

Examining the key learnings from Vodafone UK's merger with Three UK, and advocating for the implementation of a similar approach in the EU.

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IMPLICATIONS FOR FUTURE MOBILE MERGERS AND THE EU MERGER FRAMEWORK

74 Key learnings

SUMMARY

THE MERGER

The UK's Competition and Markets Authority (CMA) cleared the merger between Vodafone UK (VUK) and Three UK (jointly referred to as "the Parties" forming "MergeCo") on 5th December 2024, subject to the implementation of certain remedies. The approach to efficiencies, which in turn determined the types of remedies required by the CMA, represents a step-change compared to previous European mobile mergers. This paper explores key learnings from Vodafone UK's merger with Three UK and argues that a similar approach to efficiencies and remedies should be implemented in the EU.

he approach taken by the CMA is also noteworthy in terms of placing the requisite evidentiary weight on the sectoral regulator's views (i.e. the Office of Communications (Ofcom)), which enabled the CMA to unequivocally recognise:

- that investment in mobile networks requires a long-term perspective, particularly with regard to the proposed integration of two mobile networks;
- that the integration of the standalone networks envisaged in the Parties' Joint Business Plan is a unique opportunity to deliver a significant improvement in the quality of the Parties' networks which is otherwise unlikely to be delivered by the market;

- the increasing importance of network quality, i.e. the quality of mobile services will become more important as customer dependence on mobile services grows and their needs evolve.
- that price and network quality are both important parameters of competition in the supply of retail and wholesale mobile services;
- the longer-term increase in capacity and the reduction in the incremental cost of capacity arising from the Merger gives rise to improvements in quality which are valuable to consumers. Therefore the longer-term effect of the Merger, taking into account also the remedies, will be to improve consumer welfare, i.e. reduce quality-adjusted prices.

One of the key elements leading to the positive decision was the recognition by the CMA of the need - irrespective of the transaction under review – for significant investments in mobile networks. to increase capacity and provide the network quality needed to meet future customer needs. In this regard, the paper published by Ofcom in 2022 on its future approach to mobile markets and spectrum¹, as well as other submissions of Ofcom during the CMA's review process, played an important role. The CMA also considered the strategic steer given by the previous UK government in 2023 on the need to support investment, innovation, and growth by promoting competitive markets² and the UK Wireless Infrastructure Strategy published in the same year³ which states:

The Wireless Infrastructure Strategy sets an ambition of 'nationwide coverage of standalone 5G to all populated areas of the UK by 2030', and it is widely recognised that 5G deployment will require significant investment, including from MNOs.

The UK Wireless Infrastructure Strategy



The CMA's decision put more emphasis on long-term innovation, quality, investment and growth in response to the extensive and verifiable evidence submitted by the parties.

Against that background, one of the perceived novelties in the CMA's decision was the acceptance of the Network Commitments package put forward by the Parties, which in effect mandated the implementation of their Joint Business Plan (JBP) / Joint Network Plan (JNP), and therefore the claimed efficiencies relating

eight years. With this commitments package, the CMA accepted the need to embrace a longer period to deliver the transformative network that the network performance improvements in capacity and other the potential harms identified by the CMA from a substantial lessening of competition (SLC) in the wholesale and retail markets.

to the JBP/JNP, over a period of efficiencies put forward by the Parties as a remedy (and ultimately accepted by the CMA). The CMA acknowledged network quality dimensions contained in the JBP/JNP would ultimately offset Further, whilst the Parties viewed this remedy as quasi-structural, the CMA emphasised two crucial points about the scope of its existing framework in respect of behavioural remedies, namely that:

- 'When behavioural remedies are considered, we generally prefer to use enabling measures that 'work with the grain of competition' and address an SLC by seeking to remove obstacles to competition or stimulating competition, rather than measures that control market outcomes, which restrict the adverse effects of an SLC. [...] We consider that the Network Commitment is an enabling measure because it delivers a structural change to the UK's mobile networks, leaving market outcomes to be determined by the competitive process without further intervention4.
- For behavioural remedies to have the desired impact, it is essential that there are effective and adequately resourced arrangements in place for monitoring and enforcement. The likelihood of effective monitoring of a remedy will be significantly increased if it is possible to involve a sectoral regulator in the monitoring regime⁵."

Utilising its existing legal framework, the CMA made the promised efficiencies legally binding and ensured that compliance would be enforced and monitored with Ofcom and a third-party monitoring trustee.

Importantly, when assessing the proportionality of the Network

Commitments package (including certain Time Limited Retail and Wholesale Protections) against the prospect of prohibition of the Merger, the CMA also recognised that the transaction would give rise to relevant customer benefits (so called RCBs) that the package would help preserve. These relate to mobile connectivity, advanced 5G standalone use cases, and Fixed Wireless Access (FWA) driven by the step-change in investment in state-of-the-art mobile network infrastructure.

Whilst both the EC and UK remedy assessment frameworks contain a proportionality requirement, i.e. that remedies are proportionate to the harm that has been identified, only the CMA's assessment framework specifies that the least intrusive remedy must be selected and that RCBs are a key element in assessing the proportionality of remedy options. In considering the proportionality of remedies, therefore, the CMA will examine the extent to which the remedies under consideration preserve, reduce or extinguish RCBs.

In this case, the CMA concluded that the Network Commitment and the Time Limited Protections would be a less intrusive remedy than prohibition, as this remedy package would allow the Parties to complete the Merger – thereby preserving both the efficiencies and RCBs that the CMA had identified (whereas prohibition would clearly not). Crucially, the CMA also rejected divestment options, recognising that, given the characteristics of the UK market, the creation of a new mobile The CMA's decision put more emphasis on longterm innovation, quality, investment and growth in response to the extensive and verifiable evidence submitted by the parties.

player through the imposition of structural remedies on the merging parties (a feature of mobile remedies in a number of past cases in the EU), would not lead to better competitive outcomes for consumers and businesses in the UK. In reaching this conclusion, the CMA took account of the network sharing arrangements present in the UK market and the spectrum sold by Vodafone UK (at market prices) to Virgin Media O2, which would increase the latter's network capacity and lead to a more dynamic retail and wholesale mobile market and improved network quality.

The CMA demonstrated open mindedness by:

- 1. being willing to accept arguments and evidence around the longterm investment requirements of the mobile industry (including from sector regulators);
- **2.** assessing economic evidence relating to the efficiencies / RCBs with openness; and
- 3. accepting a behavioural remedies package that sought to maximise the preservation of any efficiencies from the merger / RCBs identified during the substantive review.

The open mindedness shown by the CMA should inform the approach taken by other competition authorities, including DG Competition, in their assessment of all future mobile mergers, given the potential benefits for consumers, business, and governments which might arise from investment in mobile networks.

In the EU, the recently-appointed Commissioner, Teresa Ribera, Executive Vice-President for a Clean, Just and Competitive Transition (EVP), received a clear mandate to modernise the EU's competition policy to ensure that it supports European companies to innovate, compete and lead worldwide, whilst contributing to the EU's wider objectives on competitiveness and sustainability, social fairness and security.

As part of this objective, the EVP is expected to revise the Horizontal Merger Control Guidelines. This is a much welcome development. However, the modernisation of the merger framework needs to go further and should include a revision of the Remedies Notice.

When revising these two pieces of soft law, the Commission's objective should be to:

- consider merger efficiencies in a forward-looking manner and over a longer time-horizon, in particular in investment-intensive sectors such as telecoms;
- consider investment intensity and real competitive dynamics which matter for future competition including the quality of the infrastructure which underpins wholesale competition and benefit Mobile Virtual Network Operators;
- remove the strong preference for structural divestment remedies and incorporate more specifically the need to preserve relevant customer benefits when considering the proportionality of remedies; and
- for regulated sectors, the EU should explicitly recognise that the sector regulator can and should play an important role not only in assisting the competition authority during the substantive review but also in monitoring and enforcing behavioural remedies⁹.

The views expressed in this paper are those of Vodafone only.







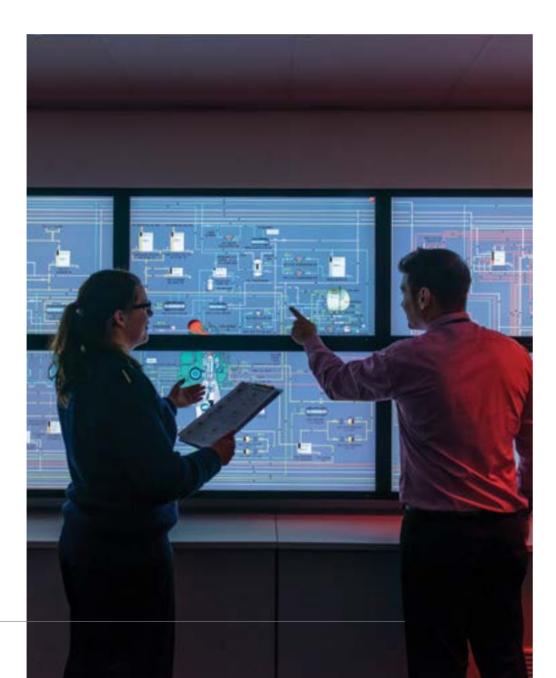
MOBILE TELECOMS MARKETS IN EUROPE

TECHNOLOGICAL AND DATA DEVELOPMENTS

he GSMA (the global mobile industry body) estimates that there were approximately 520 million unique mobile subscribers in Europe in 2024, equivalent to approximately 88% of the European population, and that around 83% of adults (in 2023) had access to a smartphone¹⁰.

Successive generations of mobile technologies have brought new advances and capabilities¹¹. For example, by providing mobile broadband, 4G paved the way for the widespread adoption of smartphones and the proliferation of mobile applications.

5G, the latest generation of mobile technology, offers more capacity, higher speeds, lower latency and the ability to connect multiple devices simultaneously. 5G also enables smart applications such as smart cities, e-healthcare, autonomous vehicles, the internet of things (IoT), and artificial intelligence (AI).

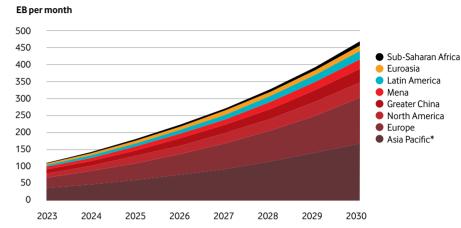


There are different types of 5G technology, each with specific characteristics and outputs. The first 5G networks to be launched were "Non-standalone 5G" (5G NSA), which were built on existing 4G core network infrastructure and were therefore a cost-effective way of introducing 5G services. More recently, operators have been investing in "5G standalone" (5G SA) networks, which use a dedicated 5G core network to exploit the full capabilities of 5G low latency services. Migrating customers to 5G SA will be important to maximise end user benefits.

5G technology can also be used for Fixed Wireless Access (FWA), providing high-speed broadband connections, especially in sparsely populated regions, where traditional wired infrastructure may be difficult or not as cost-effective to deploy. Another key feature of "5G standalone" is network slicing, which allows multiple virtual networks to be created over the same physical infrastructure, to meet customers' various needs for enhanced security, customisation, efficiency, and flexibility.

Improvements in each new generation of mobile technology, combined with increased customer appetite to use mobile services, has resulted in rapid growth in total mobile data carried by mobile networks globally. The GSMA forecasts that mobile data traffic will continue to grow over this decade, and that in Europe it will increase at an annual rate of 22% between 2023 and 2030, as shown in Figure 1.

Figure 1 Global mobile data traffic forecast



Source: GSMA, The Mobile Economy 2024

Mobile data traffic per connection (GB per month)

REGION	2023	2030	2023-2030
ASIA PACIFIC*	14	53	21%
EUROASIA	13	41	18%
EUROPE	17	71	22%
GREATER CHINA	13	54	23%
LATIN AMERICA	7	32	23%
MENA	10	31	18%
NORTH AMERICA	29	90	17%
SUB-SAHARAN AFRICA	2	9	23%

*Asia Pacific excludes Greater China

Source: GSMA, The Mobile Economy 2024

Successive generations of mobile technologies have brought new advances and capabilities. For example, 4G paved the way for the widespread adoption of smartphones and the proliferation of mobile applications.

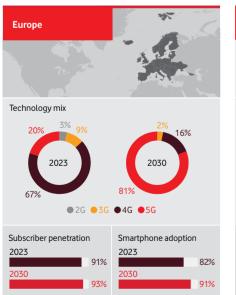
5G ROLLOUT AND AVAILABILITY IN EUROPE

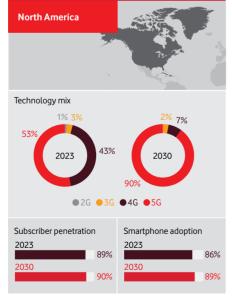
espite growth in mobile data demand in Europe being among the highest in the world, the majority of customers still use 4G rather than 5G connections, as shown in Figure 2. In 2023, 5G represented only 20% of mobile connections in Europe,

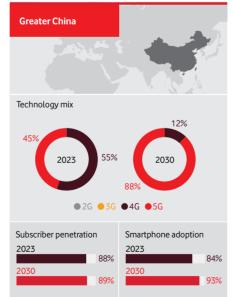
compared with 53% in North America and 45% in Greater China.

The EU is also considerably behind the USA and China in terms of mobile download speeds and 5G "mid-band" coverage, as shown in Figure 3.

Figure 2 Mobile technology mix in Europe, compared to North America and China (% of total connections)

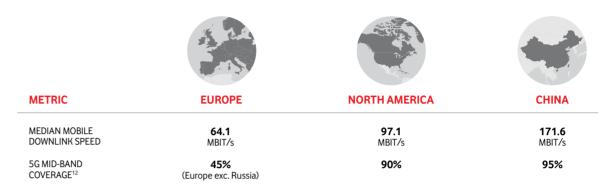






Source: GSMA, The Mobile Economy 2024

Figure 3 Median mobile download speed and 5G Mid-Band Coverage (2024)



Source: GSMA, <u>Connect Europe State of Digital Communications (2024)</u> (median speed); <u>Ericsson Mobility Report (June 2024)</u> (5G coverage)

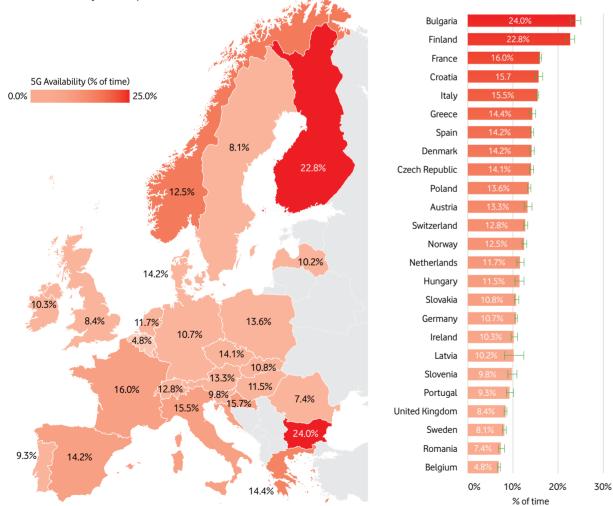


In 2023, Opensignal published data showing that 5G availability for EU countries ranged from 24% in Bulgaria to 4.8% in Belgium, as shown in Figure 4. This is in stark contrast to other countries, shown in Figure 5, such as South Korea and the US, which in 2023 had 5G availability of 43% and 31% respectively.

The implications of this lack of investment in 5G are considerable – for example, IoT solutions alone are estimated to be worth \$5.5-12.6 trillion globally by 2030¹³, value which will be enabled by 5G. The largest component of IoT is expected to be smart factories, where there is an observed relationship of 0.8% increased productivity for every 1% increase in industrial robot density¹⁴.

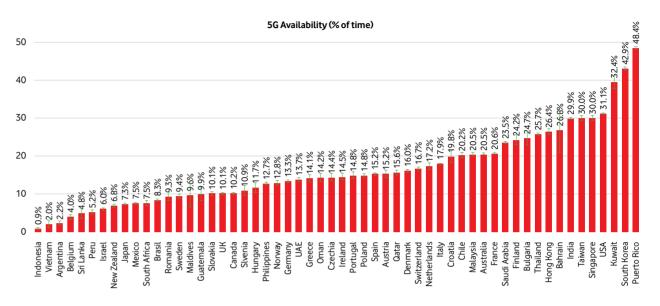
The EU has set itself ambitious targets for digital infrastructure, including 5G, recognising that a healthy digital communications ecosystem is crucial for improving the competitiveness of the European Union as a whole. As Figure 6 shows, there are concerns that many of these targets will not be reached by 2030 and there will be an investment gap.

