Mobile strategy

Terms of reference

TERMS OF REFERENCE:

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1. Terms of reference

Introduction

1.1 Ofcom is launching a strategic review of its approach to markets that deliver mobile services. This document sets out the terms of reference for the review.

1.2 We rely increasingly on mobile services for many aspects of everyday life, including work, keeping in touch with friends and family, getting around and entertainment. As a result, every year we use more and more mobile data,[1] and the Covid-19 pandemic has further emphasised how critical it is to be connected.

1.3 Network providers need to meet our current demand for services and, importantly, they also need to invest in new technologies to meet future needs. In the UK, the national mobile network operators (MNOs) are rolling out their 5G networks. Initially, the key driver has been to provide enhanced capacity for existing services in busy areas. But as 5G continues to be rolled out, and is combined with new devices and technologies, we can expect to see new uses develop, which will further enhance the way we live, work and travel. In particular, new technologies are opening up possibilities for mobile to be at the heart of industrial use cases, driving innovation and efficiency beyond the mobile sector.

1.4 Overall, we see many changes taking place across the mobile landscape, which may impact on the current national MNO business model. There has already been a blurring of the line between fixed and mobile networks,[2] and factors such as the development of new industrial uses and private networks, the use of systems integrators and the growing role of large tech companies, mean that the current business model and broader landscape may look quite different in 10 years' time.

1.5 Against this background, we plan to develop a clear strategic framework within which we make future regulatory decisions. This framework will take account of market developments to support competition, ongoing investment and innovation, and help ensure that the market delivers good outcomes for people and businesses throughout the UK. We intend to gather evidence and views from a wide range of stakeholders, so that we develop a holistic view of the challenges and opportunities facing the industry, and how these could affect people and businesses.

[1] The total amount of data consumed over mobile networks in the UK increased by 243% in the last five years. Source: figure calculated from Ofcom Telecommunications Market Update Q4 2020, *Mobile Table 2 Call and message volumes by call type (billions of minutes/messages/PB)*

[2] For example, MNOs rely on fixed core networks and fixed telecoms providers for backhaul; customers often use WiFi to connect to fixed broadband on their mobile devices.

Our current approach to the mobile sector

1.6 Ofcom is the UK's communications regulator. We seek to further the interests of citizens and consumers, where appropriate by promoting competition. Our current strategic priorities[3] include:

- **supporting investment in strong, secure networks**. We want to support ongoing investment in faster broadband, and high-quality mobile networks, as well as to ensure that communications networks are safe, secure and resilient;
- **getting everyone connected**, so that people and businesses can access key communications services; and
- **ensuring fairness for customers** so that people shop around with confidence, make informed choices, switch easily and get a fair deal.

1.7 Within this broader context, our current approach to the mobile sector is primarily to support competition among vertically integrated providers, the MNOs, and a range of resellers.[4] This competition encourages providers to invest, innovate and deliver the services that customers want, both now and in the future.

1.8 We have sought to support such competition as far as possible and, where necessary, to introduce specific additional measures to help ensure that the market delivers a range of good outcomes for people and businesses. The additional steps we have taken largely relate to the release of spectrum, which is critical to the provision of mobile broadband; improving network coverage beyond that which would be delivered by commercial rollout alone; and measures to ensure customers are treated fairly and can find the best deal more easily. In the mobile sector, wholesale price regulation is limited to regulation of the rates MNOs can charge to terminate mobile calls.

1.9 Our approach has helped the market deliver substantial benefits to people and businesses. For example, just over four fifths (82%) of the adult population now has a smartphone;[5] and, for many (60%), this has become the most important device for connecting to the internet, at home or elsewhere.[6] Average mobile data use grew by 146% between 2016 and 2019, while prices fell by almost 20%.[7] Outdoor 4G data services from all MNOs are available at 97.5% of UK premises and almost all UK premises have coverage from at least one MNO.[8] Overall, nine in ten (90%) mobile customers are satisfied with their mobile provider.[9]

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[3] Ofcom, March 2021, Ofcom's plan of work 2021/22.
[4] Ofcom last carried out a strategic review of the mobile sector as part of the Strategic Review of Digital Communications, which confirmed this approach.
[5] Source: Ofcom Technology Tracker. Base: All adults (2015, 3756) (2016, 3737) (2017, 3743) (2018, 3730) (2019, 3909) (2020, 3959). Note: Take-up of smartphone relates to personal take-up.
[6] Source: Ofcom Technology Tracker QE40. Which is the most important device you use to connect to the internet, at home or elsewhere? "Other" responses include: "Netbook", "Games console", "E-reader", "TV set", "Smart watch", "Other portable/handheld device", "Other device", "None" and "don't know".
Base: All adults aged 16+ who use the internet at home or elsewhere (n = 3422 UK).
[7] Page 3, Pricing trends for communications services in the UK (ofcom.org.uk).
[8] Ofcom, December 2020, Connected Nations 2020: UK report.
[9] Ofcom, May 2021, Comparing customer service: mobile, home broadband and landline.

Why we are carrying out a review

1.10 We are launching a review in recognition of the importance of mobile services, and the need for innovation and ongoing investment in new technologies to keep pace with the growing demands of people and businesses.

