service contracts (and in some cases fixed-or-mobile broadband contracts). They are an important sales channel for MNOs, which collectively operate more than 1,500 stores nationwide, and particularly for consumers buying bundled airtime and handset contracts. We found that Vodafone and Three stores are commonly located close to one another. 98% of Three stores have a Vodafone store within a 10 minute drive, and 83% within a 5 minute walk. Similarly, 74% of Vodafone stores have a Three store within 10 minutes drive and 60% within a 5 minute walk.

- *Analysis of switching flows in four waves of Ofcom's switching tracker*

Ofcom has been collecting data on consumer switching through its annual (now biennial) switching tracker for several years. We have collated four waves (2020, 2021, 2022 and 2023) of data from the tracker to look at the movements between providers as an indicator of closeness of competition. We found that among recent Vodafone switchers, 19% of customers came from Three; and among recent Three switchers, 15% came from Vodafone. We believe this is indicative of close competition between the two providers. Three and Vodafone are also both clearly acting as a competitive constraint on VMO2 and EE, as they capture customers from each roughly in line with their market share.

We understand the CMA at Phase 1 looked at switches from Mobile Number Portability data and GfK survey data submitted by the parties. It is not clear why the CMA has not used Ofcom's switching tracker data. It is high-quality survey evidence, and collated over four years enabled us to analyse a sample of 1,821 switchers. Its use would also improve the transparency of the analysis given that the tables presented at Phase 1 have needed redaction while the Ofcom data is in the public domain. We would be happy to provide more information on our analysis if helpful.

Please note that we have updated this analysis since our prior response to the initial invitation to comment by adding the 2022 and 2023 waves. The appended version of our invitation to comment response has been updated to include this.

Horizontal unilateral effects in the supply of wholesale services

We share the CMA's concerns that the merger could lead to weakened competition in the supply of wholesale mobile services to MVNOs. The evidence in the Phase 1 inquiry suggests that VUK and 3UK exert competitive pressure on each other and the other MVNOs. There is a risk that this could lead to both higher prices and more restrictive terms in MVNO contracts.

A reduction in competition at the wholesale level could also act to deter entry and expansion in the future if agreements with MVNOs are offered on worse terms. We understand that agreements between MNOs and MVNOs can be restrictive (e.g. how much data can be offered in plans). There is a risk that terms become more restrictive with less competition, and that this could deter players from entering the MVNO market if worse terms make a less compelling proposition to end consumers. Over time this could weaken the competitive pressure on the established MNOs, especially if it prevents entrants similar to Asda Mobile, Virgin Media or Sky Mobile who were able to quickly establish market share by bundling or targeting an existing customer base.

Countervailing factors

We expect the CMA to apply maximum scrutiny of the firms' claimed efficiencies during the Phase 2 inquiry. On the basis of the evidence so far, there is a substantial risk of higher prices and lower quality as a result of horizontal unilateral effects both in the supply of end customers and in the wholesale market. On the other hand, the parties' plans for investment seem less certain and could be subject to revision post merger. If the merger is to be approved, the CMA should be very confident that any countervailing benefits from efficiencies or increased investment are of a scale that would outweigh the potential price and quality harms from horizontal unilateral effects.

About Which?

Which? is the UK's consumer champion, here to make life simpler, fairer and safer for everyone. Our research gets to the heart of consumer issues, our advice is impartial, and our rigorous product tests lead to expert recommendations. We're the independent consumer voice that works with politicians and lawmakers, investigates, holds businesses to account and makes change happen. As an organisation we're not for profit and all for making consumers more powerful.

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APPENDIX

Updated Which? response to the CMA's initial invitation to comment

This response is as submitted at the time of the initial invitation to comment, but with updated analysis of switching flows under Concern 1, to include 2022 and 2023 waves of the Ofcom switching tracker data.

Summary

Mobile and broadband services are essential to consumers. Around 95% of households have at least one mobile phone,[3] UK adults spend on average almost three hours per day online using a smartphone[4] and the majority of calls are now made from mobile phones. Consumers rely on mobile services for work, education, entertainment and keeping in touch with family and friends.

It is vital that the UK telecoms sector delivers good outcomes to consumers on choice, quality and price - now and in the future. By and large, competition between the current four Mobile Network Operators (MNOs) to date has provided reasonable outcomes for consumers. Around 7 in 10 consumers think mobile phone coverage (71%) and mobile internet speed (69%) is good or excellent in the UK.[5] Competition has been fundamental in driving those outcomes, and will continue to be in the future. However, even current levels of competition are not always delivering good outcomes. The current four MNOs all use unfair inflation-linked price rises for customers in-contract at similar rates.[6] This already points towards some softness in competition in the market.