Figure 4 5G availability in Europe (2023)



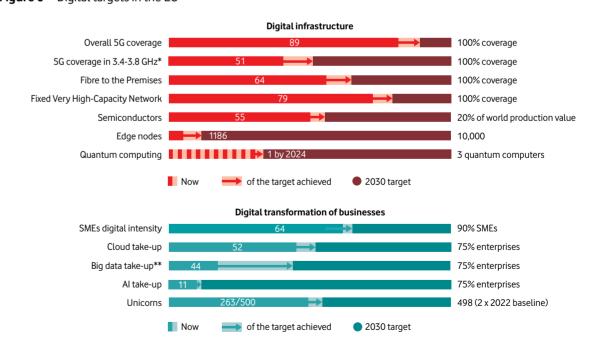
Source: February 2024 Mobile network speeds leaped ahead in 2023, but some markets lag behind | Opensignal

Figure 5 5G availability across selected countries (2023)



Source: Benchmarking the Global 5G Experience - June 2023 | Opensignal

Figure 6 Digital targets in the EU

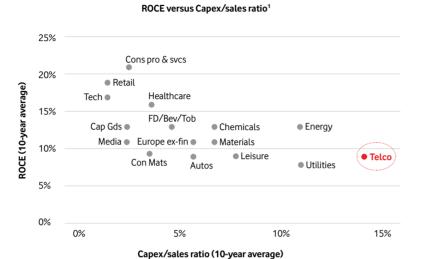


Source: State of the Digital Decade 2024 report – European Commission

This investment gap can be attributed to the low ROCE (return on capital employed) and ARPU (average revenue per user) of Europe's mobile telecom sector. Figure 7 shows that the telecom sector in Europe has one of the lowest levels of ROCE (compared to other sectors), despite having by far the highest capital intensity (capital expenditure to sales ratio). Figure 8 shows how ROCE has been below the weighted average cost of capital (WACC) for the sector for the last ten years. This is a clear indication of low profitability and the inability of the sector to sufficiently invest.

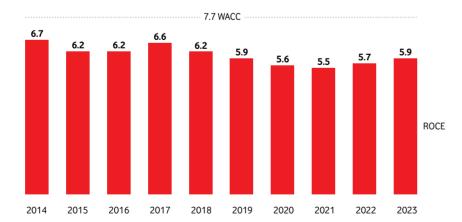
Returns are lower than other sectors, despite having the highest capital intensity requirements.

Figure 7 Return on Capital Employed (ROCE) and Capex/sales ratio across European industries



Source: European average ROCE: JP Morgan Chase & Co (VF investor presentation, 2023)

Figure 8 Comparison ROCE/WACC 2014-2023 (%)



Source: Barclays Equity Research, Network Operators of the Future, 23 April 2024.

As presented in Draghi report (2024). Note: the estimation refers to ROCE Adj. EBIT.





Figure 9 shows that mobile ARPUs in Europe are low compared to the USA, Japan, and South Korea, and therefore, despite a high level of capital intensity, this can translate into low capex, with the EU spending €109 per capita per year, compared to €240 in the US and €271 in Japan 15.

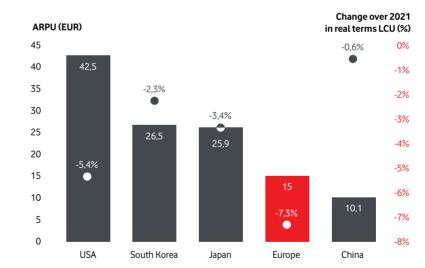
The context in which European Mobile Network Operators are investing is therefore very challenging. As Enrico Letta described in his report "Much more than a market", the enduring fragmentation hinders the scale and growth of pan-European operators, limiting their ability to invest, innovate, and compete with

their global counterparts. Letta recognises that the scale of disparity is stark: an average European operator serves only 5 million subscribers, compared to 107 million in the US and a staggering 467 million in China.

Letta concludes that the economic sustainability of the entire EU electronic communications sector is at risk unless immediate action is taken, with costs being borne by workers and citizens. While the EU should address fragmentation through single market measures and facilitate the provision of cross-border services, scale at national level will also be needed. Low prices

for customers can be sustainably achieved only if MNOs are able to reduce their cost to carry traffic and spread their fixed costs over a larger subscriber base nationally. If this does not happen, investment in 5G SA will be slowed down.

Figure 9 Mobile ARPU (excluding IoT SIMs) and change in real terms (LCU), Europe, USA, Japan, South Korea and China, 2022



Source: State of Digital Communications, ETNO (2024)

What can we learn from Vodafone's merger with Three in the UK?

Mobile telecoms markets in Europe

MARKET STRUCTURE IN EUROPEAN MOBILE MARKETS

ost EU countries have three or four Mobile Network
Operators (MNOs). In some EU countries, Mobile Virtual Network
Operators (MVNOs) have a significant presence in the retail mobile market and compete directly with MNOs, typically offering competitive pricing, and/or specialised services aimed at different market segments.

MVNOs have the largest share of subscribers in Germany, UK, Austria, Italy, and Spain, as shown in Figure 11.

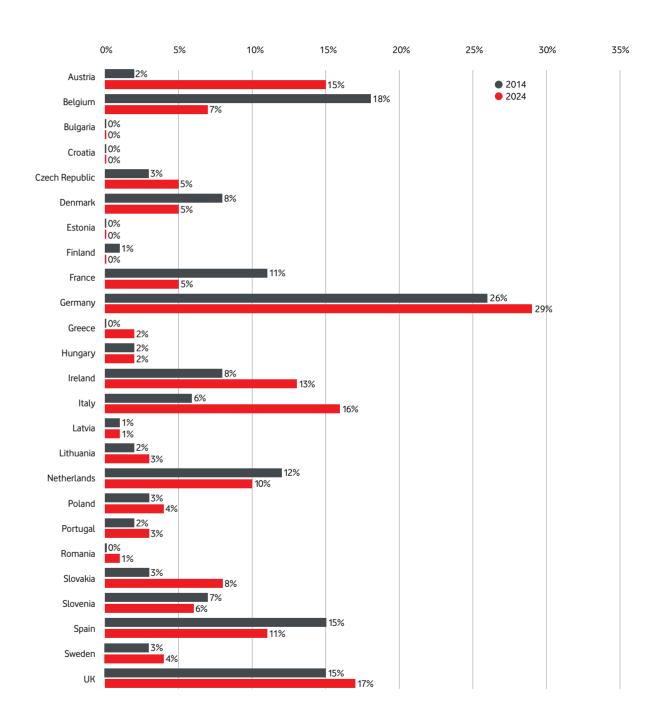
It is within this highly challenging context – for Europe in general, and the UK in particular – that the merger between Vodafone UK and Three UK was proposed.

Figure 10 European mobile market structure comparison



Source: GSMA Intelligence, Q3 2024¹⁶

Figure 11 MVNOs market shares as a percentage of total subscribers in each country



Source: Analysys Mason

eSIMS

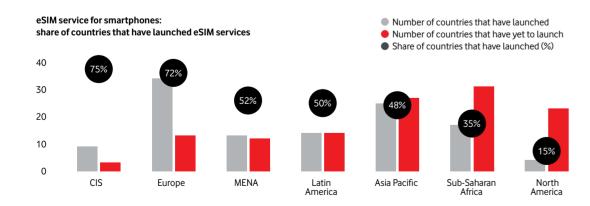
n addition to the deployment of 5G networks and direct competition from MVNOs, a number of other technological innovations are emerging that can further lower market entry barriers, help expand customer choice and also result in wider changes to the mobile industry.

For example, embedded SIMs (eSIMs), a form of programmable SIM that is embedded directly into a device (and thereby removing the need for a physical SIM card), allows mobile users to choose the underlying network provider, switch provider and buy services (i.e. roaming) from multiple providers at the same time directly on a mobile device¹⁷.

As eSIMs become more widespread, over the next five to ten years, other players, such as providers of mobile operating systems and/or third-party retailers could start making their own offer directly to mobile users. This could result in additional charges to MNOs which could then be passed onto customers and/or in a redistribution of value across the digital ecosystem which would further reduce MNOs' ability to invest in network infrastructure.

According to the GSMA¹⁸ in 72% of European countries eSIM services for smartphones have already been launched - see Figure 12. Europe leads in terms of share of MNOs that have launched eSIM services for smartphones (59%) - see Figure 13 - followed by Asia Pacific (41%). MENA and Latin America both stand at around 35%, whereas 'Sub-Saharan Africa is at the bottom (14%). In North America, the share is only 16%, which may seem surprising given the high share of eSIM launches by MNOs in both the US and Canada; however, there is a range of smaller countries within the North America region that have yet to launch eSIM services.





Source: GSMA (December 2023)

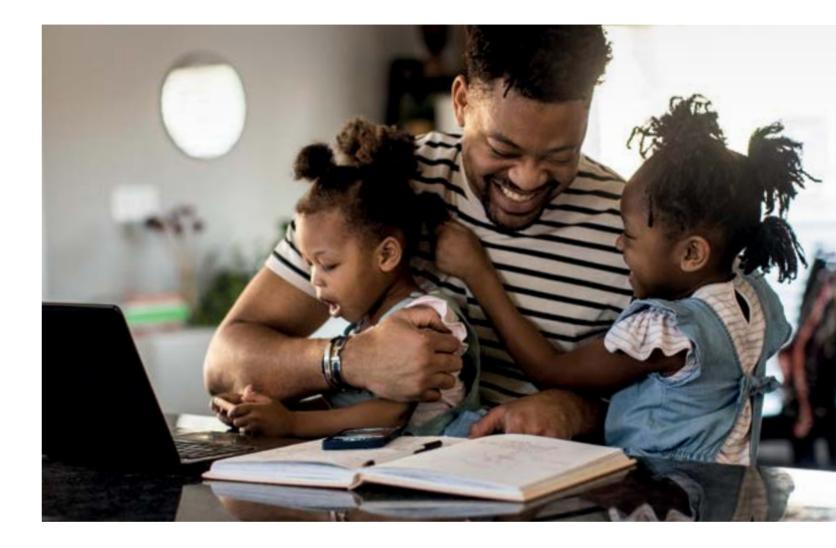
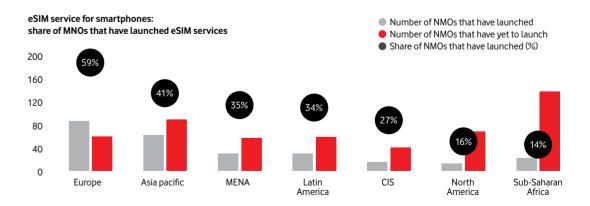
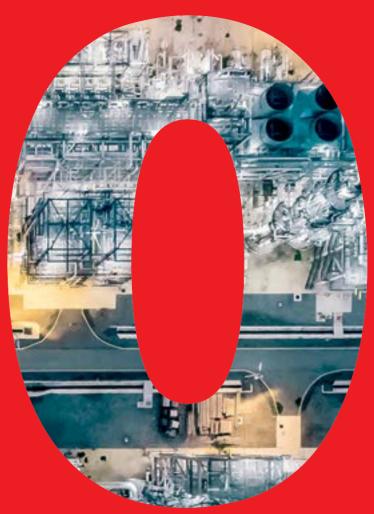


Figure 13 Percentage of MNOs that have launched eSIM services in each continent (2023)



Source: GSMA (December 2023)







THE MOBILE TELECOMS MARKET IN THE UK

The mobile telecoms market in the UK shares many of the characteristics of the European markets discussed in the previous section, with limited returns affecting the ability of MNOs to invest. The state of the UK mobile market and competition between players was important context for the CMA's assessment of the likely impact of the merger. Next, we present some of the key features of this market.



MAIN PLAYERS

In the UK, there are 4 Mobile Network Operators (MNOs):

- BTEE (Everything Everywhere), owned by BT Group;
- VMO2, a joint venture between Liberty Global (Virgin Media) and Telefonica (O2);
- Vodafone UK (VUK), a subsidiary of Vodafone Group; and
- Three UK, owned by CK Hutchison, a Hong Kong based multinational conglomerate.

All four MNOs operate their own mobile network infrastructure to offer mobile services to retail, business and wholesale customers. To optimise resources, reduce costs, and increase coverage and capacity, MNOs have paired up to create network sharing agreements:

- MBNL between BTEE and Three UK (primarily passive sharing)
- CTIL/Beacon between Vodafone UK and VMO2 (passive and active sharing).

The UK mobile market also features numerous Mobile Virtual Network Operators (MVNOs), which compete for retail customers, but buy wholesale services from MNOs, rather than own network infrastructure of their own.

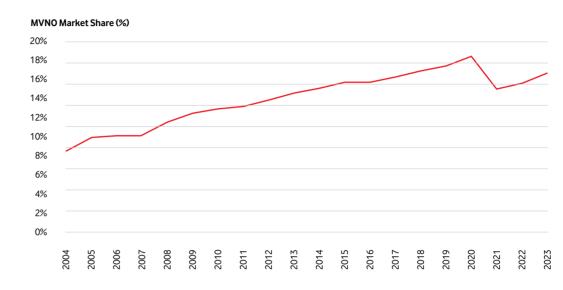
In the wholesale market, the MNOs compete with one another to secure business from MVNOs. Since the launch of the first MVNO in 1999. the UK retail market has become increasingly competitive, with MVNO market share (as a % of total UK retail market subscriptions) steadily rising since 2004 (Figure 14). Additionally, some MNOs have launched subbrands designed to appeal to specific customer segments of the market. Most notably: Vodafone UK owns VOXI and Talkmobile: Three UK owns SMARY; BTEE owns Plusnet and BT Mobile; and VMO2 owns GiffGaff. In terms of independent MVNOs, amongst the largest and / or fast growing are Sky Mobile and Lyca Mobile. Tesco Mobile is another MVNO but is a joint venture between VMO2 and Tesco, figure 15 shows the customer market shares of each MNO, including their associated wholesale MVNO customers. VMO2 has the largest number of subscribers on its network with around 36% market share (including, O2, Tesco Mobile, Sky, and GiffGaff). BTEE hosts roughly 26% of the total subscribers (including EE, Lycamobile, and

Since the launch of the first MVNO in 1999, the UK retail market has become increasingly competitive, with MVNO market share rising since 2004.

Utility Warehouse). Vodafone has approximately 23% of total UK subscribers (including Vodafone, VOXI, Talkmobile, Asda Mobile, and Lebara subscribers). Three UK has around 15% share of subscribers (including Three UK, SMARTY, and iD Mobile).

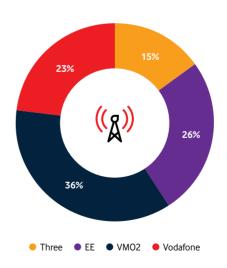
Figure 16 shows the customer market share of the main retail providers (both MNOs and MNVOs). Tesco Mobile and Sky are the two largest MVNOs with a market share of 6% and 4% respectively.

Figure 14 UK MVNO retail market share (% of total UK subscriptions ^{19 20})



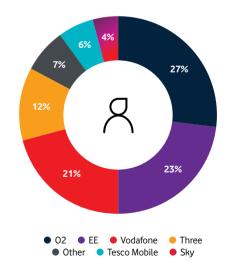
Source: Analysys Mason

Figure 15 Market share of UK MNOs by number of subscribers hosted on network (2024 Q2)



Source: Analysys Mason

Figure 16 UK retail market share by number of subscribers (2024 Q2)



Source: Analysys Mason

What can we learn from Vodafone's merger with Three in the UK?

The mobile telecoms market in the UK

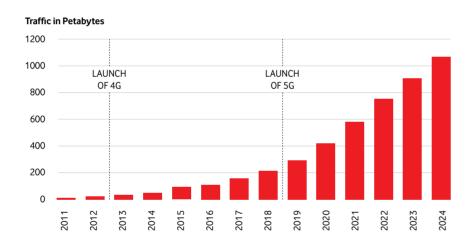
TECHNOLOGICAL AND DATA DEVELOPMENTS

fcom estimates that 97% of adults in the UK in 2024 have access to at least one mobile phone and 92% have access to a smartphone²¹. The UK government estimates that the widespread adoption of 5G can bring a cumulative benefit of £159 billion by 2035²². Separate analysis done by Analysys Mason, commissioned by the UK Department for Science, Innovation, and Technology (DSIT), estimated the cumulative gross valueadded 5G ranging between £41bn and £243bn by 2035, depending on how widely it is adopted²³.

