

For confidential responses, can Ofcom publish a reference to the contents of your response?

Yes

Your response

Question	Your response
Section 2: The quality of mobile connectivity we want to see - What are your views on the use of the Map Your Mobile good performance metric and how should the measure evolve over time? What are your views on the usefulness of: - the 90% figure as a benchmark applicable across geographies and based on crowdsourced data?, and - Whether the 90% benchmark is realistic and sufficiently ambitious?	Improving mobile connectivity is a critically important component of the Cumbria Digital Infrastructure Strategy 2026-2030 ¹to supporting economic growth, public safety and tourism in Cumbria. We welcome Ofcom's focus on moving beyond estimated coverage metrics, which we have typically found overestimate coverage availability, and towards monitoring based on real-world mobile performance, user experience data and real-time testing. We further welcome the use of the current Map Your Mobile good performance metric as a helpful and pragmatic starting point because they combine download speed, upload speed and latency. We believe that greater visibility of network quality and capacity constraints would help local authorities engage constructively with operators, support local planning decisions and inform business cases for appropriate investment in interventions or infrastructure to support communities. Currently, even in areas which supposedly have good outdoor coverage, our communities and visitors still frequently report very poor experiences with mobile connectivity. This poor level of service impacts Cumbria's ability to drive growth, attract investment and our communities have raised particular concerns about the ability contacting emergency services during extreme weather; this is particularly concerning with the withdrawal of older self-powered landline telephony services. From Cumbria's perspective, performance data is most valuable where it reflects actual customer experience and real-world measurements. We therefore support use of Map Your Mobile and would particularly like to see development of enhanced reporting on reliability, transport corridors (A-roads and rail in particular), indoor performance and continuous updating to ensure

¹ <https://connectingcumbria.org.uk/digital-infrastructure-strategy>

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	that seasonal/time of day variations in network performance are accounted for. Cumbria is keen to work with Ofcom to realise the proposed ambition that people should be able to access good mobile connectivity at the equivalent of least 90% of measurements. However, national benchmarks should be accompanied by transparent reporting for rural and deeply rural geographies to ensure that overall improvements are not disproportionately driven by gains in dense urban areas (where there will be more measurements naturally). Currently we believe that there are many areas of Cumbria where a good service would be achievable by far less than 80% of measurements due to weaknesses in both coverage and network capacity. We believe that these areas of poorest reliability should be prioritised for improvements and would welcome discussions with both Ofcom and Mobile Network Operators to understand how rapid improvement might be achieved. We accept a benchmark of 90% as realistic and achieving this would be a step change for Cumbria, and in particular for our most rural areas, but we would like to see a hard timescale for achieving improvements before 31st December 2030. However, the measure should evolve over time. Consumer expectations, digitally enabled public services, connected transport, remote and hybrid working, IoT-enabled services and business uses are all increasing the need for dependable mobile connectivity. Ofcom should therefore review the metric periodically and consider adding measures such as jitter, packet loss, time-to-first-byte, indoor/outdoor distinction, peak-time performance and consistency by operator. We would welcome a further ambition of seeking to work towards achieving a 99% benchmark beyond 2030.
Section 3: Market-led improvements in mobile network quality What information do customers need about network quality to choose the best network for their needs, and where are the main gaps in current provision of that information?	Customers need to see real-world testing/data that gives them a realistic understanding of service availability and reliability at different times of day and throughout the year. This data needs to be broken down into as small a grid/measurement point as possible to allow for realistic estimates of likely service availability at homes, businesses or other key locations for customers. Current information gives an estimate of coverage, assuming all equipment for that network is in perfect working order, based on averages across very large grid squares with no

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How well does Map Your Mobile currently meet customer and stakeholder needs, and what specific improvements would make it more useful?	consideration of capacity constraints. Connecting Cumbria receives frequent negative feedback from customers that coverage identified by the current Map Your Mobile data is overstated for all networks. We would welcome adding the ability for residents and local authorities to report connectivity issues in real time to Map Your Mobile, similar to how Google Maps allows users to report problems, feeding into a shared platform would create a much more dynamic and accurate picture of service quality than static drive tests and predicted coverage can provide. We welcome Ofcom's intention to continue developing the Map Your Mobile tool and see value in using it alongside local evidence, planning data, Street-wave-type surveys and engagement with both MNOs and Local Authorities. Further, to make Map Your Mobile more useful, we would welcome: a) downloadable local authority-level and postcode district-level datasets; b) clearer operator comparisons; trend data over time; c) ability to distinguish rural, urban, indoor, outdoor and transport corridor performance; d) clearer confidence indicators where crowdsourced sample sizes are low; and e) accessible outputs that local authorities can use in member briefings, planning discussions and engagement with communities. Ofcom should also consider providing data exports so councils can combine Map Your Mobile data with local assets, planning constraints, deprivation, business locations, visitor economy areas, care locations, emergency-service priorities and transport routes. As we highlight below, access to better local mobile data is absolutely critical for supporting the work that local authority infrastructure teams undertake to support the deployment of new mobile infrastructure.
Section 4: Connectivity in busy areas What do you think are the biggest barriers to achieving better mobile performance in	Cumbria has historically been left behind by the mobile market due to our challenging geography, low resident population and the perceived difficulty of working within our sensitive and nationally important landscape. While our county has a resident population of less than