The proposed merger would represent a major shift in the market structure of mobile networks and the associated retailing of mobile services in the UK. The merged entity would provide the network for around a third of UK customers, based on their current 18% and 13% shares.[7] We have not reached a judgement on whether the merger will be good or bad for competition and consumers overall, but clearly such consolidation would leave the UK mobile market much more concentrated than at any point in its recent history. That undoubtedly comes with risks of horizontal unilateral effects leading to higher prices and lower quality for consumers, in both the short and long term.

It is imperative the CMA gives this merger full scrutiny, and is satisfied that its approval would not result in consumers being harmed. Evidence from the parties will, as ever, be important for making this judgement, but evidence from consumers must also be considered for a merger of this importance.

[3] Ofcom, Switching tracker 2022 data tables
[4] Ofcom (2022), Online Nation: interactive report. Average daily time spent online via smartphone among UK adults was 172 minutes
[5] Online poll conducted by Opinium on behalf of Which? with 2,000 consumers responsible for the mobile network service, from 7th-13th July 2023. Q: How would you rate the quality of the following in the UK? Mobile phone signal coverage; Mobile internet speed and coverage
[6] Three of the four MNOs use CPI inflation + 3.9% and one uses RPI inflation + 3.9%
[7] Ofcom (2021), Ofcom's future approach to mobile markets

Which? currently has concerns about four ways in which the merger could lead to worse competition and outcomes for consumers. These are outlined in the following sections. We would expect the CMA to consider each of these in its assessment, alongside any other relevant factors. We have also provided evidence to help the CMA in making its judgements, including from a nationally representative survey of 2,000 consumers run in June 2023. In summary, our four areas of concern are:

1. ***less competition in the supply of mobile communications services to consumers leads to less choice, higher prices and lower quality***
   There is evidence that the merging parties are close competitors and therefore the merger risks less intense competition in the market on both price and quality. Our analysis suggests Three and Vodafone are currently close competitors. In summary:
   - Our analysis of Ofcom's switching tracker shows significant proportions of recent switchers to either Three or Vodafone came from the other firm.
   - Our June 2023 survey of customers shows that substantial proportions of consumers consider *both* Three and Vodafone at the point at which customers choose between offers on the market.
   - Our analysis of Three and Vodafone store locations suggests they are commonly located very close to one another.

2. ***less competition leads to lower levels of investment and slower rollout of 4G and 5G coverage***
   Competition at the retail level is expected to provide pressure for MNOs to invest in their networks in order to attract customers. The merging parties argue that consolidation will support investment and coverage, but academic research is at best inconclusive on the impact of consolidation on market-wide investment. It will be important for the CMA to make a well-evidenced assessment in this area attaching appropriate weight to firms' internal documents on investment plans with and without the merger taking place.

3. ***less competition in the supply of wholesale mobile communications services to MVNOs leads to less entry and higher prices for consumers***
   Retail providers that do not own spectrum (MVNOs) are dependent on accessing MNOs' networks to supply consumers. A reduction in the number of potential providers could result in less competition and potentially feed through to higher retail prices for customers.

4. ***resilience of an essential service is weakened, leaving consumers more exposed to significant disruption in the event of outages or supplier failure***
   The CMA has previously argued that competition authorities should be concerned by mergers that leave markets for essential goods or services with so few providers that none of them can fail without creating significant harm. Mobile network outages already occur, and cause significant disruption to customers when they do. This could be considered as an element of quality in the merger assessment.

The CMA will have to give due consideration to the relevant counterfactual of the merger. The parties claim that the status quo is unsustainable and risks leaving only two MNOs with the scale required to compete on 5G in particular. In their view, this would represent a weakening of competition over time and that the merged entity would provide a better competitive constraint on VMO2 and BT/EE than the two parties can achieve on their own.[8] It is not possible for Which? to assess the strength of this argument about potential and dynamic competition. But in our view, there is a material risk that the merger will represent a weakening of competition *now,* and so the CMA should demand compelling evidence of likely improved competition in the future over credible counterfactuals. Those counterfactuals should include a consideration of whether there are any alternatives to merging which could provide requisite efficiencies for the companies to recover their cost of capital, for example network sharing.[9]

We recognise that the merging companies claim there will be benefits to the merger. More efficient use of the network could lead to better services for consumers, especially given the significant cost of building 5G networks. However, any increase in investment *must* be as a result of these efficiencies of scale rather than higher revenues resulting from less intense retail competition.