As discussed in the previous section, enabled by successive generations of mobile technology including 5G, mobile data traffic (including both uploaded and downloaded data), has grown significantly year-on-year in Europe and the UK. Figure 17 shows how total monthly mobile data traffic has grown in the UK, with a compound annual growth rate of 37% over the past decade.

This trend in mobile data traffic is likely to continue as shown by Ofcom's growth scenarios (Figure 18) for the UK up to 2035.

Figure 17 Total mobile data consumption in the UK between 2011 and 2024



Source: Ofcom, Ofcom's future approach to mobile markets and spectrum,
Discussion paper, Figure 3.5. Connected Nations 2024 - UK report, Figure 3.5.

Enabled by successive generations of mobile technology including 5G, mobile data traffic has grown significantly year-on-year in Europe and the UK.

The projected growth in mobile data usage is driven by advancements in mobile technology, as well as the increasing customer demand for internet services like streaming, gaming and social media.

As in most other European countries, 4G remains the primary mobile technology used by most people in the UK. In 2024 Ofcom estimated that 4G mobile networks carried around 78% of mobile traffic and that 4G services from at least one MNO reached 95% of UK landmass²⁴. According to Ofcom, 5G NSA has comparable levels of coverage, with 5G NSA covering approximately 90-95% of UK landmasses in 2024. Figure 19 illustrates that, for the "Very high confidence" range²⁵, 5G NSA coverage has expanded by about 50 percentage points from 2021 to 2024.

Figure 18 Data traffic growth over time in low, medium and high scenarios

Monthly mobile data traffic (PB)



Source: Ofcom, Conclusions: Ofcom's future approach to mobile markets, Figure 4.1 (December 2022)

Figure 19 5G coverage outside UK premises by at least one MNO

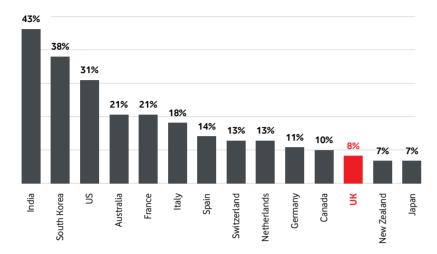


Source: Ofcom, Connected Nations Report 2024, Figure 3.2

Although 5G appears widely available, the UK falls behind other countries in terms of 5G performance and availability, as shown in Figure 20. According to Opensignal data, UK 5G users spend only 8% of the time on 5G networks, well behind other developed nations such as South Korea, the US and France.

The situation is similar for average download speeds (Figure 21), where UK users experience average speeds of approximately 30 Mbps, considerably lower than the other countries included in the comparison.

Figure 20 5G availability (% of time) across selected countries (Q4 2023)

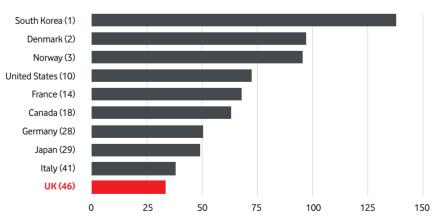


Source: Social Market Foundation, Growing Connections, Figure 2/Opensignal (2023)

Figure 21 Mobile average download speed across selected countries (Q3 2024)

Buffering

Mobile network average download speed, 2024*, Mbps, (rankout of countries)



*July 1st to 28th September

Source: <u>The Economist, The rich country with the worst mobile phone service,</u>
Nov 2024/Opensignal Q3 2024







VODAFONE UK MERGER WITH THREE UK

VODAFONE UK MERGER WITH THREE UK

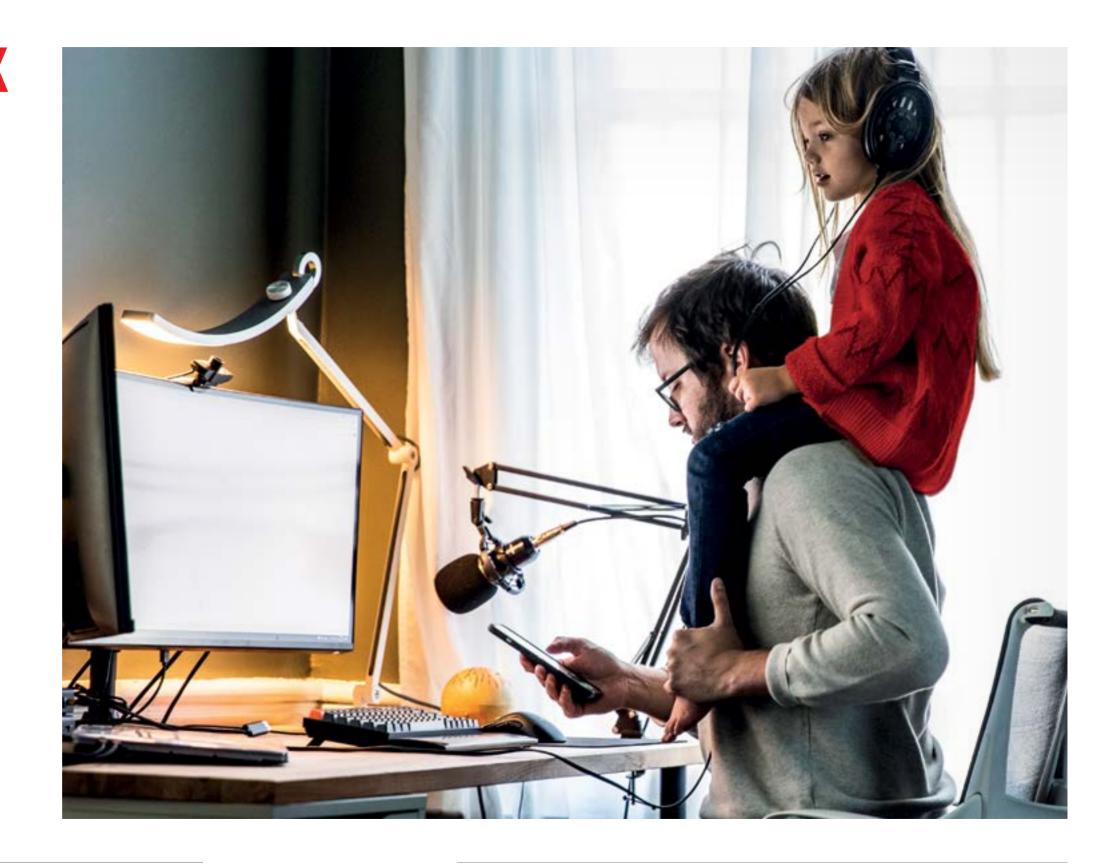
n 14th June 2023, Vodafone UK and Three UK announced their intention to merge, combining their UK telecoms businesses into a new joint venture, with 51% owned by Vodafone Group and 49% owned by CK Hutchinson²⁶.

They formally submitted a Merger Notice to the CMA on 26th January 2024, marking the initiation of the merger process²⁷. The rationale for the merger was to provide the Parties with sufficient scale to invest sustainably in a market-leading, "best in class" network, which would enable them to compete with rival operators to attract and retain customers,

and to deliver returns to fund further investment. As documented in the detailed analyses submitted to the CMA through the merger process, the case for the merger (i.e. the strategic and economic rationale) rested on three key—inter-related—pillars:

- the UK has a bifurcated market with poor network performance;
- lack of scale will worsen the market situation;
- the merger will benefit customers, competition and the wider UK economy.

The rationale for the merger was to provide the Parties with sufficient scale to invest sustainably in a market-leading, "best in class" network.



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BIFURCATED MARKET WITH POOR NETWORK PERFORMANCE

s shown in the previous section of this paper, the UK is lagging behind in 5G roll out and performance. This is due to a bifurcated market structure, with two strong players (BTEE & VMO2) which lack the incentive to invest and two weak ones (VUK and Three UK) which are sub-scale and do not have the ability to invest and challenge the larger players.

Over the past few years, Vodafone UK and Three UK have struggled to capture retail market share and lag behind market leaders BTEE & VMO2. Figure 22 shows that Vodafone and Three's market shares (of subscribers) have remained persistently flat since 2016, at around 20% and 10%, respectively. During this period, the market shares of VMO2 and BTEE have remained steady at around 27% and 25% respectively. The picture in the wholesale market is worse, where approximately 90% of MVNO traffic is hosted on either BTEE or VMO2²⁸.

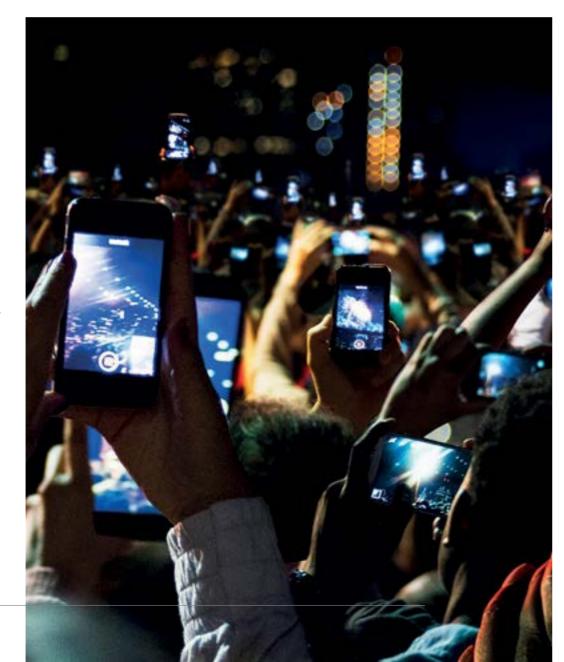
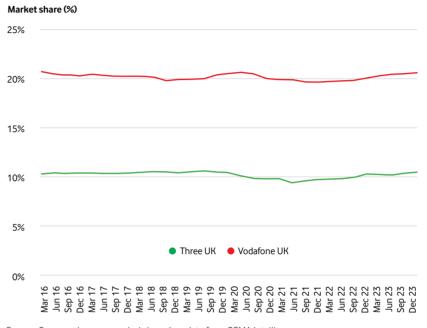
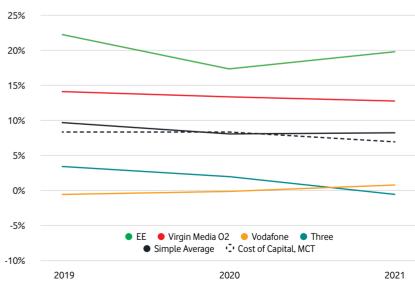


Figure 22 VUK and Three UK overall retail market shares by subscribers, 2016 – Q3 2023



Source: Compass Lexecon analysis based on data from GSMA Intelligence $\,$

Figure 23 Economic return on capital employed (ROCE) by MNO, pre-tax nominal including 5G Spectrum



Source: Ofcom's future approach to mobile markets and spectrum, Conclusions paper, Dec 22, Fig 4.2

Figure 23 shows the Economic Return on Capital Employed (ROCE)²⁹ for each of the UK MNOs between 2019 and 2021. This data from Ofcom further highlights the underperformance of Vodafone and Three relative to the two market leaders, who earned returns considerably above the cost of capital³⁰. A ROCE that is below the cost of capital removes the ability for MNOs to invest sustainably in the future, given each pound invested does not generate sufficient returns for the investor. Ofcom corroborates this finding, stating that "If an MNO's financial returns were below the cost of capital for a sustained period of time, this could reduce its incentives to invest"31.

This analysis indicates that both Vodafone UK and Three UK were operating at a sub-scale level, resulting in unsustainable returns which diminish their capacity to invest and compete effectively against BTEE and VMO2. This bifurcated market represents a low investment, low network quality equilibrium, as the two dominant entities face insufficient competitive pressure to invest, despite the considerable need for investment in UK mobile networks.

LACK OF SCALE WOULD WORSEN THE MARKET SITUATION

ithout the merger, both Vodafone UK and Three UK's limited scale would hinder their ability to compete effectively in both retail and wholesale markets, and therefore hamper their ability to invest in 5G SA and improve network quality of their customers in the UK.

The mobile Telecoms industry is characterised by high cyclical capex requirements, high fixed costs, and economies of scale. Without the necessary scale to recoup fixed and capex costs, making the case for future investments becomes difficult, as investors cannot be confident of making sustainable returns. The CMA has recognised this point, stating that:

"We recognise that economies of scale are an important feature of the UK mobile Telecoms industry and that being able to invest in network quality is important to compete effectively³²."

In its recent conclusions paper on the future approach to mobile markets and spectrum, Ofcom recognised that significant investment in mobile

networks will be needed to meet customers future connectivity needs. Ofcom stressed that MNOs will need to invest to deploy the capacity needed to carry more mobile traffic, as well as in new technologies, including 5G standalone, in order to meet future demand and deliver the quality and experience needed by people and businesses.

Investing in 5G (including 5G SA) will require operators to deploy additional infrastructure. The CMA acknowledged the significant investment needed in mobile networks, stating that "We recognised that operating a mobile network involves high fixed costs and Ofcom anticipates that significant investment in mobile networks will be required to deploy the capacity needed to carry more mobile traffic, as well as in new technologies, including 5G SA".

This was consistent with evidence submitted by Vodafone UK in response to Ofcom's mobile market review. Using analysis from Frontier Economics (as per the diagram below), it was shown that there is a Minimum Viable Scale necessary to invest in 5G SA. Only at market shares in excess of 26% does the return on investment in 5G SA exceed the cost of capital – and both Vodafone UK and Three UK were below that level.

GG

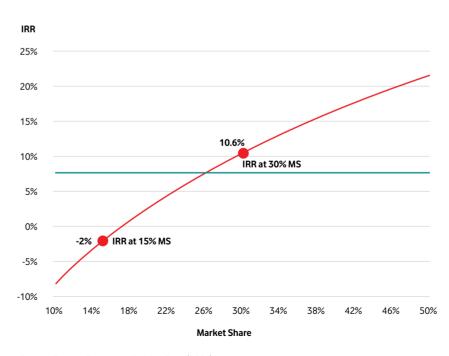
We recognise that economies of scale are an important feature of the UK mobile telecoms industry and that being able to invest in network quality is important to compete effectively 31.

CMA Final Report (2024)





Figure 24 Relationship between Internal Rate of Return (IRR) and Market Share



Source: Frontier Economics for Vodafone (2021)

Following BT's merger with EE in 2016 and Virgin Media's merger with 02 in 2021, both players capitalised on their improved economies of scope to cross-sell mobile services to their fixed broadband customers or offer fixed-mobile bundles. This put a further competitive constraint on Vodafone UK and Three UK, which made achieving scale more difficult.

In the absence of the merger, and therefore without investment by the sub-scale players, BTEE and VMO2 would have less incentive to invest, which is particularly concerning given the urgent need for investment in the UK market to deploy 5G SA and to address the explosive growth in data demand and quality requirements. This would have made the UK fall further behind in 5G rollout and performance, negatively affecting consumers and businesses.

 2

MERGER FOR THE BENEFIT OF CUSTOMERS, COMPETITION, **AND THE WIDER UK ECONOMY**

he parties submitted substantial evidence showing how combining their complementary assets, namely spectrum and radio sites, would create a strong third operator with increased scale and investment capacity. The Joint Network Plan (JNP) included investment of £11bn over 10 years to create a best-in-class network. The investment in 5G SA would provide network coverage, quality, and capacity improvements that will benefit customers and also level the competitive playing field in the UK mobile market, forcing BTEE and VMO2 to invest more to compete effectively.

The pro-competitive impact of the merger and the improvements in network coverage and quality, as well as the significant increase in capacity, are fully aligned with the UK's government objectives, further demonstrating the benefits that the merger will bring to UK consumers and businesses. In 2023 the UK government set out its Wireless Infrastructure Strategy (WIS) which stated that 5G will be the cornerstone of the UK's digital economy and that 5G SA will drive growth in the industries of today and tomorrow. It also included a goal to have 5G SA in all populated parts of the UK by 2030.



Similarly, the EU set out its own digital strategy through the Digital Decade Policy Programme, highlighting – among other points – the importance of next generation fixed and wireless network technologies.

The WIS states that significant investment from MNOs will be required to meet the government headline ambition to have 5G SA in all populated parts of the UK by 2030. To enable this national rollout, the government has confirmed its openness to market consolidation and strengthening the investment climate by tackling the practical and regulatory barriers to network deployment whilst also noting that merger decisions are taken on their merits by the CMA.

As detailed below, the JNP will deliver for customers in a number of ways. The CMA recognised these benefits for customers and ultimately allowed

What can we learn from Vodafone's merger with Three in the UK? Vodafone UK merger with Three UK

IMPROVEMENTS TO NETWORK QUALITY

Currently, the networks of Vodafone UK and Three UK experience congestion (i.e. traffic demand exceeding capacity in a particular locality during busy periods). This has a material negative impact on network performance and customer experience.