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town and city centres and why? • What do you think should be Ofcom's main priorities for our future work in this area? • What information would stakeholders, especially local authorities / planning authorities find useful for Ofcom to provide further insights on and why?	600,000, we are significant to the UK mobile market containing more than 3% of the landmass of Great Britain and each year receive more than eighteen million visits from both domestic and international travellers to our two world heritage sites. For Carlisle city centre, market towns and honeypot visitor locations, capacity and congestion are increasing sources of service failure, user frustration and this has a significant impact on business operations. Networks may perform adequately in winter months, but visitor demand and increased user expectations can make networks unusable for the majority of the year. Greater investment into network densification is required to meet the rapidly increasing requirements for speed and capacity within urban areas and high-density tourism hotspots. Connecting Cumbria is seeking make this easier with creating a route to allow licencing of public assets (streetlighting) to support deployment of more radios. However, there are limits to the number of radios that each asset can support and we would strongly urge Ofcom to encourage the use of neutral host models for network densification/deployment. Neutral host infrastructure, small cells and multi-functional street assets could play a much greater role in town and city centres, but their impact is limited where there is insufficient take-up by mobile network operators. We further would ask Ofcom, and the mobile industry, to provide routes for developers/planners to engage so that provision for mobile coverage can be considered for new housing/commercial developments at the earliest opportunity. Currently new development is rarely planned with mobile connectivity in mind and we would welcome an understanding of how to encourage better engagement between developers and MNOs; particularly for developments of moderately sized developments (under 1,000 properties). We would also ask for recommendations for Local Plans/planning policy makers as to how greater mobile network provision deployment can be supported for roads/transport corridors. In comparison to fixed broadband operators, many MNOs are unwilling to share or engage with digital infrastructure teams regarding plans to deploy new infrastructure. This significantly reduces the ability of these

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	teams to facilitate and broker support, particularly where planning or street works permits are required. Cumbria has two dedicated full-time Streetworks inspectors to support digital infrastructure activity and would welcome stronger engagement with our teams to expedite safe, compliant and appropriate deployment in our county. Working with local authorities and giving advanced visibility of deployment plans can significantly reduce the risks of unhelpful delays because of other competing permit requests for the same road space. Sharing information under legal non-disclosure agreements with digital infrastructure teams could significant boost and help enable MNO deployment plans.
Section 5: Connectivity in indoor, shared public places • What do you think are the biggest barriers to achieving better mobile performance indoors and why? • What do you think should be Ofcom's main priorities for our future work in this area? • What information would you find useful for Ofcom to provide further insights on in relation to connectivity indoors and why?	In Cumbria general limitations in the overall network often mean that general provision, both outdoor and indoor, is insufficient for communities. We know that indoor coverage is made worse by the large number of older buildings used for public service and community spaces within our area. We would be very interested in advice to support building owners/managers to understand routes to improve provision. A further barrier is that responsibilities are fragmented. Building owners may want all visitors to have good connectivity, while individual MNOs may prioritise investment that benefits only their own customers. Neutral host solutions, distributed antenna systems and high-quality Wi-Fi can help, but they require commercial agreements, access, power, backhaul and clear ownership of ongoing costs. With the withdrawal of the traditional, self-powered, land-line services (digital switch over/PSTN withdrawal) there are many vulnerable people in Cumbria's rural communities concerned about being unable to make emergency calls from within their homes during extreme weather events; power can fail frequently and service may take several days to restore during such events. Ensuring resilience and committing to support routes for improving indoor provision for community spaces should be a priority for Ofcom. We are keen to see data based on testing and real-world user experiences for indoor coverage with a particular