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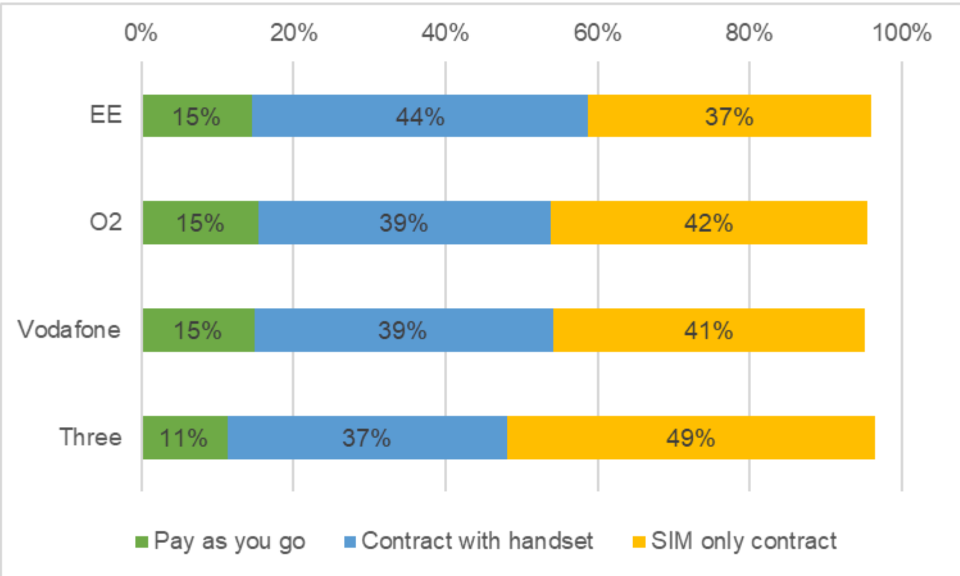
[8] Business and Trade Committee oral evidence session, 17 October 2023. A representative from Three said “Absent this merger, we do not see any real ability to move forward and grow the business in a way that will break that cycle. It will lead to the situation where you have two subscale operators and two scale operators in VMO2 and BT, and that is not healthy for competition."
[9] Frontier Economics (2021), Getting a fair share

Concern 1: less competition in the supply of mobile communications services to consumers leads to less choice, higher prices and lower quality

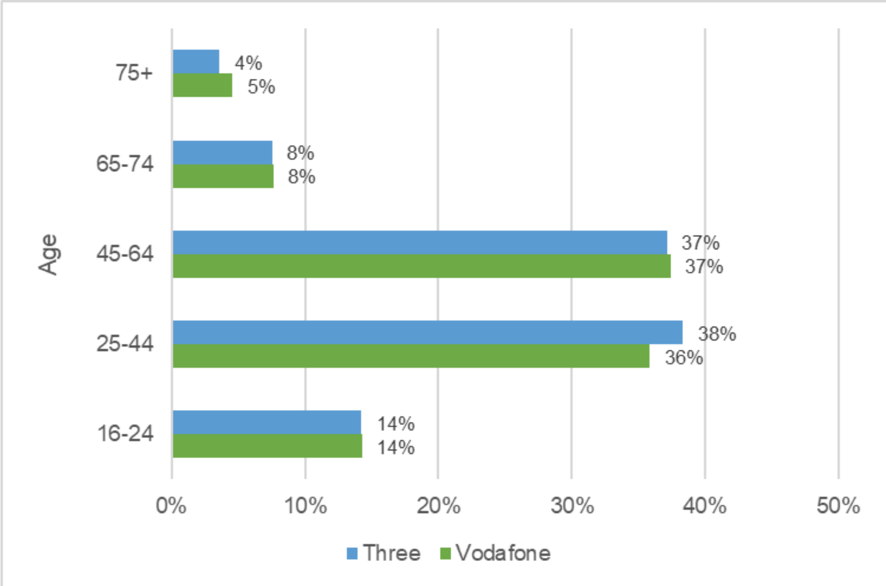
On the basis of current evidence, we believe that Vodafone and Three are close competitors and therefore the merger risks leading to worse outcomes for consumers on both price and quality. This is consistent with the CMA's merger assessment guidelines which state that so-called horizontal unilateral effects are "more likely where the merger firms are close competitors or where their products are close substitutes. The more closely the merger firms compete the greater the likelihood of unilateral effects because the merged entity will recapture a more significant share of the sales lost in response to a price increase."[10]

Both Three and Vodafone provide a very similar product, with both firms offering at least 4G coverage to >90% of UK premises.[11] The two firms profile similarly across both demographics and contract types, suggesting that they are competing for many of the same customers. Our analysis of Ofcom's 2021 Switching Tracker shows that similar proportions of Three and Vodafone customers report being on pay-as-you-go (PAYG), pay monthly (with a handset) and pay monthly (SIM only). These are also similar proportions to the other two MNOs. The analysis also shows that both firms have a similar proportion of customers within different employment types and across ages.