Following the merger, the Parties will combine their spectrum, radio sites and other assets to deliver greater network capacity and availability than would be possible separately. Specifically, spectrum from Vodafone UK's network will be deployed on Three UK sites and vice-versa, expanding capacity on those sites.

Additionally, Multi-Operator Core Networks (MOCNs) will be implemented to enable network sharing, such that Three UK's

Three

customers can access Vodafone UK's network and vice versa, allowing traffic to be steered efficiently between the two networks and congestion alleviated. Spectrum sharing and MOCN will be implemented from 'day 1' of the merger (within the first 12 months).

This will provide a cost-effective and immediate enhancement in capacity. leading to reduced congestion and higher average speeds across the network during peak periods. As Vodafone UK and Three UK continue to comprehensively integrate their networks and deploy additional spectrum, coupled with investments in new radio equipment, there will be further increases in network capacity, further reducing congestion in the following years.

Early implementation of MOCN will also significantly improve coverage, by providing customers with access to the combined footprints of the current networks. The Parties estimated that, in the short term. 25% of 'not spots' (uncovered areas) will be eliminated, giving customers a more consistent and reliable coverage. This will particularly benefit rural populated areas. Figure 25, from Opensignal³³, shows Vodafone UK and Three UK individual networks and how their combined network will immediately improve 5G coverage for millions of customers as a result of the merger.

Combining Three UK and Vodafone UK sites will also significantly improve the quality of coverage. MergeCo's much denser network will deliver stronger signal to more areas in the UK than would be possible absent the merger. This will result in a more consistent and reliable coverage for customers. Figure 26 depicts how the resulting site densification means the distance between sites will be

Figure 25 Extent of 5G mobile network coverage, before and after the merger

Vodafone Three & Vodafone combined Areas of existing overlap Areas either operator will gain coverage Areas of improved coverage are plotted with priority to emphasise the calculated of the merger

Source: Opensignal, Vodafone and Three set to create UK's leading mobile coverage network post-merger, March 24

reduced, boosting signal strength and resulting in fewer customers suffering from poor signal quality.

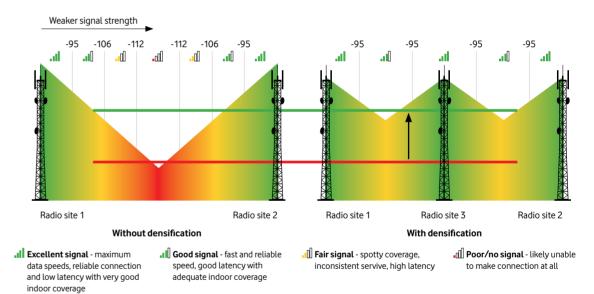
The merger will also allow the Parties to deploy their combined C-band spectrum holdings much more extensively,34 across 86% of the UK's population in high traffic areas by 2032. This represents a material improvement in high-capacity 5G coverage that would not be possible absent the merger.

This will improve customer experience as users will on average be closer to the site they are being served from, minimising the drop off of performance (the red and orange shaded areas in the diagram below) close to the cell edge during peak hours.

Investments in core, backhaul, and transport infrastructure will greatly reduce the latency of the combined network, providing customers with

faster response times. Vodafone UK and Three UK estimate that in high traffic areas, the improved network will improve latency by nearly 50% compared to their current individual networks.

Figure 26 Site densification



Source: 3 UK internal data

CHANGES TO NETWORK SHARING AGREEMENTS (BEACON)

Another key element of the merger has been the commercially agreed amendments to the network sharing agreement between Vodafone UK and VMO2, under 'Beacon 4.1', which will allow VMO2 to access more shared sites. In addition the divestment of spectrum from VF UK to VMO2

will significantly improve VMO2's ability to expand network capacity - through the combination of additional sites and additional spectrum to deploy on sites - improving network quality for their retail and wholesale customers. Importantly, this agreement was made conditional on the merger going through and would not happen absent the merger.

This agreement will make the mobile landscape more competitive³⁵. Without the changes to Beacon, VMO2 would have the least spectrum holdings post-merger, and it currently has the worst performing network in the UK according to a number of measures. The changes to Beacon therefore help the three players become more equal in standing, making them stronger competitors to one another.



COST OF CAPACITY AND PRICES

With increased network capacity through spectrum sharing, MOCN, and site integration, the Parties' unit cost of expanding capacity will decrease. As the CMA states,³⁶

- "Network capacity is a function of the amount of spectrum deployed multiplied by the number of sites, increasing both the number of sites and the amount of spectrum deployed on them will have a 'multiplicative' effect on the Merged Entity's network capacity compared to the sum of two standalone networks."
- 2. "In the longer term, this 'multiplicative effect' may also mean there is a reduction in the unit cost of expanding capacity in response to increased demand as the Merged Entity and VMO2 can deploy more spectrum on their networks (for example through adding more sites or

new technology), and therefore achieve a larger capacity uplift for a given spend, than in the counterfactual. Such reductions in the unit cost of capacity potentially give the Merged Entity and VMO2 an incentive to provide a better quality of service and/or lower prices, and therefore in principle also enhance rivalry."

An increase in network capacity represents a shift in the industry supply function, which ultimately brings down the unit price for capacity. This reduction in unit costs is crucial, as mobile operators need to increase capacity to meet rapidly growing demand. The UK market has seen a 96% decline in price per GB between 2010 and 2017³⁷, showing how decreasing incremental costs of capacity is what drives lower prices for consumers.

Retail customers will receive improved service quality, lower quality-adjusted prices and a lower price per GB than the Parties could offer as standalone operators. The lower incremental cost of adding further capacity will also allow the Parties to provide MVNOs with more competitive prices. Additionally, as VMO2 will deploy more spectrum across more radio sites as part of the Beacon 4.1 agreement, they will also have a reduction in their incremental cost of capacity, benefiting their wholesale and retail customers in the same way.

Absent the merger, Vodafone UK and Three UK would have continued to experience increasing incremental cost of capacity as congestion on their individual networks got worse and data traffic from customers increased.

PRO-COMPETITIVE IMPACTS

Finally, the improvements in quality in Vodafone UK and Three UK's combined network will increase the competitive pressure on BTEE and VMO2 to make better pricing offers to their retail and wholesale customers, in order to avoid market share losses.

It will also boost dynamic competition within the UK mobile market. BTEE and VMO2 will face

increased pressure to accelerate investment in 5G SA to compete with the Parties' Best-in-Class network, improving their own network quality and providing a material benefit to their wholesale and retail customers.

Additionally, as previously mentioned, the Beacon 4.1 agreement will improve VMO2's network quality, thus improving their competitive offering, and putting added pressure on BTEE to improve their own network and offer better prices to their customers.

Absent the merger, the UK would remain in the low investment, low network quality equilibrium, as a result of the bifurcated market structure.



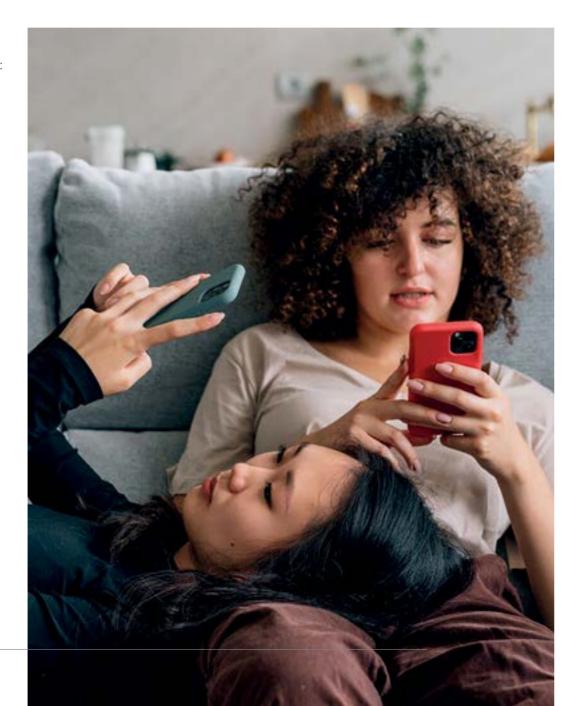


CMA ASSESSMENT OF THE MERGER AND WHAT HAS CHANGED

THEORIES OF HARM AND THE CMA'S ASSESSMENT

The CMA identified three theories of harm in its investigation of Vodafone UK's merger with Three UK:

- Substantial lessening of competition (SLC) in the supply of mobile telecommunication services to end customers (retail market);
- Substantial lessening of competition (SLC) in the supply of wholesale mobile telecoms services (wholesale market); and
- Substantial lessening of competition (SLC) from the Parties' participation in both network sharing agreements.



These harms, assessed under a no-remedy scenario, were described in detail in their Phase 2 investigation and Final Report and are summarised below. In assessing the merger, the CMA took a forward-looking approach and considered how competition would have evolved with and without the merger in the UK markets for mobile telecommunications services.

In assessing these theories of harm, the CMA did not consider any of the efficiencies which would arise from the merger or the benefits of network quality improvements. The efficiencies were assessed separately, under the countervailing factors (see next section), and considered for their potential to offset this harm.

SLC IN THE RETAIL MARKET

The CMA considered whether the merger, by removing an MNO from the market, would result in higher prices or a degradation of non-price aspects of product offerings (i.e. lower quality, smaller data packages) for customers at the retail level³⁸. To assess this, it relied on several pieces of evidence including:

- parameters of competition evidence on customer choice factors;
- customer bases evidence on market shares and customer churn;

- the Parties' competitive position

 evidence on the competitive positions, incentives, and strategies of the Parties, including in relation to both pricing and network investment;
- closeness of competition and competitive constraints – evidence on how closely the Parties compete and the constraint they face from rivals; and
- post-Merger constraints evidence on how the Merger may affect any competitive constraint from MNOs and MVNOs and quantitative evidence on the impact of the Merger on prices, excluding consideration of any efficiencies³⁹.

The CMA found that the Parties were close competitors and that BTEE and VMO2 competed closely with the Parties at retail level, and they may compete less aggressively after a merger.

In its analysis on the parameters of competition and customer choice factors, it found that price is a key a factor for customers, with 84% of respondents citing a price-related factor as a reason for choosing their current provider⁴⁰.

It estimated that, without any efficiencies, the merger might lead to an average price increase of 5.5% for Three UK and 2.6% for Vodafone UK, which is equivalent to an annual loss in welfare to UK consumers of

approximately £216m per year⁴¹. It also found that those consumers on the lowest incomes would see the greatest fall in their welfare⁴².

Ultimately, before the CMA took the Merger's efficiencies into account, it found that there is scope for an SLC as a result of the Merger, due to horizontal unilateral effects in the supply of retail mobile services⁴³. In particular, at this interim stage of its assessment it found that the Merger would lead to price increases for mobile customers (or to equivalent reductions in data packages or service features) and that any price increases would potentially affect tens of millions of mobile customers, particularly those customers least able to afford mobile services44.



SLC IN THE WHOLESALE MARKET

In a similar vein to the retail market, the CMA considered whether, by removing the competitive constraint of an extra player in the wholesale mobile market, the Merger would make it more difficult for independent MVNOs to secure competitive terms, restricting their ability to offer best deals to retail customers. The CMA's analysis for the wholesale market considered:

- the extent of existing competition in the supply of wholesale mobile services;
- the extent to which the Parties are close competitors, i.e. whether they act as a competitive constraint on one another; and
- the alternative competitive constraints the Merged Entity would face following the Merger from other MNOs⁴⁵.

The CMA's conclusions on the extent and nature of wholesale competition between the Parties, with which the Parties, are that the Parties:

- 1. were close competitors historically and exerted a competitive constraint on one another.
- compete closely for some large MVNOs and Three UK provided competitive pressure for a number of opportunities even when it did not win.

In addition to the direct wholesale impacts, the CMA considered that an increase in MergeCo's retail market share could mean less incentive to bid for wholesale business, which could have a knock-on effect of making other MNOs compete less aggressively in wholesale market as well.

The CMA concluded that, before taking the Merger's efficiencies into account, the Merger may be expected to give rise to an SLC in the wholesale market as the Merged Entity – and its competitors – may have less of an incentive to bid for wholesale business and/or may offer less competitive prices/terms to MVNOs. In particular, the CMA considered that the Merger would reduce the number of MNOs from four to three, making it more difficult for independent MVNOs to secure attractive competitive terms, which would reduce their ability to compete strongly in the retail market and that this was important because many MVNOs priced aggressively. often focusing on value segments of the retail market⁴⁶.

The CMA considered whether, by removing the competitive constraint of an extra player in the wholesale mobile market, the Merger would make it more difficult for independent MVNOs to secure competitive terms.

SLC FROM PARTICIPATION IN BOTH NETWORK SHARING AGREEMENTS

The CMA initially had concerns about the Parties' network sharing agreements with the other two MNOs (BTEE and VMO2). It noted that MergeCo would be part of both network sharing agreements and that this could lead to acquiring some commercially sensitive information which could impact BTEE and VMO2 incentives to invest and compete with the Parties⁴⁷, including on network quality.

This theory of harm was dropped by the CMA during its Phase 2 investigation. In the interim, both Vodafone UK and Three UK have made changes to their respective network sharing agreements: Three UK modified its MBNL⁴⁸ agreement with BTEE in 2023; and Vodafone and VMO2 signed a new Beacon 4.1 Agreement in July 2024.

After extensively investigating these new agreements, the CMA concluded that MergeCo may have some visibility of the network upgrades planned by BTEE and VMO2 under the MBNL and Beacon agreements, but that it was unlikely that this information would be useful in informing the Merged Entity's investment plans, given its limitations⁴⁹ (for example, how far in advance the information was shared and the scale of information shared).

IS ANYTHING NEW?

The main theories of harm identified by the CMA for this merger were similar to those identified by the EC Commission in 2016 in the proposed merger between O2 and Three⁵⁰ in the UK, and other mobile mergers which have been assessed by DG Competition in the past. However, it is worth noting that this merger is between the 3rd and 4th largest players in the market by market share, whereas the O2/Three case was between the 2nd and 4th largest players.

Market shares are a first screening tool for assessing merger cases as they can give an indication of the market power of the merged entity. In general, higher combined market shares for the merging parties can signal more market power and therefore result in an SLC finding, particularly if the products in the market are not differentiated.

In differentiated product markets, such as mobile services, the CMA often uses diversion ratios⁵¹ to calculate the Gross Upward Pricing Pressure Index (GUPPI), which tries to predict how the merging parties might change their prices postmerger (before taking into account efficiencies).

The CMA calculated that a merger between Vodafone UK and Three UK will result in a combined market share⁵² of 30-40% by both revenue and subscriber count, which is significantly lower than the proposed 2016 O2/Three UK merger which would have created a combined entity with 40-50% market shares⁵³. The 2016 case would have been

most stark in the SIMO prepaid market, where O2/Three UK would have had a majority (50-60%) of subscribers and revenue⁵⁴.

Of the six 4-to-3 mergers in Europe to have been approved since 2012, four were between the 3rd and 4th biggest players, the exceptions being Ireland and Spain (which were between 2nd and 4th). Notably though, these markets had various differences in exact market shares, with a variety of HHIs and differences

in whether the merged party was the 1st, 2nd or 3rd largest player – note that there were some differences between market shares by subscriber and by revenue, with Germany's 2014 merger between Telefonica and E-Plus for example creating the biggest player by subscriptions but the 3rd biggest player by revenue.

There were differences in the submarkets, with some countries having more concentrated prepaid markets than postpaid markets, for example.

Figure 27 European 4-to-3 mobile mergers since 2012

Year	Co	untry	Players	Market Share	Outcome
2012	=	Austria	Orange (#3) H3G (#4)	24%	•
2014		Germany	Telefonica (#3) E-Plus (#4)	31%	•
2014	П	Ireland	O2 (#2) H3G (#4)	40%	•
2015	==	Denmark ²	Telenor (#2) Telia (#3)	41%	•
2016		Italy	Wind (#3) Tre (#4)	33%	•
2016		United Kingdom	Hutchinson (3UK) (#4) Telefonica UK (02) (#2)	40%	•
2018	=	Netherlands	T-Mobile(#3) Tele2 (#4)	25%	•
	Ê	Spain	Orange (#2) MásMóvil (#4)	43%	•
lay		Portugal	Vodafone (#3) Nowo (#4)	27%	•
Today		United Kingdom	Vodafone (#3) 3UK (#4)	30%	
		Italy	Vodafone (#2) Others ³	?	

