Ofcom's Proposed Plan of Work 2023/24

Cellnex UK Response

February 2023

Overview of Cellnex UK

Cellnex Group

This response is submitted by Cellnex UK (link), which is part of Cellnex Group (link) which:

- Supports over 420 million mobile connections across Europe

- Operates >70,000 mobile sites today, which will grow to >130,000 by 2030

- Is Europe's leading neutral host mobile infrastructure provider, covering 12 countries: Austria, Denmark, France, Ireland, Italy, Netherlands, Poland, Portugal, Spain, Sweden, Switzerland and the UK

- Provides mobile infrastructure services, private and mission-critical networks, distributed antenna systems & small cells and smart/IoT & innovative services

- 16 mission critical networks operated in Spain for Public Safety (emergency bodies)

- 40 private networks operated across Europe for Critical Business (enterprise)

- Had an annual turnover of €2.5bn in 2021

- Is a member of the FTSE4Good, Standard Ethics, United Nations Global Compact

Where possible, we have sought to provide international examples from the wider Cellnex Group in our response.

Cellnex UK

We are the trusted partner of all the major UK mobile network operators, hundreds of private businesses, the emergency services, as well as the UK Government, specifically Cellnex UK:

- Is the UK's leading independent wireless connectivity infrastructure company

- Operates >9,000 mobile sites today, which will grow to >13,000 by 2031

- Has deployed over 1,000 small cells to date

- Is a provider of private networks in campus and indoor environments

- Is an indoor mobile coverage provider, most notably in the Etihad stadium in Manchester

- Is deploying contiguous mobile coverage and capacity along the 81km Brighton to London Mainline and three major stations

- Has won three DCMS 5G competitions, working collaboratively with universities and start-ups to deliver 5G innovation

- Employs 350 people across four major UK locations – Reading, Manchester, Scotland and Leamington Spa

- Has invested £6.1bn in the UK since 2016

Basis of Response

We have reviewed and commented on the elements of Ofcom's proposed plan of work for 2023/24 which are related to the services and sectors we currently provide to and envisage providing to in the future.

1. Overall Focus

Cellnex notes the wide and diverse portfolio that Ofcom is now accountable for and as a consequence the expansive nature of the 2023/24 work plan. Given our business focus and areas of market participation, as described on the previous page, we make the following observation.

As per recent Ofcom consultations – notably *Ofcom's Future Approach to Mobile Markets* – and associated industry responses it is clear the UK mobile sector is undergoing rapid and significant structural change. This is likely to see the roles of different parties (e.g. neutral hosts, hyperscalers etc.) change, new companies entering the sector and an end outcome which may fundamentally redefine what a 'mobile network operator' ('MNO') is and what activity it undertakes.

Concurrently Government ambition for public wireless networks has never been higher, with a desire for the UK to have world leading networks, innovation across both public and private networks and be at the cutting edge of technological developments such as OpenRAN and virtualisation alongside achievement of vendor diversification.

These factors are likely to result in a need for additional regulatory consideration and activity alongside action to resolve the ongoing and growing gap between Government ambition vs. the ability of UK MNOs to invest at this level[1]

Conclusion As a result of this context we believe Ofcom will need to dedicate considerable, potentially disproportionate, focus to this area of its remit during 2023/24 to ensure the UK wireless sector can deliver against sector, Government, business and consumer requirements.

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[1] https://www.connectivityuk.org/2022/09/06/dcf-report-the-investment-gap-to-full-5g-rollout/

2. Enabling Wireless Services in the Broader Economy – Specific Comments

In this section we note some specific comments against the priority outcomes that Ofcom has outlined in this area.

2.1. World Class Digital Infrastructure vs. Economics of UK Mobile Sector

Cellnex notes that the Government will published its *Wireless Infrastructure Strategy* ('WIS') during 2023 and this will complement the *Future Telecoms Infrastructure Review* ('FTIR') from 2018 which had a greater focus on fixed and didn't consider 5G. In this we expect to see Government articulate its desire for world-class wireless infrastructure

As noted in the Section 1 we believe Ofcom needs to consider the economics the UK MNOs current face and associated impact on investment capability in its work plan for 2023/24 and should evaluate levers it has at its disposal to facilitate investment in improved network quality, for example:

- Review of annual spectrum licence fee mechanisms and potential to introduce an incentive based approach for demonstrable additional investment in network quality

- The approach taken to spectrum auctions – notably forthcoming mmWave – and how physical deployment of networks which yields significant economic benefit can been guaranteed or incentivised, rather than a dominant focus on upfront one off fees

- Ensuring a regulatory environment which is supportive of neutral hosts and associated shared infrastructure which reduces the per unit economic cost, notably for network densification which is a key enabler of world class networks

There are no doubt other levers which exist at these should also be reviewed during 2023/24.