Figure 1 - Percentage of MNO customers by contract type and age of customer



[10] CMA (2021), [Merger Assessment Guidelines](), para 4.8
[11] Ofcom (2023), [Connected Nations Spring 2023 Update]()



Source: Which? analysis of Ofcom Switching Tracker data, 2023. Wholly-owned sub-brands (Smarty, VOXI and Talkmobile) included as customers of Three and Vodafone respectively in the second chart only (owing to data availability)

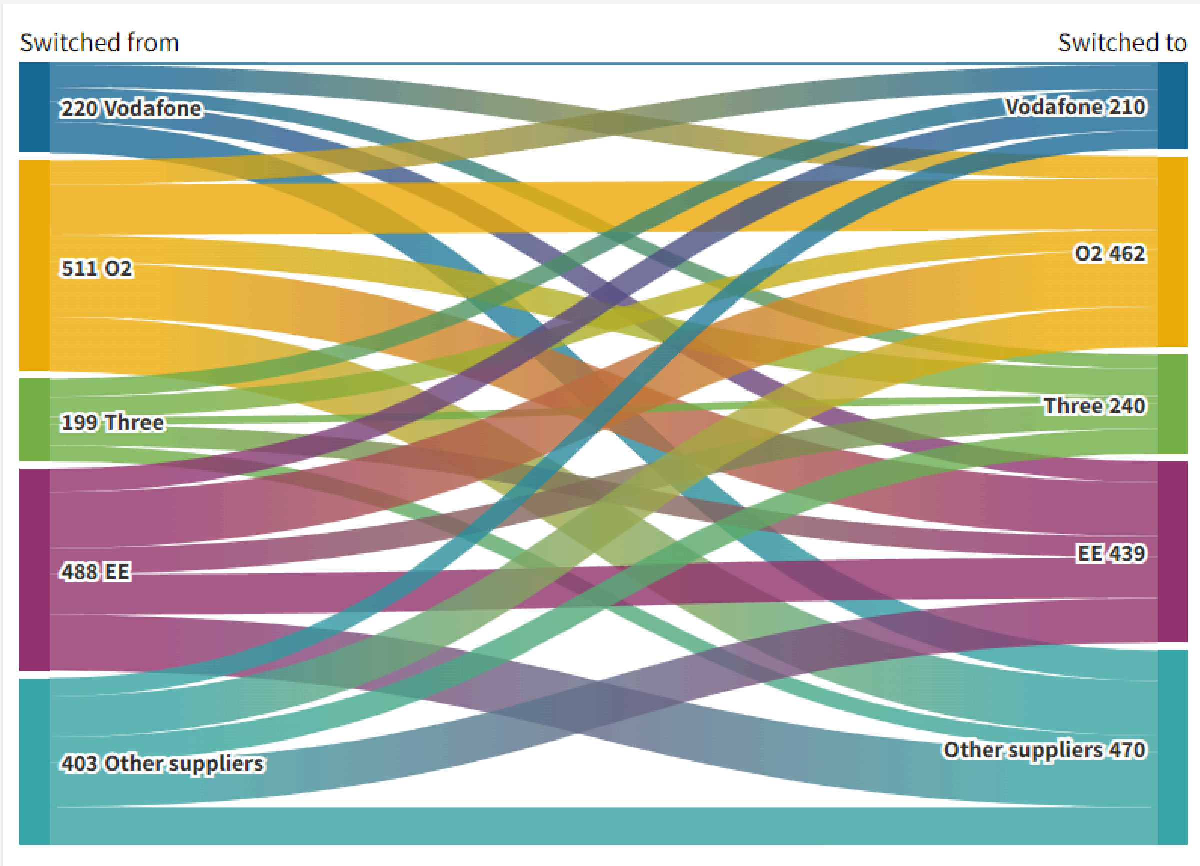
It is notable that both firms have committed to offering “flexible, contract-free offers with no annual price increases” in the event of the merger. Some analysts have interpreted that commitment as an indication that the merged company will operate a multi-brand strategy, as each of Vodafone and Three do at present, where sub-brands Smarty Mobile (Three), Voxi (Vodafone) and Talkmobile (Vodafone) tend to offer flexible and lower-priced contracts. That both firms have sub-brands targeting these customer segments in the first instance is an indication of them competing for the same pool of customers.