Note: 1) Retail market share in terms mobile subscription. 2) The merging parties abandoned the planned merger before an official prohibition by authorities. 3) Vodafone is reportedly in talks with other operators seeking rival deals after rejecting Iliad's merger offer.

Source: Copenhagen Economics (February 2024)

COUNTERVAILING FACTORS—RIVALRY-ENHANCING EFFICIENCIES (REEs)

s part of the assessment of any merger, the CMA is required to consider whether there are any countervailing factors that may prevent an SLC arising from a merger. For this merger the CMA considered whether there were any rivalry-enhancing efficiencies (REEs) i.e. efficiencies that change the incentives of the merging firms and induce them to act as stronger competitors to their rivals.

For example, reducing marginal costs can create an incentive to provide lower prices or a better-quality service, which puts pressure on competitors to improve too. The CMA's guidance states that it is for the merging firms to demonstrate that the merger will result in efficiencies.

Most of the CMA's assessment on the presence of these efficiencies was based on scrutinising the evidence the Parties submitted as well as

the internal documents of their competitors (see Section 3 for more details).

The critical starting point was the Parties' Joint Business Plan (JBP) including their Joint Network Plan (JNP) and their supporting explanatory submissions, which enabled the CMA to reach the following conclusion:

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

of sites held by the Merged Entity. This process contrasts with the identification of locations for and subsequent construction of new sites, which would be required for site footprint expansion by each of the Parties absent the Merger, and which is likely to be significantly more practically challenging⁵⁵."

The CMA considered whether there were any rivalry-enhancing efficiencies, i.e. efficiencies that change the incentives of the merging firms and induce them to act as stronger competitors to their rivals.

Overall, the CMA noted that 'in principle there are underlying economic reasons why a merger of MNO networks may lead to rivalry-enhancing efficiencies⁵⁶.

- It acknowledged that these relate in the first instance to the Merged Entity having more sites and spectrum than the network of each Party enabling the merged network in principle to achieve better coverage and deploy greater capacity than either of the Parties' networks could do individually (other things remaining equal). It considered that an improvement in coverage represented a quality improvement while an increase in capacity could facilitate other quality improvements, such as reducing congestion and increasing download and upload speeds. Furthermore, in light of evidence that network quality factors are competitive variables in the mobile industry, albeit less important than price. it concluded that such quality improvements may make the Merged Entity a stronger rival and result in a competitive response, and therefore represent rivalryenhancing efficiencies⁵⁷.
- Secondly, it also considered that in the longer term, the unit cost of expanding capacity (for example through adding more sites or new technology) may also be reduced as the Merged Entity could deploy more spectrum on its network than the Parties were able to deploy on each of the standalone networks in the counterfactual. Given that mobile operators needed to increase capacity to meet growing demand, it concluded that this reduction in unit cost of capacity may represent a reduction in

long-term incremental cost, which could potentially give the Merged Entity (all else being equal) an incentive to provide a better quality of service and/or lower prices, for example in the wholesale market (compared to a scenario where there is no reduction in unit cost of capacity)⁵⁸.

The CMA recognised that the effects described above could in principle enhance rivalry in the supply of retail mobile telecoms services and wholesale mobile telecoms services (compared to the situation in the absence of such effects) but that they need to be supported by evidence that they satisfied certain requirements⁵⁹.

As part of its assessment, the CMA considered whether any of the REEs set out above were likely to be realised, timely and large enough to offset any loss of competition due to the Merger, were merger-specific and such that customers in the UK will benefit⁶⁰. In assessing these REEs, it considered whether several criteria were cumulatively met. 61 concluding that most were met but that the Parties were not likely to have the incentive to deliver the full Joint Business Plan (JBP), and therefore the quantum of any rivalry-enhancing efficiencies was likely to be less than claimed⁶² and that these REEs were unlikely to outweigh the anticompetitive effects identified in the wholesale and retail market. The criteria assessed were:

Criteria 1 - Rivalry-enhancing in the relevant market⁶⁴:

Spectrum and number of sites

As mentioned above, the CMA acknowledged that the Merged Entity may have more sites and

more spectrum than the networks of each Party individually. Because network capacity is a function of the amount of spectrum deployed multiplied by the number of sites, increasing both the number of sites and the amount of spectrum deployed on them would have a 'multiplicative' effect on the Merged Entity's network capacity, compared to the sum of two standalone networks, potentially increasing the Merged Entity's capacity compared to the standalone network.

Similarly, it considered that the transfer of spectrum to VMO2 and any increase in VMO2's sites due to Beacon 4.1 increases VMO2's capacity. Such increases in capacity give the Merged Entity and VMO2 an incentive to provide a better quality

of service, and/or to fill that capacity by making more attractive offers to customers, and therefore in principle enhance rivalry

Additional capacity

The CMA said that longer term, this 'multiplicative effect' may also mean there was a reduction in the unit cost of expanding capacity in response to increased demand as the Merged Entity and VMO2 could deploy more spectrum on their networks (for example through adding more sites or new technology), and therefore achieve a larger capacity uplift for a given spend, than in the counterfactual. Such reductions in the unit cost of capacity potentially give the Merged Entity and VMO2 an incentive to provide a better quality of service and/or lower prices,

and therefore in principle also enhance rivalry.

The CMA therefore concluded that the REEs claimed by the parties could in principle increase rivalry (compared to the situation in the absence of such rivalry-enhancing efficiencies) in each of the market where it identified an SLC.

Criteria 2 - Likelihood

The CMA considered the JBP was likely to result in some degree of REEs. The Merged Entity would have the incentive (and ability) to deliver the so-called 'Day 1' benefits of a combination of Multi-Operator Core Networks (MOCN)⁶⁵ and deployment of additional spectrum through the Parties' combined holdings. It also considered likely some degree of site densification and the realisation of REEs from the spectrum transfer to VMO2 through Beacon 466. The CMA concluded, however, that the Parties were not likely to have the commercial incentive to deliver the full JBP and that the quantum of any efficiencies was likely to be less than claimed by the Parties. Therefore, it concluded that the merger will likely result in some degree of REEs, though not as much as claimed by the Parties.

Criteria 3 - timeliness⁶⁷

The CMA considered that on the basis of the evidence it had seen, the REEs were likely to be realised as a result of the Merger in a timely manner. It agreed that much of the MOCN and spectrum transfer benefits were likely to occur shortly after the merger. It also considered that rivalry enhancing network quality improvement of the spectrum transfer were likely to occur in the short-to-medium term.

Criteria 4 - sufficiency⁶⁸

The CMA considered that the Parties were not likely to realise the full extent of the REEs claimed because they did not have a commercial incentive to deliver the full JBP, as mentioned in '(2) Likelihood'. It concluded though that there will likely be network quality improvements in reliability, coverage, latency, and average speeds. The surveys and econometric analysis considered by the CMA indicated that network quality related parameters play an important role in customer decisions, but that they are less important than price. The CMA concluded that although the merger was likely to result in some efficiencies which are rivalry-enhancing, these were – without the safeguards ultimately provided by the Network Commitments package ensuring implementation of the JBP/JNP insufficient to fully offset the impacts on the retail market. Similarly, the CMA considered that – again, without the safeguards ultimately provided by the Network Commitments package ensuring implementation of the JBP/ JNP – the efficiencies were not likely to offset the adverse impacts in the wholesale market.

Criteria 5 - merger specificity⁶⁹

The CMA acknowledged that the efficiencies in the JBP are merger-specific and could not likely be achieved by other means. Hence, it found that this criterion was met.

Criteria 6 - Benefits customers

The REEs which would likely be delivered would benefit customers in the UK, insofar as they (partially) offset the anti-competitive effects of the merger.

IS ANYTHING NEW?

1. Credible evidence submitted by the Parties and Ofcom's role

As discussed above, the CMA acknowledged the presence of significant REEs from the merger and considered that most of the criteria for the assessment of these REEs were met.

In reaching its conclusions, the CMA took into account Ofcom's expertise in a manner consistent with its existing quidance:

"In line with our guidance in relation to merger investigations involving regulated sectors, we have engaged closely with Ofcom, given its specialist mobile network expertise. However, while we have had close regard to Ofcom's views, we have ultimately

reached our own conclusions on each of the relevant questions⁷⁰."

Specifically, Ofcom said that the integration of the standalone networks envisaged in the JBP was a "unique opportunity" to deliver a significant improvement in the quality of the Parties' networks, which was otherwise unlikely to be delivered by the market and was unlikely to be delivered subsequently if sites were decommissioned in the short term beyond the quantities envisaged in the JBP.

Ofcom considered that the three (primary) areas of quality improvement would be from greater coverage reliability, reduced congestion and greater availability of C-band spectrum coverage, but that the improvements in coverage reliability were likely to be more valuable to customers than the

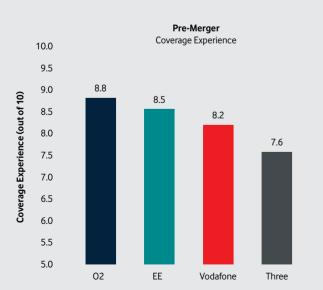
increase in speeds and reduction in congestion. Cumulatively, these benefits would be significant for customers⁷¹.

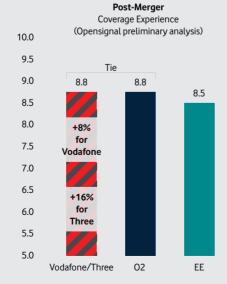
In its 2022 paper Ofcom also said it did not oppose 4-to-3 mobile mergers in the UK, and that 'whether a particular merger is likely to result in a substantial lessening of competition depends on the effectiveness of competition that can be expected in the market after the merger, rather than just the number of competitors'⁷².

Furthermore, Opensignal's independent analysis corroborated the improvements in network coverage which would arise from the merger⁷³. Figure 28 shows well how these would translate to a higher 'coverage experience' score, making the MergeCo more competitive.

Figure 28 Opensignal estimates of coverage pre-merger versus post-merger

Coverage Experience on the combined network of Vodafone/Three is expected to rival that of 02, the current leader





Source: Opensignal

Opensignal methodology is based on user readings, with data collection cutoff date: 20th Feb 2024

The extensive and credible work that both Vodafone UK and Three UK carried out on the JBP and on demonstrating the presence of REEs, coupled with Ofcom's assessment of the network quality improvements resulting from the merger, were key factors that led the CMA to clear the merger, albeit with remedies, as further discussed in the next section.

We note that claims regarding efficiencies have been made in all recent 4-to-3 mobile mergers but have not been completely accepted by the relevant authority, as most of the assessment criteria were not met⁷⁴.

The efficiency arguments made by previous merging parties often failed the 'merger specificity' criterion, as relevant authorities found that network sharing agreements were a less anti-competitive alternative to the merger but with similar benefits for consumers. This was the case for Germany (2014), Ireland (2014), and Italy (2016), for example. In Austria (2012), the EC rejected the efficiency arguments on all criteria, stating 'the efficiencies claimed by the Notifying Party have not been shown to be verifiable, merger specific, and to the benefit of consumers'75. Only in Netherlands (2018) and Spain (2024) have any efficiencies been accepted across all of the criteria, and even then, some efficiencies were rejected. Ultimately though, if the EC concludes that there will not beany Significant Impediment of Effective competition (SIEC)⁷⁶ after considering remedies, the merger can still be approved regardless of any efficiency arguments made.

2. Divestment of spectrum by Vodafone UK

Another noteworthy element in this merger was Vodafone UK's decision to divest part of its spectrum to VMO2.

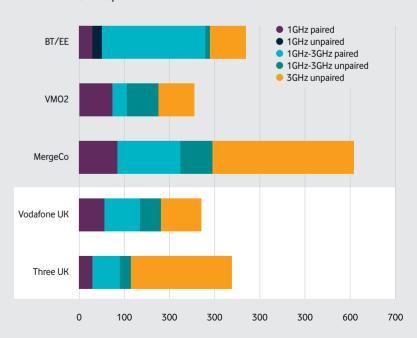
Part-way through the Phase 2 investigation, on 3rd July 2024, Vodafone UK and VMO2 entered into the Beacon 4.1 Agreement.
As part of the agreement, Vodafone UK extended its current network sharing agreement with VMO2 and agreed on a Spectrum Transfer Agreement, whereby VMO2 acquired spectrum from Vodafone UK conditional on the CMA approval for the Merger. Importantly, the transfer of spectrum was on commercial terms agreed by Vodafone UK and VMO2 and based on market prices.

VMO2 currently has the lowest mobile spectrum share (excluding the impact of the Beacon 4.1 spectrum transfer, Figure 29) and, based on a number of measures, the lowest network quality of the four MNOs in the UK⁷⁷.

The transfer of spectrum to VMO2 is pro-competitive as it reduces the prospect of post-merger spectrum asymmetry in the market and incentives VMO2 to compete fiercely. The CMA concluded:

"Overall, our view is that we do not consider that spectrum asymmetry is likely to materially reduce the competitive constraint of the other MNOs post-Merger. This is because we consider that it is likely that the spectrum trade under Beacon 4.1

Figure 29 Mobile spectrum holdings by operator and band (MHz) prior to divestment



Source: Omdia, Will the Vodafone UK/Three UK merger gain approval?, June 23

will occur following the Merger (as discussed in Chapter 10), and therefore the degree of overall spectrum asymmetry will be less than the current asymmetry. We do not consider that asymmetries within low-band spectrum would significantly weaken the competitive position of other MNOs⁷⁸."

The CMA noted that the transfer of spectrum to VMO2 and any increase in VMO2's sites due to Beacon 4.1:

Increases VMO2's capacity. Such increases in capacity give the

Merged Entity and VMO2 an incentive to provide a better quality of service, and/or to fill that capacity by making more attractive offers to customers, and therefore in principle enhance rivalry⁷⁹.

- Might lead to a reduction in the unit cost of expanding capacity and potentially give VMO2 an incentive to provide a better quality of service and/or to fill that capacity by making more attractive offers to customers⁸⁰.
- Would provide a notable increase in network quality for VMO2

wholesale customers which would further increase network quality competition⁸¹.

The divestment of spectrum to VMO2, an established mobile operator in the market, is akin to a "structural remedy" which does not undermine the commercial logic of the merger. The CMA also recognised this and said the spectrum trade is in effect a structural divestment.



REMEDIES

Although the CMA found the merger would result in some REEs even without remedies, it concluded that those efficiencies were not sufficient to offset the SLCs in the retail and wholesale market, particularly in the short run.

After consulting extensively on whether a possible set of remedies proposed by the Parties could rectify the adverse impact on competition, the CMA identified two effective options:

- 1. Prohibition of merger
- 2. Approval of the merger with a network commitment and time-limited protections (at wholesale and retail level)

Whilst both options address the SLCs, the CMA acknowledged that the second option of approving the merger with remedies was the least costly and intrusive and that was not disproportionate in relation to the SLCs and the adverse effects

it identified. In particular, the CMA acknowledged that prohibiting the merger meant that customers would not benefit from any of the REEs and network quality improvements that it considered likely.

The CMA and the Parties agreed that traditional structural remedies (namely the divestment of assets) were not feasible in this merger due to the fact that they did not sufficiently address the SLC in the retail and wholesale markets, and they would unwind some of the REEs arising from the merger (see box below).

This opened up the use of "quasistructural" remedies, such as the network investment commitments, and time-limited behavioural remedies, which were able to preserve the relevant customer benefits of the merger, whilst addressing the potential short term SLC. As we will further discuss below, the network commitment is a "quasistructural" remedy, whilst the timelimited protections are "behavioural remedies" needed to provide shortterm protection whilst the full effect of the efficiencies arise, which the CMA accepted given its assessment that other structural options would not be effective.

One aspect which has enabled the use of the network commitments and behavioural remedies is that Vodafone UK and Three UK operate within a regulated environment with expert monitors (Ofcom).

In line with its guidance, the CMA considered that behavioural remedies could have the desired impact if effective monitoring and enforcement are in place and the likelihood of this increase if it is possible to involve a sectoral regulator in the monitoring regime⁸². Ofcom will play a key role in the implementation, monitoring, and enforcement of the investment commitment and behavioural remedies, thereby fulfilling the practicality criteria of deciding upon the effectiveness of a remedy.

IS ANYTHING NEW?