1.11 We want to take stock of the significant changes that are taking place within the existing mobile sector,[10] as well as outside it. These changes include the following:

- **A growing demand for high-quality mobile connectivity**. Having reliable mobile services is already important for people and businesses, wherever they are. Nonetheless, we expect to see a growing demand for high-quality mobile connectivity as, for example, video usage grows and people expect to watch such content on-the-go on mobile networks (as well as on fixed networks). This demand may be further driven by the development of innovative new uses for mobile connectivity, such as augmented and virtual reality, particularly if they become mass market applications that are used on-the-go. On the business side, some new industrial use cases are likely to require high-quality connectivity – in particular high speeds and responsive connections without delay.[11] As a result, MNOs need to continue investing to rollout networks, expand capacity, and deploy new technologies where they are needed, including 5G.
- **Changing customer behaviour**. We are already seeing changes to both what people buy and where they buy it, with a shift from bundled airtime and device contracts to SIM-only contracts, and a shift from the use of high street retail stores to online. In the future, national mobile connectivity may become a smaller part of the broader service received by customers, and we could see a shift from buying directly from mobile providers to buying indirectly through fixed-mobile service bundles or through application providers such as the large tech companies.
- **Changes to the mobile business model.** The national MNO business model has withstood a number of market developments to date, including a significant growth in the importance of services provided by others over mobile networks. However, future trends may prove to be more disruptive. There is scope for changes such as the bundling of mobile connectivity with other services sold by different service providers, and for the emergence of alternative providers of connectivity (such as localised service providers) to change the role of the national MNOs.
- **MNO revenues have been impacted by these changes.** Total mobile retail revenue has been relatively stable in real terms over the last few years,[12] but average revenue per

[10] In the UK this has been based on network competition from 4 national MNOs with 2 network sharing agreements, and retail competition among the MNOs and a range of resellers, with customers typically buying their mobile services and devices from the MNOs and resellers.
[11] Examples include bespoke networks in warehouses which allow packing robots to send and receive instructions from a central computer multiple times a second and avoid collisions; and improved real-time monitoring of patients in healthcare remotely in connected ambulances.
[12] See Communications Market Interactive report, though changes in reporting make it difficult to compare revenues over time.

user has generally been declining.[13] This comes at a time when MNOs need to invest in 5G networks and implement new security requirements, as well as ensure sufficient diversification of providers in the supply chain. MNOs are seeking to grow their revenues, for example by selling bigger data packages, fixed-mobile bundles, and 5G devices.

1.12 In light of these changes, it is timely to take a holistic look at how the market operates, how it is likely to evolve, and the extent to which it is likely to deliver good outcomes for people and businesses.

Purpose and scope of the review

1.13 The overall aim of this review is to ensure that the markets that deliver mobile services work well for people and businesses over the next five to 10 years, as technologies develop and the market changes.

1.14 Specifically, we want to develop a strategy for our approach to the sector that supports the delivery of high-quality connectivity and innovation, to meet people's and businesses' needs in the future. We intend to consider the following key areas:

- **What will good outcomes for people and businesses look like in five to 10 years' time?** We will consider how people's and businesses' use of mobile is likely to evolve, including what new uses might become possible due to changes in technology. This will inform our view of the high-level outcomes we should be trying to achieve. As part of this, we will take into account the ongoing challenges that some customers face in obtaining good mobile connectivity.
- **What impact are changes across the mobile value chain having on the market?** In light of the significant changes that are taking place, we will look at how competition operates at different levels of the mobile value chain. We will consider how the value chain may change (both vertically and horizontally) over the next five to 10 years, and the potential impact of those changes. As part of this, we will consider the business case for investment in mobile network connectivity, as well as the implications of market developments for innovation.
- **To what extent is the market likely to deliver good outcomes for people and businesses?** We will consider whether there are any barriers to the market delivering good outcomes, and whether any existing regulation might need to be revised to help ensure the delivery of those outcomes.

1.15 A key benefit of this work will be a holistic view of how the mobile market operates and how Ofcom can best contribute to the delivery of good outcomes for people and businesses.

[13] Ofcom, based on confidential MNO submissions.

Linkages to existing policy development

1.16 The project will need to take account of, and work alongside, the ongoing process of existing policy development and enforcement, which will continue. This includes our ongoing spectrum work (such as planning for future spectrum requirements, which will consider the potential future needs of the mobile sector), as well as other ongoing work in areas such as mobile coverage, supply chain diversification and net neutrality.[14]

Timescales and approach

1.17 Our approach will depend in part on the outcome of our engagement with stakeholders. However, we anticipate at least two main phases of work:

- **Phase 1: evidence gathering, stakeholder engagement and discussion.** We will engage with a wide range of stakeholders and gather evidence to inform our analysis, including on how people's and businesses' use of mobile connectivity might develop and what outcomes they might want to see; the impact that changes to the mobile value chain are having on the market; and the extent to which the market is likely to deliver good outcomes. We intend to complete this phase of work with the publication of a discussion paper in Q3 2021/22.
- **Phase 2: further analysis, initial views and any next steps.** Building on stakeholder responses, we intend to publish a document setting our initial conclusions and any next steps in Q1 2022/23.

[14] See Ofcom's plan of work 2021/22 for more details.