Switching flows between the companies [UPDATED 16/05/2024]

Data from Ofcom’s switching tracker shows that substantial numbers of switching customers move directly between the two firms. Combining two waves of the survey from 2020 and 2021,[12] we analysed the proportions of recent switchers to either Vodafone or Three that came from the other. Among recent Vodafone switchers, 19% of customers came from Three; and among recent Three switchers, 15% came from Vodafone. Three and Vodafone are also both clearly acting as a competitive constraint on VMO2 and EE, as they capture customers from each roughly in line with their market share.

Figure 2 - numbers of recent switchers in the 2020-2023 Ofcom Switching Tracker moving between providers[13]

[12] Our analysis of switching flows combined the respondent-level data from the 2020, 2021, 2022 and 2023 Switching Tracker waves to create a large enough sample of switchers.
[13] Interactive chart available on Flourish here https://public.flourish.studio/visualisation/17308287/



Source: Which? analysis of *Ofcom Switching Tracker data, 2020, 2021, 2022 and 2023 waves. Wholly-owned sub-brands included as customers of each MNO*

Shopping around and considering providers

To supplement the Ofcom Switching Tracker, we also conducted our own nationally representative survey with 2,000 members of the public on which firms consumers consider when choosing a provider.[14] This provides an indication of whether the firms are competing directly at the point of consideration for consumers, even if the customer switches to a different firm, or just changes their plan with the current provider.

Among our sample, 1,647 consumers told us that they had changed their network or their plan with their existing provider. 28% of consumers had changed within the last year, 22% between 1-2 years ago, 10% 2-3 years ago, and 22% more than 3 years ago. We then asked respondents who had changed their network or plan which, if any, providers other than their current provider they considered at that time - 22% had considered at least one other firm. This allows us to examine not only which firms consumers switched between, but all the firms that consumers considered when they were choosing their new plan and/or network (i.e. had at least thought about switching provider). Thus we can also determine how many customers who considered each of the merging parties also considered the other.

[14] Online poll conducted by Opinium on behalf of Which? with 2,000 consumers responsible for the mobile network service, from 7th-13th July 2023

Both Three and Vodafone commonly appear in the choice sets of those who considered switching. Among all those who had considered another provider, 45% had considered at least one of Vodafone's brands and 42% at least one of Three's brands. We also observe considerable overlap between the consumers who considered Vodafone and Three.[15] Of the customers who had considered Vodafone (and at least one other provider) as an option (n=192), 43% also considered a Three brand. Similarly, of the customers who considered Three, 46% also considered a Vodafone brand. Given the overlap in considerations between Three, Vodafone and the other two MNOs, we would also expect each of Three and Vodafone to currently provide a competitive constraint to VMO2 and BT/EE as well as each other.

Figure 3 - Firms considered by customers who switched plan or provider, and considered more than one brand[16]

Brands considered[17]	All customers who considered options when changing plan (N=430)	Customers who considered Vodafone (N=192)	Customers who considered Three (N=179)
Vodafone	45% (192)	–	46% (83)
Three	42% (179)	43% (83)	–
O2	66% (283)	66% (127)	69% (123)
EE	52% (224)	53% (102)	54% (96)
Any independent MVNO	59% (255)	53% (101)	58% (104)

Source: Which? analysis of online poll conducted by Opinium on behalf of Which? with 2,000 consumers responsible for the mobile network service, from 7th-13th July 2023

We also asked consumers about a hypothetical scenario where their current provider stopped trading and they needed to choose a new one. Just over half (54%) of respondents did not know who they would consider in this scenario, but among those who did, 35% said they would consider Three and 35% said they would consider Vodafone. Similarly to the responses among those who had actually considered switching, there was considerable overlap between consumers who would consider Three and Vodafone. Among consumers

[15] We count among the population who considered a particular firm (Firm A): 1. consumers who are current customers of Firm A but who previously switched plan/provider and considered at least one other firm; and 2. Customers of other firms who previously switched plan/provider and considered the Firm A.
[16] Percentages are of the column totals. Does not sum to 100% as consumers can consider more than one firm.
[17] A customer has considered a firm if they considered any of the brands fully owned by that firm

who would consider Three, 51% would also consider Vodafone; and among those who would consider Vodafone, 50% would also consider Three.