Effectiveness of other structural remedies to address SLC in retail and wholesale markets

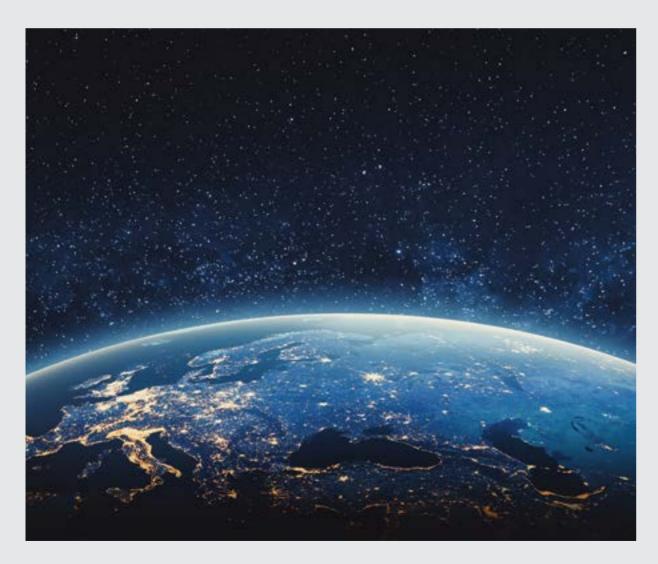
The use of structural remedies to address any competition concerns has long been a staple of European mobile merger cases. They typically involve one-off measures such as the divestment of some of the merging parties' assets, including spectrum, physical network assets, and/or business units to a third party.

The CMA and DG Competition have a clear preference for structural remedies over behavioural remedies, because they are more likely to directly deal with the SLC/SIEC in relevant markets and restore effective competition⁸³. Additionally, they view them as effective because they rarely require monitoring and enforcement after they are implemented.

Since 2012, out of the seven cleared 4-to-3 MNO merger cases, all but one case (T-Mobile/Tele2, Netherlands,

2018) were cleared with structural remedies involving the divestment of assets. Another two 4-to-3 mergers were either blocked due to the remedies not going far enough to address the SLC/SIEC and their adverse effects (O2/Three UK, UK, 2015) or abandoned by the merging parties (Telenor/Telia, Denmark, 2015).

The CMA concluded that they did not expect a traditional structural remedy (divestment or partial divestment of assets) to be appropriate in the Vodafone UK/



Three UK merger given that it would unwind the economies of scale and potentially undermine the remedy's effectiveness and that any new MNOs would not be able to compete effectively⁸⁴. This is in contrast to the blocked 2016 Three-O2 merger where the CMA considered that structural remedies were needed⁸⁵.

The CMA this time carefully examined the effectiveness of a traditional divestment remedy based on the current specific market realities in the UK⁸⁶:

"In our view, it is theoretically possible to enable another MNO to enter the UK through a partial divestiture remedy. Whilst there are country specific challenges, this remedy has been pursued in other jurisdictions. To be comprehensive, the divestiture package would need to enable a suitable purchaser to compete effectively under separate ownership. However, a purchaser would likely only acquire a subset of the assets currently used by the Parties to compete in the relevant markets. This may lead to an MNO that is smaller than either of the Parties today. It is not clear that such an entity would be able to compete effectively in both the retail and wholesale markets where we have identified SLCs."

They also go on to quote Ofcom who noted that:

"Divestiture remedies in the mobile sector have been relatively unsuccessful in restoring a fourth operator and noted that regardless how much spectrum is divested, it remains

Figure 30 Average ARPU across MNOs in Italy (2014-2024)



Source: Analysys Mason

difficult for the remedy taker to gain market share"87.

The CMA therefore concluded that due to the above risks and practical difficulties, an MNO entrant remedy⁸⁸ would be high risk in the UK and would not present a sufficient degree of certainty of achieving its intended effect.

One of the key challenges that would be faced by a new MNO created via a partial divesture remedy would be due to the fact that Vodafone UK and Three UK do not own all the network infrastructure used in the supply of their services. Third party hosts/ tower companies such as Cellnex UK, own a significant amount of the passive infrastructure used by MNOs, and the new MNO would have to negotiate terms with these providers to enter the market. Additionally, as previously mentioned, the MNOs in the UK are party to two network sharing agreements (CTIL/Beacon and MBNL), which the new MNO would not have access to. It is the CMA's view that this provided

an increased level of risk and practical difficulties for the new MNO, impacting the effectiveness of this remedy⁸⁹. In recent 4-to-3 mobile mergers assessed by DG Competition, notably in Italy and in Spain, DG Competition cleared the merger with a structural remedy involving the divestment of assets by the merging parties.

In the 2016 merger between Wind and Three in Italy, Iliad Italia was the remedy taker, acquiring spectrum blocks and mobile base stations to enter the market as a new MNO. In 2024 Iliad had around 11.5m mobile subscribers⁹⁰, which is significantly lower than Wind Tre (23%), Vodafone Italy (27%), and TIM Italia (27%). This means six years after the remedy taker entered the market, the remedy package recreated a market structure with three strong players and a weaker fourth player. As Figure 30 shows, the consequence of this is that average revenue per user (ARPU) in the market has been fallen significantly after the merger.

In Spain, the Orange and MásMóvil joint venture was cleared by DG Competition in 2024, with the merged entity being required to divest spectrum held by MásMóvil to Spain's largest and fastest-growing MVNO, Digi. Orange and MásMóvil also committed to enter an optional national roaming agreement, which Digi could decide to use or not. These two remedies were intended to allow Digi to transition to becoming a full MNO91.

Some of the earlier EU 4-to-3 mobile mergers cleared with partial divesture remedies also failed to recreate a strong 4th player into the market. Specifically, the 2012 merger of Hutchison 3G and Orange in Austria had been cleared with a partial divestment remedy requiring Hutchison 3G to divest radio spectrum to an interested new entrant in the Austrian mobile market.

Two years later, DG Competition cleared a merger between Hutchison 3G and O2 in Ireland with a partial divesture remedy option for an MVNO to acquire spectrum and become a full MNO. In both of these cases, MVNOs did not opt to become full MNOs and both countries were left with 3 MNOs operating within the mobile market.

As discussed above, Vodafone UK's decision to divest some of its spectrum at the start of the CMA's Phase 2 Investigation is akin to a

"structural remedy".

The CMA recognised this, stating that the spectrum trade is "in effect a structural divestment"92.

Rather than creating a new sub-scale player, the Beacon 4.1 agreement will strengthen an existing MNO,

Figure 31 Spectrum divestiture levels in 4-to-3 mergers since 2012

					Spectrum divestiture		
Year	Co	untry	Market Share	Outcome	Low bands ²	Mid bands ³	High bands⁴
2012	=	Austria	24%	•		•	
2014		Germany	31%	•		••••	
2014	П	Ireland	40%	•	•	••••	
2015	==	Denmark ²	41%	•			
2016		Italy	33%	•	•		
2016		United Kingdom	40%	•			
018		Netherlands	25%	•			
	A	Spain	43%	•		••••	
lay	•	Portugal	27%	•			
Today		United Kingdom	30%		?	?	
		Italy	?		?	?	

Notes: 1) Retail market share in terms mobile subscriptions. 2) Sub - 1GHz spectrum bands. 3) Spectrum bands between 1 and 3GHz. 4) Spectrum Bands above 3GHz. 5) Non-materialised spectrum divestitures occurred when spectrum divestiture was destined for new MNO entrants that did not occur.

Source: Copenhagen Economics (based on publicly available information, including documentation from the European Commision and National Regulatory Authorities)

Source: Copenhagen Economic (February 2024)

providing them with a notable and rapid increase in network quality, allowing them to compete more effectively in the provision of retail and wholesale services, positively impacting their customers.

The divestment of spectrum by Vodafone UK and its resulting procompetitive impacts, was a change in the market context which the CMA considered when examining the remedies package tabled by the Parties. Together with the Network Commitment package, it limited the scope for further structural remedy, including other divestment of assets, as these would have undermined the logic of the merger⁹³.

Crucially the CMA noted that:
"the Network Commitment
is an enabling measure because
it delivers a structural change
to the UK's mobile networks,
leaving market outcomes
to be determined by the
competitive process without
further intervention.

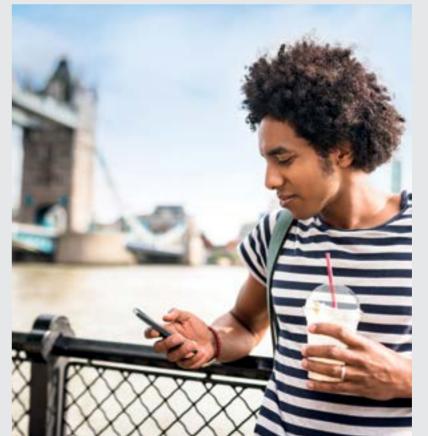
We consider the Network Commitment does this by stimulating competition through achieving, once fully implemented, the significant and long-lasting capacity and quality improvements we have identified.

The boost to competitive rivalry in both the retail and wholesale

markets that will result from the Network Commitment will grow over time as the investment and integration plan is implemented, resulting in progressive increases in network capacity and quality. The same will be true for the transfer and deployment of spectrum to VMO2 pursuant to Beacon 4.1, which we have considered alongside the impact of the Network Commitment⁹⁴."

Divestment of spectrum as a remedy has taken place in all but one of Europe's past six mergers, as shown in Figure 31. It is important to note that, in the Vodafone UK/Three UK case, whilst spectrum is to be sold, this is pursuant to a commercial agreement between Vodafone UK and VMO2, not as part of a formal remedy.

The CMA therefore assessed the impact of that sale as part of its substantive review of the merger, not as a part of its formal remedy assessment – although Vodafone UK/ Three UK positioned the sale as a 'quasi' remedy that would strengthen competition, both by improving spectrum parity between the MNOs and boosting VMO2's network quality, thereby strengthening it as a competitor. It is also noteworthy that, in contrast to the divestment of spectrum in formal remedies in previous EU cases (where the recipient was a new entrant or MVNO), in the Vodafone UK/Three case, the sale was to another established MNO.



THE NETWORK COMMITMENT

To address the CMA's concerns regarding the incentives for MergeCo to not fully implement the Joint Business Plan / Joint Network Plan (JBP/JNP), the parties proposed a "network commitment", which legally binds MergeCo to implement their JBP/JNP.

As part of this network commitment, the Parties committed to:

- 1. Fully integrate the network into a combined grid of an agreed number of sites (substantially larger than the grid currently utilised by either company).
- 2. To ensure nationwide benefits, MergeCo is required to integrate a minimum number of sites in both rural and urban areas. Within each of these areas, MergeCo is required to deliver a specified number of high-, mid-, and low-configuration sites⁹⁵.

The network commitments consist of three legally binding targets over an 8-year period, with legally binding measurement points after years 3, 5 and 8⁹⁶. MergeCo would report to an independent third-party monitoring trustee and Ofcom on its compliance with the commitment, as well as on improvements to its network⁹⁷. The network commitment will be formalised as a variation of the Merged Entity's spectrum licence, which will give Ofcom monitoring and enforcement powers.

The CMA concluded that the network commitment would increase network capacity and lead to lower incremental costs of adding further capacity to the network, and that this would increase competitiveness in terms of the prices offered to retail customers and MVNOs. Additionally, it concluded that the network commitment will lead to significant and long-lasting network quality improvements.

The merger and the network commitment, proposed by the Parties and accepted by CMA, will ensure that a significant investment in 5G SA networks takes place⁹⁸. Absent the merger, this level of investment would not happen. Ofcom agreed. stating that "It recognises that 3UK has shown itself to be innovative in finding ways to generate additional revenues, but that this may not be long lived (as a result of competitors' response and a continued 'scarcity' of capex) ... absent the Merger - 3UK may curtail investment, with the result that it is likely to be a less strong competitor in future"99.

This commitment to invest, as formalised as part of the remedies, was an important aspect which led the CMA to clear the merger.

IS ANYTHING NEW?

The network investment commitment remedy is a novel concept in the context of European mobile merger cases, but not in the US. It was used in conjunction with other structural remedies in the T-Mobile and Sprint 2020 merger case, who were the third and fourth largest mobile wireless carriers in the US. Specifically, T-Mobile and Sprint committed to deploy 5G SA to cover 97% of the American population within three years, and to

reach 99% of the population within six years. This commitment includes deploying 5G service to cover 85% of rural Americans within three years and 90% of rural Americans within six years. In October 2023, T-Mobile announced that they had achieved their commitment to deploy 5G SA, months ahead of schedule¹⁰⁰. In early 2024 T-Mobile had submitted an official progress report to the Federal Communications Commission (FCC) to confirm that they had met these commitments¹⁰¹.



TIME-LIMITED PROTECTIONS – WHOLESALE MARKET

The Parties and the CMA agreed upon Wholesale Access Terms (WAT) as time-limited protections for the wholesale market. The Wholesale Access Terms are made up of two key components: (i) a reference offer with pre-agreed wholesale terms available to MVNOs across the UK market; and (ii) the extension of existing contract terms for MVNOs currently on Vodafone UK's and Three UK's networks. Crucially, the CMA noted that:

"A Wholesale Access Terms measure — on the basis that it broadly reflects the terms of MVNO contracts across the market — can support the Network Commitment to provide a cap on price and non-price MVNO terms during the initial years of network integration.

Over time, we consider that the combination of the additional network quality and capacity improvements deriving from the Network Commitment once fully implemented along with Beacon 4.1 [...] would increase the ability and incentive of both the Merged Entity and VMO2 to compete for wholesale opportunities and ensure effective long term wholesale competition, such that a Wholesale Access Terms measure can be lifted.¹⁰²"

As such, the WAT is a time-limited protection that is designed to only remain in place until the combined rivalry-enhancing effects of Beacon 4.1 (the quasi-remedy) and the Network Commitment "kick-in" sufficiently. The CMA has tied the end of the timeframe of the WAT to the fulfilment of the Year 3 deliverables

under the Network Commitment as it expects that, by the time the Year 3 deliverables are achieved, significant improvements in MergeCo's coverage, reliability and capacity will have been delivered and the effects of Beacon 4.1 on VMO2's quality and capacity will also have started to take effect¹⁰³.

The reference offer

The first component of the WAT, a reference offer with pre-agreed wholesale terms, is designed to ensure that MVNOs continue to have access to competitive wholesale terms, which they can use to continue to compete effectively in the retail market or to negotiate competing offers with other MNOs. Specifically, the CMA stated that:

"[They] are not seeking to reflect the 'best' terms that have been negotiated in the current market (or 'better' terms than are currently available). Instead the [terms of the reference offer] need to be broadly reflective of terms currently commonly available across the wholesale market to reflect the current level of competition and constrain price and non-price terms for a limited period of time 104."

The CMA determined the following key features to be appropriate for this reference offer:

Price

Two models of pricing apply: (i) per GB wholesale pricing for capped tariffs; and (ii) per bundle wholesale pricing for unlimited tariffs. Both models are subject to three different pricing tiers based on MVNO size and there is a premium for plans with data speeds above 150 Mbps¹⁰⁵.

Future Pricing Mechanism (FPM)

The FPM allows for the wholesale price paid by the MVNO to fall proportionally as the Merged Entity's ARPU decreases or the average data usage on the Merged Entity's network increases 106.

Service Equivalence

MVNO customers would be provided with mobile service on the same basis as it is provided to the Merged Entity's customers, including as this relates to 5G SA.¹⁰⁷.

Contract Term

The maximum contract term is 5 years. MVNOs can request a shorter term¹⁰⁸.

Duration

MVNOs can seek access under the reference offer in the first 3 years post-completion of the merger. They will have until the end of the 4th year post completion to conclude a contract on WRO terms, provided that interest is expressed within the first 3 years post-completion¹⁰⁹.

Capacity Limit

The Merged Entity is not required to offer the reference offer to any MVNO if the MVNO's aggregate mobile data traffic for the coming 12 months is more than [15-20]% of the total capacity of the Merged Entity's network¹¹⁰.

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The extension of Vodafone UK's and THREE UK's existing wholesale contracts

In addition to the reference offer, the second element of the WAT requires MergeCo to allow the MVNOs with which Vodafone UK and 3UK have existing wholesale contracts to either (i) recontract on their existing contract terms should their live contract expire within the timeframe of the WAT; or (ii) sign up to the reference offer. The CMA viewed this measure as necessary to protect MVNOs that are currently on Vodafone UK's and 3UK's networks.

For aspects of the existing relevant contract which either party (either the relevant MVNO or MergeCo) considers to be no longer relevant for the originally intended purpose, a commercial arbitrator will be appointed to resolve the dispute should MergeCo and the MVNO be unable to reach a separate agreement¹¹¹.

Monitoring compliance

The CMA would oversee compliance with the WAT commitments. Disputes on the terms of access between MVNOs and MergeCo will be resolved

by a commercial arbitrator, which would report to the monitoring trustee or Ofcom (who would report to the CMA).