2.2. Network Coverage vs. Performance

We note this theme is also a part of 'Internet We Can Rely On' in the workplan and our comments below apply equally to this area regarding consumer choice and incentives to invest.

We note Ofcom's tendency to use the term 'network coverage' and whilst semantic we would encourage the consistent usage of 'network coverage and performance' to signify the shift from early voice services, where if coverage was present users could utilise the full offering. As compared to the new reality of data dominant networks and usage where users need to understand what applications they can use in frequently visited locations.

Cellnex believes there are two significant benefits to achieving published network performance data which is high quality, comparable across MNOs and sufficiently localised – as a result this should be an area of considerable focus for Ofcom in 2023/24:

a. Providing better information for consumer pre-purchase and incentivising investment in network quality

We detailed the positive benefits of this for consumers in our response to *Ofcom's Future Approach to Mobile Markets*. From this we would underline the critical benefit of MNOs being rewarded for their investment; with the availability of comparable data likely to increase 'network performance' as a consumer purchasing criteria creating a virtuous circle of network investment leading to better economic outcomes for the MNOs.

A key areas of focus should be measuring performance across the UK rail network given government ambition, the significant economic benefit of improvement and the UK being unusual in Europe in having no coverage/performance obligations here.

b. Enabling industry to optimise infrastructure investments for use by multiple parties

As we noted in our response to *Ofcom's Future Approach to Mobile Markets* access to better network coverage and performance information would have a significant positive impact on neutral host's investment approach, in summary it would:

- Enable proactive deployment of infrastructure in locations where neutral hosts can deliver the most benefit

- Provide greater certainty/time horizon knowledge when additional sharers may be likely to join and avoid risk premium

- Avoid wasted investment in locations where current service is sufficient for the near and medium term

- Give the ability to optimise solution fit with reference to wider network performance

2.3.   Accelerating innovation and spectrum sharing

The UK and Ofcom have achieved shared spectrum access leadership across Europe in the 3.8 – 4.2 GHz spectrum band. As we are now moving beyond initial pilots/trials and into scale number of deployment Ofcom should review the licencing processes and associated conditions to ensure they are fit for purpose, automated where possible and scalable during 2023/24.

As per our response to *Meeting the Future Demand for Mobile Data* we believe the following should be considered:

- Greater security of tenure at a licence level

- Improved processes and data sets to enable access to medium/higher power spectrum

- Minimum separation distances/exclusion zones for other users based on empirical/fact-based evidence and regularly reviewed to reflect any technological improvements

An alternative path may be for an 'expert user' category to be created where these types of organisation:

- Submit proposals for complex schemes (e.g. campus environments, higher power requirements) with a greater level of detail against agreed parameters, having had access to enhanced data sets to confirm viability, reducing need for support from Ofcom to arrive at a viable solution; and

- Accept greater licence obligations, for example need to resolve any interference issues and coordinate with existing and new licensees without involving Ofcom

2.4.   Sector/Industry Vertical Specific Spectrum Requirements

We are encouraged by Ofcom's focus on an outcome which will ensure spectrum is made available to meet the specialised needs of key sectors (e.g. utilities, manufacturing and transportation). As per our response to *Meeting Future Demand for Mobile Data* we agree these verticals need dedicated spectrum to support the need for dedicated wide area network(s) towhich will support mission-critical applications and enable wider economic/societal benefits (e.g. net-zero).

Given spectrum is a scarce resource the need for deployment of a single networks which supports multiple users groups (e.g. a neutral host network for electricity, gas and water sectors) may be required and accordingly we look forward to responding to the relevant consultations Ofcom plans to issue.

Spectrum for Operational Rail

We note the criticality of harmonisation with Europe of spectrum for FRMCS (i.e. 874.4 to 880.0 MHz paired with 919.4 to 925.0 MHz and 1900.0 to 1920.0 MHz) and Ofcom should ensure this is allocate/reserved for this use in the UK now. This will provide the UK with the ability to leverage international standards, equipment economies of scale and keep pace with rail innovation.

Operational deployment will occur in the medium term but trial and testing activity will commence much sooner to validate performance, optimise deployment approach and confirm use cases. We note this activity is not currently detailed within the *Ofcom's Project Work for 2023/2024* tables in A2 and would strongly encourage Ofcom to include this in its 2023/24 work plan.

3. A2 Project Work

Cellnex notes Ofcom's proposals in the table in A2 which we are supportive of, we would draw out the following three as particularly critical and time sensitive:

- Improving consumer experience and information of mobile coverage and performance

- Future communications needs of utilities, given net zero targets and growing need for increased local level control on the UK's energy networks

- Licencing platform evolution for shared access licences, as per points detailed above in 2.3