Store locations

All four UK MNOs operate physical stores from which they sell handsets and mobile service contracts (and in some cases fixed-or-mobile broadband contracts). They are an important sales channel for MNOs, which collectively operate more than 1,500 stores nationwide. In 2020, Deloitte noted that stores are a particularly important sales channel for firms selling contracts with handsets, finding around a third of smartphones were sold in-store over the prior two years.[18] MNO stores are also now the main physical locations at which consumers can buy phones on contract, as independent stores offering contracts from multiple operators have diminished significantly since the closure of all Dixons Carphone stores.[19]

Given their important roles as a sales channel, co-location of stores may also be an indication that the four main MNOs are competing closely. To examine this question, we analysed the locations of stores listed on company websites to determine how closely they are located to one another. At the time of our analysis (August 2022), EE operated 475 stores, Vodafone 411 stores, O2 391 stores and Three 309 stores. Our analysis shows that the vast majority of stores are located close to stores from all three other MNOs.

For 98% of Three stores, there is at least one Vodafone store within a 10 minute drive, while 74% of Vodafone stores have at least one Three store within the same travel time. Given that Three has the fewest stores of all MNOs, it is also less frequently located close to other MNO stores.

Figure 4: Proportion of “Surrounding” stores within a 10 minute driving time of the “Centre” store

	Surrounding				
Centre		**Vodafone**	**Three**	**O2**	**EE**
	Vodafone		74%	87%	90%
	Three	98%		95%	98%
	O2	92%	78%		91%
	EE	92%	78%	87%	

Source: Which? analysis of store locations listed on company websites

Even when the distance between stores is reduced to a 5-minute walk, there are still a majority of stores from rival MNOs within that distance for all four operators. For 83% of

[18] Deloitte (2020), The future of mobile operators: online or on the high street?
[19] Ofcom (2022), Discussion paper: Ofcom’s future approach to mobile markets

Three stores, there is at least one Vodafone store within a 5 minute walk, while 60% of Vodafone stores have at least one Three store within a similar travel time.

Figure 5: Proportion of "Surrounding" stores within a 5 minute walking time of the "Centre" store

	Surrounding				
Centre		**Vodafone**	**Three**	**O2**	**EE**
	Vodafone		60%	68%	78%
	Three	83%		90%	96%
	O2	72%	70%		86%
	EE	71%	67%	77%	

Source: Which? analysis of store locations listed on company websites

This high level of closeness between the two companies' stores further suggests that they are close competitors.

Concern 2: less competition leads to lower levels of investment and slower rollout of 4G and 5G coverage

Competition at the retail level provides pressure for MNOs to invest in their networks in order to attract customers. Weaker competition may lead to lower capital investment in their networks and this may mean mobile coverage and connection quality is weaker for consumers in the future than would otherwise be the case. The merged entity will also hold licences for 'a considerable amount of 5G-ready spectrum,'[20] which could weaken competition in the supply of 5G services to both consumers and MVNOs, and may affect incentives to invest.

On the other hand the parties argue that the merged firm would be better-placed to invest in networks and that the merger would increase rivalry in investment. They say that the costs of investing in 5G are much greater than previous generations and that Three and Vodafone individually do not currently have the scale to make these investments sustainably.

Greater levels of investment would clearly be good for consumers. However there is no clear evidence as to whether the merger will likely lead to higher or lower levels of investment than would otherwise be the case. The theoretical and empirical research to date suggest that both are plausible outcomes. For example, Genakos, Valletti and Verboven (2018) found capital expenditure *per firm* increased after mobile telecoms mergers but at a country level this was not enough to make up for the loss of investment from losing a firm.[21] Abate, Bahia

[20] Assembly Research (2022), Analyst Note, Three/Vodafone: What would be the chances of regulatory approval?
[21] Genakos, C., Valletti, T., and Verboven, F. (2018), [Evaluating market consolidation in mobile communications](), Economic Policy, Vol 33 (93) 45-100

and Castells (2020) also found investment *per firm* in Europe 2011-2018 was greater in more concentrated markets, and also that greater concentration was linked to better network performance in the period after 2015.[22] However, Bryson, Garbe, Backovsky and Malikova (2023) argue that the per-firm increases in investment are mechanical (i.e. two identical firms merging would double per-firm investment), while their comparative analysis of the US and EU shows 'more value being returned to customers in the less-concentrated EU market.'[23]