Relation to the retail market

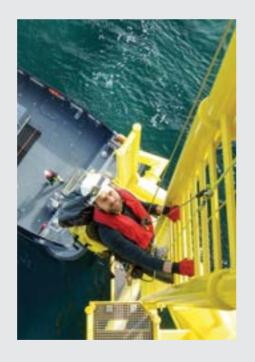
By addressing SLC in the wholesale market, the CMA considered that this remedy also helps the retail market by allowing MVNOs to continue to offer competitive prices and innovative products. Furthermore, it states that the Network Commitment will have a stronger effect in the retail market compared to the wholesale one, making a short-term wholesale remedy particularly important.

IS ANYTHING NEW?

There is recent precedent to this remedy being used in European mobile merger cases, but it has always been used in conjunction with a set of traditional structural remedies which involved the divestment of assets rather than as a short-term measure to enable the efficiencies from a network investment commitment to arise.

Some notable cases include the Austria H3G and Orange merger case in 2012, where H3G was required to provide wholesale access to potential MVNOs based on a reference offer.

UPC entered the market as an MVNO using this remedy. Then two years later in Germany, the Telefonica/02 and E-Plus merger was cleared, and the merging parties were required to extend their existing wholesale agreements with their current MVNO partners and offering them 4G access. Then a year later in 2015 in the UK, as a part of the H3G and O2 merger attempt, the merging parties proposed wholesale network agreement for MVNOs to have access to 4G technologies but the merger was ultimately not cleared by the European Commission.



LIMITED PROTECTIONS - RETAIL MARKET

The Parties and the CMA agreed on time-limited retail customer protections as a remedy to mitigate any potential negative impacts from the merger on existing retail customers, particularly in relation to higher prices in the short term, before the competitive benefits of the network integration and investment roll-out are sufficiently evident.

In particular the CMA noted that:

"If the Merger were to proceed only subject to the implementation of the Network Commitment, the retail SLC would...not be comprehensively addressed as adverse effects would arise while the rivalry-enhancing effects of Beacon 4.1 and the Network Commitment grow over time. As such, the SLC would not be fully addressed throughout its expected duration solely through the Network Commitment.

In these circumstances, our remedies guidance notes that, in addition to so-called 'enabling measures' like the Network Commitment that work relatively slowly in addressing an SLC, measures that control market outcomes (such as price caps) may be needed to supplement enabling measures for a limited period to provide protection to customers from the adverse effects of an SLC¹¹²..."

The time limited retail customer protections would require the Parties to retain certain existing mobile tariffs and data plans thus protecting current and future customers, including those on the Parties' sub-brands, from short-term price rises in the early years of the network commitment.

As with the wholesale-related remedies, the CMA has tied the end of the timeframe of the retail protections to the fulfilment of the Year 3 deliverables under

the Network Commitment as it expects that, by the time the Year 3 deliverables are achieved "the impact of the Network Commitment and Beacon 4.1 will have begun to have a material positive effect on competition (paragraph 16.219) such that the retail protections could be lifted 113."

IS ANYTHING NEW?

Such retail price protection remedies are uncommon. Looking into the past six approved 4-to-3 telecoms mergers across Europe, none had such a retail price remedy. However, as they are merely short-term supporting measures, it would be incorrect to see these measures as a silver bullet to any SLC at the

retail level. The CMA makes clear in the Final Report that "imposing any pricing restrictions or protections in a market has a high chance of creating market distortions, both foreseen and unforeseen" and that such risks grow over time, ruling out the potential for long-term pricing restrictions¹¹⁴.

The CMA got comfortable with the limited scope of these time-limited

retail protections primarily due to the very small subset of tariffs which are covered and the short, three-year time period¹⁵. These time-limited retail protections also do not resolve the SLC themselves – they are a stopgap measure to address the CMA's "residual time-limited concerns in the retail market"¹¹⁶.





IMPLICATIONS FOR
FUTURE MOBILE
MERGERS AND THE EU
MERGER FRAMEWORK

KEY LEARNINGS

As recognised by the CMA, the assessment of each mobile merger is context-specific and depends on the evidence and facts of each case, including the characteristics of mobile markets such as geographic, demographic, and regulatory aspects¹¹⁷. Nevertheless, based on the discussion in the previous section on "key elements" which have made Vodafone's UK merger with Three UK possible, some learnings can be drawn for future mobile mergers in the European Union and also on how the EU merger framework should be adapted to ensure a more forward-looking merger policy, that stimulates competition in mobile infrastructure as a means of improving consumer welfare.

The Vodafone UK merger with Three UK, as approved by the CMA, shows a clear open-mindedness on how mobile telecom mergers can be assessed by competition authorities¹¹⁸. The CMA was prepared to consider that a competitive mobile market does not necessarily require four MNOs and examined the merger case on its merits, taking account of the market and economic reality and focusing on what delivers most long-term benefit to consumers, businesses.

The CMA took an evidence-led approach, recognising:

- the need for significant investments to meet customers' future needs and the benefits of scale in the telecom sector;
- the Parties JBP and JNP as a credible integration plan and unique opportunity to positively transform the competitive landscape by delivering a step change in network quality and capacity;
- the Merged Entity's superior network quality would increase the competitive pressure on rivals and create a strong incentive for the Merged Entity to compete aggressively in both the supply of retail and wholesale mobile telecommunication services to win customers in order to fill its expanded capacity;
- the Merger would result in substantial benefits if the JBP is fully delivered, and that any doubts that the Parties would likely have the incentive to deliver the full JBP and therefore the quantum of benefits, could be resolved by acceptance of the Network Commitments package (including time limited retail and wholesale protections);
- the Network Commitment is an enabling measure because it delivers a structural change to the UK's mobile networks, leaving

market outcomes to be determined by the competitive process without further intervention.

In a recent public statement, Sarah Cardell, the CMA's Chief Executive Officer, recognised that the competition assessment needs to go beyond lower prices and focus on other benefits including quality, investment, and growth¹¹⁹. She also referred to the existing flexibility in the merger regime and that the CMA, as part of its assessment, "can evaluate whether the merger is likely to result in competitionenhancing efficiencies that might offset immediate concerns (for example, efficiencies flowing from long-term infrastructure or technology investments)"120.

The recent statements from the CMA's CEO align with proposals from Mario Draghi in his report "The future of European competitiveness"121 to increase the weight of innovation and investment commitments, as well as longer periods for assessing efficiencies, when assessing mergers in the EU. As further explored below, some changes to the EU merger framework will be needed so that DG Competition has the right tools to adopt a more forward-looking approach, in particular on how to assess merger efficiencies and implement investment commitments.



There are three key learnings from the CMA process which are relevant for future mobile mergers, particularly to change the EU merger framework.

First, it is key for the Parties to provide credible evidence on the benefits for consumers, particularly at the start of the merger review process. The Parties were able to demonstrate that the efficiencies claimed were both likely and timely, and that customers would benefit from improvements in capacity and network quality. Moreover, since more spectrum will be deployed across more sites, performance will be improved in previously uncovered areas, giving customers more consistent and reliable coverage. To address the CMA's concerns that the Parties

lacked the incentive to carry out the JNP in full, the Parties agreed to binding network commitments to be delivered over a period of 8 years, and on time-limited retail price measures and on wholesale protections for MVNOs (until the efficiencies of the network deployment offset any remaining anti-competitive effects).

Secondly, the CMA placed significant weight on the expert opinion of the sectoral regulator, Ofcom, and was able to recognise the need for significant investment in mobile networks in the UK to increase capacity and provide the network quality needed to meet future customers' needs.

Ofcom played an important role in the outcome of this merger, not only by acknowledging the need for stepping up investments to meet customers' future connectivity needs, but also by acknowledging that this objective could not be achieved under the existing market conditions. Ofcom was also instrumental in supporting the CMA in the review of the Parties' JNP and all technical network modelling and giving the CMA comfort that the JNP was credible and would actually materially improve outcomes for consumers.

Finally, Ofcom, as the sectoral regulator, will play a key role in enforcing and monitoring the commitments put forward by the Parties. The CMA Remedies Notice welcomes the involvement of a sectoral regulator in the remedies monitoring regime and Ofcom, together with the CMA and a third-party independent trustee, will be responsible to ensure that both the behavioural retail and wholesale remedies, as well the quasi-structural investment remedy, will be complied with by MergeCo.

Thirdly, it was important that during the remedies' discussion, the CMA sought the right balance between short-term and long-term merger benefits for consumers, and the role of the remedies in preserving the economic rationale of the merger. For example, the benefits inherent to the network commitments and the subsequent increase in total industry supply put forward by the Parties could have been undermined by the imposition of structural remedies trying to re-create a 4th (sub-scale) operator.

Moreover, the CMA acknowledged that the imposition of traditional structural remedies - to allow the entrance of a new mobile player, or to push an MVNO to become an MNO - does not necessarily create more competitive outcomes 122. The CMA acknowledged the importance of strengthening an established MNO to foster investment and improve network quality, consequently keeping competition at wholesale level for the benefit of MVNOs and ultimately retail customers.

Which changes are needed for the European Union to follow the CMA approach?

Both the UK and EU merger frameworks show a clear preference for structural over behavioural remedies¹²³. In recent mobile mergers, both DG Competition and national competition authorities have almost exclusively relied on structural remedies such as asset divestiture (e.g. spectrum) or the imposition of access obligations¹²⁴. To approve the Vodafone UK merger with Three UK, the CMA focussed on the structural effects of a legally binding network investment commitment package that would deliver on a joint network plan over the next eight years. This investment commitment can be regarded as a quasi-structural remedy as it will change the UK mobile market structure. The committed roll-out plan will not only increase 5G geographic coverage but also improve network quality and capacity for consumers and business. Ofcom (with the assistance of a third-party monitoring trustee) will be responsible for monitoring the compliance of the roll-out plan put forward by the Parties.

In the same way as the CMA closely collaborated with Ofcom throughout the process, DG Competition also has the power to request information and in past mergers very often relied on inputs from national regulators to better understand the specificities of the telecom market under review¹²⁵ (sometimes even exclusively). The participation of NRAs in the implementation and monitoring of the commitments put forward by merging parties is also common practice¹²⁶.

In previous mobile mergers the European Commission has not been willing to adapt its approach to remedies, including acceptance of behavioural remedies, due to the perceived complexity involved in their implementation and monitoring, as stated in the decision to block the merger between CK Hutchinson and O2 in 2016 (para 3051)¹²⁷.

However, there is already a track record of European Commission decisions where DG Competition considered behavioural remedies appropriate in certain circumstances¹²⁸ and other decisions where national sector-specific regulators were entrusted to enforce remedies decided by DG Competition in their local markets. For example, the Austrian Telecoms Regulator RTR was instructed as arbitrator in the T-Mobile/Telering merger¹²⁹. Also, national railway regulators in Belgium, France, and the UK were instructed in the M.5655 - SNCF/LCR/Eurostar merger to serve as appeal authorities and enforce the rules set out in the merger commitments¹³⁰.

As demonstrated by the Vodafone UK and Three UK merger, there is a need to return to this practice going forward rather than simply demanding structural remedies



without a more considered analysis such as that undertaken by the CMA in this case.

The CMA Merger Remedies Guidance facilitates the use of behavioural remedies in regulated sectors by recognising that the likelihood of effective monitoring is significantly increased if it is possible to involve a sectoral regulator in the monitoring regime. Sarah Cardell (CMA's Chief Executive) recently announced a review of merger remedies which should include the assessment of the impact of behavioural remedies including any distinction for regulated sectors. Building on the UK experience, the EU merger framework would benefit from guidance on how sector regulators can be efficiently involved in the monitoring and enforcement of behavioural remedies.

Moreover, since the adoption of the European Electronic Communications Code (EECC)¹³¹, National Regulatory Authorities have increased visibility on detailed information regarding the geographic reach and roll-out of broadband networks by operators in the Member State. Article 22 of the EECC¹³² mandates NRAs to conduct a geographical survey of the reach of electronic communications networks capable of delivering broadband (i.e., broadband networks) every three years. The geographical survey shall include a survey of the current geographic reach of broadband networks within their territory and may also include a forecast for a period of up to three years. As NRAs today already have access to very detailed data on network roll-out,

monitoring investment commitments by the merging parties should not increase the burden of NRAs considerably.

At a moment where the European Commission is starting its 2024-2029 mandate and the responsible Commissioner is tasked with modernising competition policy, in particular through the revision of the Horizontal EU merger guidelines, the recent CMA decision provides a clear precedent for how competition authorities should give adequate weight to efficiencies, innovation, time horizons, and investment intensity of competition in certain strategic sectors.

The list of potential changes below is non-exhaustive:

- The Horizontal EU Merger Guidelines should provide clearer approaches on how DG Competition should address efficiencies in investment-intensive sectors. The time horizon to deliver on efficiencies linked to network investments should be longer and this may require guidance on how to consider efficiencies, so that these are consistent with the usual investment cycles in each sector or industry.
- The European Commission should also provide guidance on how regulated sectors can benefit from the experience of sector-specific regulators in the implementation and enforcement of remedies requiring monitoring. The telecoms sector, with the enhanced competencies of the sector-specific regulator as provided by the EECC is well placed

to serve as a benchmark.

- The revision of the Horizontal EU merger guidelines should be accompanied by a revision of the EU Remedies Notice. For example:
- The strong structural preference for divestment remedies should be removed.
- O The current formulation of the proportionality test – which is focussed on measuring the proportionality of a remedy simply by reference to whether it addresses the identified competition harms – should be extended to include consideration of the impact of remedies on relevant customer benefits and other transaction efficiencies. There should be a related rule that the EC should accept the least intrusive and costly remedy – so long as it addresses the relevant competition concerns fully.
- There should be a specific reference to the role of relevant sectoral regulators as monitors of behavioural commitments.
- A mere change to the Horizontal EU merger guidelines would be insufficient to address these aspects and deliver on the expected modernisation of EU competition policy.

CONCLUSION

The new Commissioner, Teresa Ribera, Executive Vice-President for a Clean, Just and Competitive Transition (EVP), received a clear mandate to modernise the EU's competition policy. Supported by the findings of the EC White Paper on the future of connectivity and the recommendations of the Draghi report, it is evident that time is of the essence to support European companies to innovate, compete and lead worldwide, whilst contributing to the EU's wider objectives of competitiveness and sustainability, social fairness, and security. The EU is lagging behind on fixed and mobile connectivity which undermines the potential of digital transformation of business and public services.

A modern competition regime is needed. As well as increasing consumer benefits, this should take into account long-term efficiencies, innovation, improved coverage, network quality, security and resilience. We see the CMA decision in the Vodafone UK merger with Three UK as a new template for the assessment of mobile mergers that is able to deliver on various EU objectives, including growth and competitiveness of the European economy.

The modernisation of EU competition policy also requires also changes to existing soft law in the short term, combined with the ambition to change the EU merger regulation in the mid to long-term to:

- consider merger efficiencies in a forward-looking manner and over a longer time-horizon;
- consider investment intensity of competition in certain strategic sectors, including the role of MVNOs in mobile;
- remove the current strong preference for structural remedies and broaden the proportionality test to account for the impact of remedies on transaction benefits; and

 for regulated sectors, the EU should explicitly recognise that the sector regulator can and should play an important role in monitoring and enforcing behavioural remedies¹³⁵.

As the EU looks to revamp its competition rules, it can draw on these lessons from the Vodafone / Three merger in the UK. Globally competitive digital infrastructure is possible in Europe, but only if there are appropriate incentives to invest through enhanced scale.