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	focus on community/public sector buildings. We would be very interested in advice to support building owners/managers to understand routes to improve provision.
Section 6: Connectivity on trains • What do you think are the biggest barriers, technical and commercial, to achieving better mobile performance on trains? Which are most significant and why? • Do you agree with our proposal to work with government to support improvements in train connectivity? • What information would you find useful for Ofcom to provide further insights on in relation to connectivity on trains and why?	Cumbria strongly supports efforts to improve connectivity on key road and rail services. The ability to access reliable connectivity to support business activities while travelling to, from and within Cumbria is one of the most frequent issues raised by Cumbrian businesses, and businesses considering investing in Cumbria, with lack of productivity during travel time seen as a significant block on growth and productivity. Ensuring coverage of all rail and significant commuter bus routes is key to support greater transition to use of public transport and reducing congestion. We are keen to see data based on testing and real-world user experiences for rail routes to provide reliable data for customers, support engagement with planning authorities and allow consideration of businesses cases for intervention. We would also seek engagement with Ofcom and MNOs to understand what opportunities are available to local authorities and planning authorities to support investment and drive improvement of networks. We are also supportive Ofcom's proposal to work with Government, DfT, DSIT, NISTA, Network Rail, TOCs and industry. A coordinated approach is needed because rail connectivity is unlikely to be solved by market forces alone. The transition to future rail communications systems and investment in LEO satellite, track-to-train, neutral host and improved cellular backhaul should be considered together rather than as isolated interventions. We would encourage engagement in this process to include Local Authorities to allow consideration for how resolving connectivity on train lines might also benefit nearby rural properties or roads.
Section 7: Connectivity in rural areas • What do you think are the biggest barriers to achieving better mobile performance in rural locations and why?	Greater investment into network coverage, capacity and densification is required to meet the quality of services that are increasingly critical for all users – this is needed in market towns, villages and deeply rural areas as well. The investment case for this within rural areas is typically

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• What do you think should be Ofcom's main priorities for our future work in rural locations and what outcomes should we aim to achieve? • What solutions (technical, commercial, policy or delivery) could improve rural mobile performance? • What information would you find useful for Ofcom to provide further insights on in relation to rural connectivity and why?	impacted by the anticipated challenges of deployment in such areas, perceived resistance from planning authorities and the low return on investment. However, it should be noted that while our county has a resident population of less than 600,000, we each year receive more than eighteen million visits from both domestic and international travellers to our two world heritage sites. This means that there is year-round very high demand for services in Cumbria's market towns, transport corridors, rural tourism areas and on walking trails. Ofcom should also help ensure that rural connectivity is treated as essential infrastructure supporting economic growth, public service transformation, visitor economy, health and care, transport, farming, emergency response and digital inclusion. Ensuring that all communities, particularly rural communities that are vulnerable to extreme weather events, are able to reliably access the connectivity they need must be a key priority. Currently we believe that there are many areas of Cumbria where a good service would be achievable by far less than 80% of measurements, as per the current national benchmark, due to weaknesses in both coverage and network capacity. We believe that these areas of poorest reliability should be prioritised for improvements and would welcome discussions with both Ofcom and Mobile Network Operators to understand how rapid improvement might be achieved. We also share Ofcom's concerns around satellite direct-to-device services. Whilst the integration of satellite and other non-terrestrial technologies could help address some of the most difficult coverage and resilience challenges, it will be important that there is not an over-reliance on non-terrestrial technologies that could diminish the perceived need for investment in rural terrestrial networks – as the continued investment in the latter needs to remain a strategic priority. Many rural communities and businesses continue to flag issues around higher costs of living so it will be important that access to mobile connectivity remains affordable and accessible to all consumers. We believe that satellite networks are unlikely to be able to match the capacity and latency performance to compete with terrestrial services so it is vital that this complementary rather than replacement principle is reflected in the UK's mobile infrastructure policies, moving forward.

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	We encourage Ofcom to prioritise infrastructure sharing, support innovative delivery models, improve the availability of evidence relating to rural performance, and to work with Connecting Cumbria and Digital Places, alongside government, on developing routes for targeted interventions in rural areas and along transport corridors where commercial delivery alone is unlikely to achieve acceptable outcomes. Further, we would encourage Ofcom to engage with and support working with fully independent MNO's to broaden the market in rural areas and support community led engagement with independent networks as technical delivery solutions Mandating extended power resilience is a critical issue for rural communities that are vulnerable to extended power outages during extreme weather, we have already worked with one community and an independent MNO to develop a route to ensure emergency communications during such extended power cuts, and would be keen to see support for more such high resilience coverage projects for similar communications/power vulnerable communities. We would welcome engagement with Ofcom, and industry partners to develop pilot projects and programmes within Cumbria to test routes for wider improvement programmes. Local authorities would benefit greatly from more detailed and accessible datasets, including GIS-compatible information on performance, not-spots, transport corridors, congestion hotspots and projected future demand. Such information would assist strategic planning, economic development, resilience planning and digital inclusion initiatives. Further we would like all reporting on national benchmarks to be accompanied by transparent reporting for rural and deeply rural geographies to ensure that overall improvements are not disproportionately driven by gains in dense urban areas. Crowdsourced data is valuable but can under-represent the worst-served places because tests are less likely to be generated where people have no usable signal. This makes granular evidence essential. Finally, we would encourage Ofcom to undertake capacity assessments for satellite direct-to-device services to provide a robust evidence base to support hard-to-reach digital infrastructure policy and future programme development.

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