The conflicting evidence on mergers and investment is also reflected in Ofcom's research, which concluded that "the empirical research that has been performed to date does not provide evidence of a positive link between mobile mergers and quality outcomes."[24]

Consumers care about network quality[25] and any purported increase in investment as a result of the merger could provide considerable benefits to consumers. However, on the basis of the current evidence this is by no means a foregone conclusion and adverse impacts on investment also remain a distinct possibility. Given the uncertainty around the effects on investment, we consider there should be a high evidential bar if the CMA is to approve the merger on the grounds of improved dynamic competition and increased rivalry in investment.

Concern 3: less competition in the supply of wholesale mobile communications services to MVNOs leads to less entry and higher prices for consumers

MVNOs rely on wholesale access to MNOs' networks in order to supply customers. A merger between Three and Vodafone would mean that there would be one fewer potential wholesaler for them to purchase from. All four MNOs currently supply at least one MVNO, although in terms of customers O2 by far supplies the most as it has an agreement with Sky Mobile and the 50:50 joint venture with Tesco Mobile. Notably, Virgin Mobile was previously the largest MVNO and switched its wholesale provider from EE to Vodafone in 2019. Since its merger with O2, Virgin cancelled the 5-year agreement with Vodafone, with plans to migrate customers to O2 over time.

Weakened competition at the wholesale level could lead to consumer harms in three ways:
- Higher charges for MVNOs gets passed onto consumers through higher prices
- Wholesale supply contracts become more restrictive and lead to a lower quality service for MVNO customers
- Entry becomes harder or less attractive to new MVNOs weakening competition at the retail level over time

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[22] Abate, S., Bahia, C. & Castells, P. (2020), Mobile market performance and market structure in Europe during the 4G era
[23] Bryson, J.J. Malikova, H., Garbe, L & Backovsky, D. (2023), Big Telcos Aren't Necessarily Better: A Case Study of EU versus US Market Concentration
[24] Ofcom (2021), Ofcom's future approach to mobile markets
[25] In our survey, 'reliable network' (31%) and 'good network coverage' (30%) were the second and third most common reasons for consumers choosing their current mobile service provider, behind only 'low price services' (39%).

Higher prices

MVNOs and other service providers often invite MNOs to bid for wholesale access contracts. Not all MNOs will decide to bid for contracts and need to weigh up a number of factors including network optimisation and long term strategic considerations like whether the MVNO will canabalise the MNO's existing customers. This means smaller MNOs will often be more likely to bid for contracts as they have more spare capacity on their networks. In O2/Three, the European Commission noted that Three was an important competitive constraint in these bids even where it failed to win the contracts. A reduction in the number of bidders for contracts may therefore lead to higher prices for MVNOs and get passed through to customers.

MVNOs often target a niche in the market, which makes them more attractive to MNOs to supply for strategic reasons - as there is less chance of cannibalisation of existing customers. For example Lebara Mobile (supplied by Vodafone) targets price sensitive international call customers. If the merger leads to higher prices charged to MVNOs then this could mean that prices increase particularly for niche groups, and this may have distributional consequences.

Lower quality

The European Commission's findings on the proposed Three/O2 merger found that agreements between MNOs and MVNOs are typically very restrictive and can prevent MVNOs from 'offering attractive price and data bundles' as well as 'meaningfully differentiating their retail services as regards quality or technical innovation.'[26]

Fewer bidders to supply MVNOs could lead to more restrictive agreements between the successful MNO supplier and the MVNO, which might lead to lower quality for consumers. This might for instance mean that less network capacity is reserved by the MNO for the MVNO customers, who could experience slower connection speeds and more dropouts. Alternatively it might involve restricting parts of the spectrum for use by the MVNO. Virgin Media's 2019 decision to switch wholesaler from EE to Vodafone appears to have been driven by a desire to provide 5G services to customers.[27] With fewer wholesale suppliers available, deals such as this may become harder to achieve for MVNOs to the detriment of their quality offering to consumers.

Less entry and expansion in the future

Similarly to above, if MNOs become less generous or less willing to bid for the wholesale supply of MVNOs then this could deter entry by new players who wish to enter the mobile market. Over time this could weaken the competitive pressure on the established MNOs, especially if it prevents entrants similar to Asda Mobile, Virgin Media or Sky Mobile who were able to quickly establish market share by bundling or targeting an existing customer base.