GLOSSARY

Term	Definition
Three UK	Hutchinson 3G UK Limited
5G SA	5G Standalone
5G NSA	5G Non-Standalone
ВТЕЕ	BT Group plc
СМА	Competition and Markets Authority
FWA	Fixed Wireless Access
GB	Gigabyte
GSMA	Global System for Mobile Communications Association
ЮТ	Internet of Things
JBP	Joint Business Plan
JNP	Joint Network Plan
M2M	Machine to Machine

Term	Definition
MOCN	Multi-Operator Core Networks
MNO	Mobile Network Operator
MVNO	Mobile Virtual Network Operator
RCB	Relevant Consumer Benefits
REEs	Rivalry Enhancing Efficiencies
SLC	Substantial Lessening of Competition
SEIC	Significant Impediment to Effective Competition
TELECOMS	Telecommunications
VMO2	Virgin Media O2 UK Limited
VUK	Vodafone UK Limited
WTA06	Wireless Telegraphy Act
WIS	Wireless Infrastructure Strategy

REFERENCES

- Ofcom, Ofcom's future approach
 to mobile markets and spectrum,
 Conclusions paper, Dec 22.
- Strategic steer to the Competition and Markets Authority, Nov 23; the Labour government elected in 2024 is following the same strategy by stressing the need for growth, innovation and investments.
- DIST, <u>UK Wireless Infrastructure Strategy</u>, Apr 23, setting out, among other things the UK's government 5G Standalone policy objectives.
- 4. CMA, <u>CMA Final Report</u>, Dec 24, para. 16.109.
- 5. CMA, <u>CMA Final Report</u>, Dec 24, para. 16.173-c.
- 6. European Commission, <u>EC mission letter</u> for Teresa Ribera, Sep 24.
- 7. European Commission, <u>Guidelines on</u> the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (2004/C 31/03)
- 8. European Commission, Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, (2008/C 267/01).
- CMA, <u>Merger remedies</u>, Dec 18 guidance explicitly recognises (para. 7.6) that "the likelihood of effective monitoring will be significantly increased if it is possible to involve a sectoral regulator in the monitoring regime".
- 10. GSMA Intelligence, <u>The Mobile Economy</u> Europe 2025, Jan 25
- For example, 2G/3G improved call quality and security, enabled text and multimedia messaging, and allowed mobile internet access. 4G provided high speed data transmission and low latency, which enabled seamless streaming of HD video, mobile gaming enhanced mobile applications.

- The mid-band spectrum is required for the most effective form of 5G connectivity, so-called 5G 'Built Right'. The coverage rates included here are for 'Europe excluding Russia', 'North America', and 'Mainland China'.
- McKinsey & Co, <u>The Internet of</u>
 <u>Things: Catching up to an accelerating opportunity</u>, Nov 21.
- See Select USA, Robots and the <u>Economy, Select USA</u>, 2020. This rises to 5% productivity improvements for industries adopting robotics for the first time.
- As of 2022: Connect Europe, <u>The State</u> of <u>Digital Communications 2024</u>, Jan 24
- 16. Updated using Mapchart.net, showing the UK as a now 3-player market.
- 17. See for example, Ofcom, <u>Ofcom's</u> future approach to mobile markets and <u>spectrum, Conclusions paper</u>, Dec 22, para 4.42.
- GSMA Intelligence, <u>Accelerating eSIM globally: state of the consumer market user behaviour and adoption growth scenarios</u>, Dec 23.
- Subscriptions exclude M2M/IoT connections.
- 20. The large drop of MVNO market share in 2021 was due to completion of 2020 merger between Telefonica (O2) and Liberty Global (Virgin Media), where Virgin Media operated as a MVNO in the UK market though Virgin Mobile.
- 21. Ofcom, <u>Communications Market Report</u> 2024: Interactive data, Jul 24.
- 22. DIST, <u>UK Wireless Infrastructure Strategy</u>, Apr 23.
- 23. DIST, Realising the Benefits of 5G, Aug 21.
- 24. Ofcom, Connected Nations Report 2024, Dec 24, pg.28-29.
- 25. Of com refers to confidence ranges when reporting 5G mobile availability

- predictions, indicating the likelihood of on the ground coverage. "High Confidence" is associated with a signal strength (-110 dBm), to equate to at least an 80% confidence level. "Very High Confidence" is associated with a higher signal strength (-100 dBm), to equate to a circa 95% confidence level.
- 26. Vodafone UK/Three UK, Merger
 Statement of Vodafone UK and Three
 UK, Jun 23.
- 27. Vodafone UK/Three UK, <u>Statement</u> from Vodafone UK and Three UK on submission to the CMA, Jan 24.
- 28. Vodafone UK/Three UK, Initial Phase 2
 Submission and Response to the CMA's
 Phase 1 Decision, Jun 24, para 1.9.
- ROCE is a measure of a company's profitability and how efficiently it deploys its capital.
- The cost of capital is the minimum return that investors can expect for providing capital, given the risks to the investment.
- 31. Ofcom, Ofcom's future approach to mobile markets and spectrum, Conclusions paper, Dec 22
- 32. CMA, CMA Final Report, Dec 24, para. 8.200-c.
- Opensignal, <u>Vodafone and 3 set to</u> <u>create UK's leading mobile coverage</u> <u>network post-merger</u>, Mar 24.
- C-band spectrum is a high-capacity mid band spectrum that enables more users and increased average speeds, superior to low band spectrum typically used for 5G NSA.
- The CMA agrees that the divestment of spectrum would 'lead to material network quality improvements and an increase in capacity (and lower future costs of capacity) for VMO2, making it a stronger competitor'. CMA, Final Report, Dec 24, para 6.

- 36. CMA, Final Report, Dec 24, pg 460.
- As described in the <u>Parties response to</u> <u>the provisional findings</u>, Oct 24, pg 31.
- CMA, <u>CMA Final Report</u>, Dec 24, para 8 341
- 39. Ibid, para 8.9.
- 40. Ibid, para 8.21
- 41. Ibid, see para 8.335 (a).
- 42. Ibid. see para 8.335 (a).
- 43. Ibid, para 8.345.
- 44. Ibid. para 16.4(a).
- 45. Ibid, para 9.10
- 46. Ibid, para 16.4(b).
- 47. CMA, Phase 1 Investigation Anticipated joint venture between Vodafone Group Plc and CK Hutchison Holdings Limited concerning Vodafone Limited and Hutchison 3G UK Limited Decision on relevant merger situation and substantial lessening of competition, Apr 24, para 5.6.3
- 48. CMA, <u>Phase 2, Provisional Finding</u> <u>Report, Sep 24, para 11.11.</u>
- 49. CMA, <u>CMA Final Report</u>, Dec 24, para 12 90
- 50. We note however that the CMA did not have a theory of harm on coordinated effects and dropped the theory of harm on network sharing agreements during its phase 2 investigation, as described earlier in this paper.
- 51. Diversion ratios measure what proportion of sales lost by one product, given its price increases, will go to each competitor product. This is a measure of substitutability between products/brands and can be calculated using switching rates.
- 52. Incorporating subscribers of the MVNOs hosted on each of their networks.

- Based on the 2014 data used for the European Commission's analysis (<u>Commission Decision</u>, 2016, pg. 82).
- 54. Excluding MNOs apart from Tesco Mobile.
- 55. CMA, CMA Final Report, Dec 24, para 47, pg 14.
- 56. Ibid, para 14.23.
- 57. Ibid, para 14.23.
- 58. Ibid, para 14.25.
- 59. Ibid, para 14.27.
- 60. Ibid, para 14.27.
- 61. Ibid, para 14.211.
- 62. Ibid, para 14.232.
- 63. Ibid, para 14.291.
- 64. Ibid, para 14.214-215.
- MOCN allows multiple mobile network operators (MNOs) to share a common core network infrastructure while maintaining their individual radio access networks (RANs).
- 66. Ibid, para 14.237-238.
- 67. Ibid, para 14.241-243.
- 68. Ibid, para 14.244-247.
- 59. Ibid, para 14.289.
- 70. Ibid, para 14.67, pg 425.
- 71. Ibid, para 14.75.
- 72. Ofcom, Ofcom's future approach to mobile market: A discussion paper, Feb 22, pg 4.
- 73. Opensignal, <u>Vodafone and 3 set to</u>
 <u>create UK's leading mobile coverage</u>
 <u>network post-merger, Mar 24.</u>
- 74. The European Commission has three criteria for efficiencies in their horizontal merger guidelines; (i) likelihood to benefit consumers, (ii) merger specificity

- i.e. efficiencies cannot be achieved to a similar extent by less anticompetitive alternatives, and (iii) verifiability. The merging parties have to meet all the three criteria for their efficiency arguments to be accepted by the EU Commission Directorate General for Competition (DG Competition).
- European Commission, Austria H3G/ Orange Commission Decision, Dec 12 page 102.
- The substantive test in the EU merger regulation (EC No 139/2004 of January 2004) is the so-called SIEC-test, which differs from the SLC test enshrined in the Enterprise Act 2002.
- 77. Ibid, para 16.229.
- 78. Ibid, para 8.312
- 79. Ibid, para 14.214.
- 80. Ibid, para 14,125.
- 81. Ibid, para 16.230.
- 82. CMA, Merger remedies, Dec 18, para. 7.6.
- 83. E.g. paragraphs 3.32, 3.46 of the CMA Merger Remedies Guidance (2018). Moreover, according to paragraph 7.2 of the MRG, the CMA can use behavioural remedies as the primary source of remedial action in only where: (a) structural remedies are not feasible; or (b) the SLC is expected to have a short duration; or (c) at Phase 2, behavioural measures will preserve substantial RCBs that would be largely removed by structural measures. However, the CMA opens the door for behavioural remedies in regulated sectors by recognising that the likelihood of effective monitoring is significantly increased if it is possible to involve a sectoral regulator in the monitoring regime. Moreover, Sarah Cardell (The CMA's Chief Executive) recently announced a review of merger remedies, including the impact of behavioural remedies including any

distinction for regulated sectors (Driving growth: how the CMA is rising to the challenge). The preference for structural remedies in the EU Merger regulation is very nuanced and is linked to recital 8, but the European Commission clearly stressed the preference for structural remedies in paragraph 15 of the EU remedies notice. Similar to the UK, behavioural remedies in the EU remain the exception (paragraph 17 and 61 et seq.).

- 84. Ibid, para 16.55 and 16.57.
- 85. The CMA states in a letter to the European Commission that 'the only appropriate remedy that would meet the criteria that the Commission is bound to apply' is divestment of enough infrastructure for a viable fourth MNO. CMA letter. April 2016.
- 86. Ibid, para 16.54-16.55.
- 87. Ibid, para 16.58.
- 88. Referring to the entry of a new MNO with the aim of compensating for the loss of competition resulting from the Merger.
- 89. CMA, <u>Remedies Working Paper</u>, Nov 24, para 1.69.
- 90. Iliad, 2024 Q3 Results, Nov 24.
- 91. As recently announced, Digi decided not to take the national roaming remedy from the joint-venture but rather negotiate a national roaming agreement with Telefonica (replacing the existing MVNO agreement between the Parties). Microsoft Word CCS 2013 Results Announcement.doc. As Vodafone Group argued during the merger process as interested third party the wholesale mobile market in Spain is competitive and there was no need to impose a national roaming remedy.
- 92. CMA, Final Report, Dec 24, para 14.238.
- 93. In previous mergers, spectrum divestitures

- have been used by competition authorities to push the entry of new players or to strengthen MVNOs at a discounted price. The divestiture by Vodafone does not fall under this scenario as it was carried out at market prices to an established player in the market.
- 94. CMA, Final Report, Dec 24, para 16.109.
- The site configuration refers to the type of spectrum that a given site is configured for (high/medium/low band frequencies).
- 96. With regards to what is being measured, the Parties have opted for input-based requirements since the metrics are clear, unequivocal, measurable and easy to monitor. Output based measurements like speeds, coverage, and capacity are a function of the number of sites and the spectrum deployed on them. Ofcom agrees on this and reported that inputbased requirements have "significant advantages" compared to outputbased ones, since they have steeper monitoring requirements and significant measurement concerns (high standard deviation of measurement error. CMA, Remedies Working Paper, Nov 24, para 1.119 and 1.140-147.
- For more details on the type of information to be provided by MergeCo see CMA, <u>Final Report.</u> Dec 24, para 16 131-133
- 98. We also note that at the time of the proposed O2/Three merger in 2016 the UK was 'one of the most advanced countries in the EU in terms of roll-out of 4G technology and take-up of 4G services.
- 99. CMA, Remedies Working Paper, Nov 24, para 1.194.
- 100. T-Mobile, Press Release, Oct 23.
- 101. Third Annual Progress Report on T-Mobile's 5G Network Deployment, Rural 5G Network Deployment submitted to FCC in Jan 2024.

- 102. CMA, Final Report, Dec 24, para 16.481 and 16.482.
- 103. Ibid, para 16.535 and 16.536.
- 104. Ibid, para 16.481.
- 105. Ibid, para 16.508.
- 106. Ibid, para 16.515.
- 107. Ibid, para 16.500.
- 108. Ibid. para 16.542.
- 109. Ibid, para 16.537.
- 110. Ibid, para 16.491.
- 111. Ibid, para 16.526.
- 112. Ibid, para 16.213-214.
- 113. Ibid, para 16.384.
- 114. Ibid, para 16.416.
- 115. Ibid, para 16.421.
- 116. Ibid, para 16.362.
- 117. CMA, Provisional Findings Report, Sep 24, para 8.299-8.300.
- In the last decade only one merger in the EU was adopted without any remedies (Case <u>M.8792</u>, T-Mobile NL/ Tele2 NL).
- 119. Speech: Driving growth: how the CMA is rising to the challenge delivered at the Chatham House Competition Policy 2024 Conference. We know the benefits from promoting competition are profound and far-reaching not just lower prices, but more innovation, choice, quality, security of supply, productivity, investment and growth.
- 120. The CMA also announced a review of its approach to mergers remedies, which will cover:
 - when behavioural remedies may be appropriate (including any distinction for regulated sectors);

- the scope for remedies that lock in genuine rivalry-enhancing efficiencies
- the role for remedies to preserve relevant customer benefits which may offset anti-competitive effects/
- how to move to effective remedy discussions as quickly as possible, informed by a clear understanding of CMA's potential competition concerns and a sound appreciation of the commercial reality of the Parties' business operations.
- European Commission, <u>The future of European Commission competitiveness</u>, Sep 24
- 122. As mentioned above, the divestments imposed in the Austrian (2012) and Irish mergers (2014) did not lead to the creation of a fourth MNO in these markets.
- 123. See footnote... above.
- 124. T-Mobile/Tele.ring (Austria, 2006), T-Mobile/Orange (United Kingdom, 2010), Hutchinson/Orange (Austria, 2012), Hutchinson/Telefónica Ireland O2 (Ireland, 2014), Telefónica Deutschland/ E-Plus (Germany, 2014), Hutchinson/ Wind (Italy, 2016) and Orange/MásMóvil, Spain (2024).
- 125. E.g. CK Hutchison/O2 merger the European Commission recognises it also cooperated very closely with the CMA and with Ofcom, the communications regulatory authority in the United Kingdom.
- 126. E.g. T-Mobile/Tele.ring merger case (2006), Orange/MásMóvil (2024).
- 127. DG Competition relies on the EU Remedies Notice, which expresses a clear preference for structural remedies, to push the Parties, especially in horizontal (mobile) mergers to offer

- structural remedies. Even if accepted, behavioural remedies have been only as complement to divestment of assets by the merging parties, Please see EU Remedies Notice, para 15: "[...] commitments which are structural in nature [...] are, as a rule, preferable from the point of view of the Merger Regulation's objective, [...] and do not, moreover, require medium or long-term monitoring measures."
- 128. Case M.9660 Google/Fitbit, in which the European Commission accepted long-lasting behavioural commitments (10 years).
- 129. Paragraph 140 of the decision on case No COMP/M.3916 T-Mobile Austria/ Tele.ring: T-Mobile has also undertaken to appoint a trustee, whose task will be to supervise the selection of mobile communications sites, the sell-off process, and the transfer of the sites. The commitments given also provide that, in the event of disagreements between T-Mobile, on the one hand, and H3G and ONE, on the other, the Austrian regulatory authority, RTR, will act as arbiter.
- 130. Paragraph 97 of the decision on case No. COMP/M.5655 - SNCF/LCR/Eurostar: Should however the Trustee's opinion be contested, the railway undertaking requesting access to one of the services covered by the commitments will still have the opportunity to lodge an appeal. In this regard, while the Commission will act as an appeal authority as long as national railway regulators have not demonstrated their ability and willingness to do so, the commitments foresee that national regulators, in view of their extensive knowledge of the railway industry, will be very well placed to consistently enforce the rules set out by the commitments.

- 131. Directive (EU) 2018/1972 of the European Parliament and the Council of 11 December 2018 establishing the European Electronic Communications Code.
- 132. We note that the EECC gives Member States the flexibility to entrust the competence of conducting geographical surveys of the reach of broadband networks and roll-out deployments to authorities that are not the sector-specific regulatory authority. To date, geographic surveys are delivered by the NRAs of 18 Member States, so-called "other competent authorities" (OCA) of 4 Member States, whilst in 5 Member States they are a joint responsibility of an NRA and an OCA performed in part by a NRA and in part by an OCA.
- 133. CMA's merger remedies guidance explicitly recognises (para. 7.6) that "the likelihood of effective monitoring will be significantly increased if it is possible to involve a sectoral regulator in the monitoring regime".

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