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[26] https://ec.europa.eu/competition/mergers/cases/decisions/m7612_6555_3.pdf
[27] Which? (2019), Virgin Media announces switch to Vodafone network

MNOs may also be able to better prevent the growth of existing MVNOs so that they do not become major competitors by entering into more restrictive supply agreements. MVNOs can reach scale at which point it becomes attractive to develop into a fully fledged MNO with spectrum and infrastructure, and exert maximum competitive pressure on the existing MNOs. In order for this to happen, it is essential that they first reach a critical mass of customers. In the case of the EC's assessment of the merger of Three and O2 in Ireland, they estimated that this critical mass was somewhere between 3.8% and 5% market share, although this will likely be considerably higher given the increased costs of investment in 5G compared to previous generations. While no current MVNOs have publicly expressed an interest in transitioning to full MNO, worse wholesale competition could act to limit those ambitions if they were to emerge. Over time this could weaken the number of players able to put competitive pressure on the three remaining MNOs.

Concern 4: resilience of an essential service is weakened, leaving consumers more exposed to significant disruption in the event of outages or supplier failure

A 2022 CMA paper on resilience and competition policy argued that competition authorities should be concerned by mergers that leave markets for essential goods or services with so few providers that none of them can fail without creating significant harm.[28]

We have concerns that this merger could lead to lower levels of resilience for UK consumers. The merged entity would supply around a third of mobile customers over its network and therefore any issues with its ability to service UK customers could lead to significant disruption to a much greater number of consumers than an issue at Three or Vodafone individually. Failure of the company would be an unlikely outcome but similar consumer harms could result from outages or major service failings of the merged entity. Resilience in this sense may become particularly relevant given the potential for UK critical infrastructure to be targeted by cyber-attacks.[29]

In the 2022 CMA paper, Coscelli and Thompson note several features which can increase fragility of supply:

- market concentration, and particularly the presence of market power;
- the financial resilience of suppliers, and their vulnerability to changes in trading conditions;
- supply chain dependencies, and in particular whether there is upstream dependency for key inputs on a small number of suppliers and/or particular geographic locations.

The Vodafone/Three merger would certainly increase market concentration, and possibly lead to the presence of market power among the three remaining MNOs. The fact that the mobile telecommunications networks are part of critical national infrastructure may also

[28] Coscelli and Thompson (2022), CMA economics working paper, Resilience and Competition Policy
[29] Commons and Lords Joint Committee (2018), Cyber Security of the UK's Critical National Infrastructure

leave them more susceptible to cyber attacks. Against this, the financial resilience of a merged entity may be better than that of Vodafone and Three separately.

If indeed resilience is weakened as a result of the merger, then the harms caused could include extended periods of disconnection, cost of failed supply being spread across all consumers (as in energy), and increasingly weakened competition from even greater consolidation among two MNOs.

Coscelli and Thompson also note some key features which could aggravate or prolong the harm caused by disruptions of supply:

1. the extent to which the product in question – whether it is a production input, service or consumer good – is essential, such that it cannot easily be substituted for alternatives in the face of shortages or supply discontinuity;
2. whether there are significant barriers to the entry (and expansion) of new suppliers: where this is the case, it can prolong the disruption;
3. whether the good or service is supplied to vulnerable consumers, who may be at greater risk of harm when supply is disrupted.

Mobile telecoms fit all three of these market features. First, mobile telecoms are widely seen as essential, as outlined in the introduction to this response. Second, it is not easy for new companies to enter at the MNO level. Third, services are supplied almost universally across consumers so those with vulnerabilities will be impacted by interruptions to supply - potentially quite seriously in the case of disabled or elderly consumers who need mobile connections to communicate with family or carers.

While we understand that resilience is unlikely to feature heavily in the CMA's decision to approve the merger, we do consider that it is a relevant measure of quality for consumers that should be taken into account alongside price and other network quality metrics.

Conclusion on Which? concerns

Overall, our view is that the initial evidence points to a strong likelihood of weakened competition immediately following the merger. This risks less choice, higher prices and lower quality for consumers at least in the short term. Our analysis shows substantial proportions of customers consider both firms when shopping around, and switch directly between them when moving providers. Both firms also locate physical stores close to one another. We recognise that this *could* be counterbalanced by improved dynamic or potential competition in the long-run. However this hinges on whether the merger will lead to greater or lower investment, and the evidence on this is much less clear. Given this uncertainty, we consider there should be a high evidential bar if the CMA is to approve the merger on the grounds of improved dynamic competition and increased rivalry in investment.