

Your response

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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?	Confidential? – ~~Y~~/ N The introduction of a Good Performance metric is a welcome shift from measuring the availability of mobile coverage towards assessing the quality of connectivity experienced by users. However, the current measure appears relatively limited and may not fully reflect the range of technologies, services and use cases supported by mobile networks. A single threshold is unlikely to capture the needs of all users, particularly where mobile connectivity is the primary means of accessing the internet and no suitable fixed connection is available. Ofcom should therefore establish a transparent process and timetable for reviewing and updating the metric. Over time, it should evolve beyond a basic performance threshold to incorporate other factors such as reliability, consistency, resilience, mobility and performance during busy periods. Consideration should also be given to whether different thresholds are required for different environments (in-building, road, rail etc), services and user needs. More broadly, Map Your Mobile should increasingly focus on measured or evidenced quality of service rather than relying primarily on predicted signal strength. Ofcom should consider requiring mobile network operators to provide coverage and performance information that better reflects network capability and the real-world experience of users, including the impact of congestion, indoor use and network technology.
What are your views on the usefulness of: the 90% figure as a benchmark applicable across geographies and based on crowdsourced data?	Postcode district is not an appropriate level of geographic granularity for reporting mobile performance outside dense urban areas. In many rural parts of the UK, postcode districts can extend over hundreds of square miles and encompass areas with significantly different levels of coverage and performance. This limits the usefulness of the information for consumers making purchasing decisions. Ofcom should consider adopting a more representative geographic framework that reflects population distribution, settlement patterns and key

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	transport corridors rather than administrative postcode boundaries alone. More broadly, the value of the Map Your Mobile service should not be judged solely on whether consumers actively visit the website before selecting a mobile provider. Purchasing decisions are influenced by price, previous experience, recommendations and operator marketing. Map Your Mobile could establish a trusted, independent benchmark that also influences how operators and other consumer-facing organisations communicate mobile coverage and performance. The service should also be extended to provide information beyond the coastline, enabling marine users to better understand expected mobile coverage in coastal waters. The proposed 90% benchmark provides a useful and easily understood reference point, enabling consistent comparison across operators and over time. However, it should not become the sole measure of network quality. As with today's coverage metrics, there is a risk that a single threshold becomes disconnected from users' actual experience if it is treated as the primary indicator of network performance. To ensure meaningful comparison between operators, latency, jitter and packet loss should be measured to one or more agreed national reference points that are equally accessible to all operators. Without common measurement destinations, reported performance can be influenced by differing interconnection arrangements rather than the performance of the access network itself. Crowdsourced data provides valuable insight into real-world user experience but is inherently influenced by user density, handset mix, application usage and where measurements can be collected. In particular, it is likely to underrepresent remote not-spots where users are unable to generate measurements. The methodology should therefore combine crowdsourced data with operator data, independent drive and walk testing, and targeted measurements in rural areas, transport corridors and other strategically important locations. Ofcom should also define the period over which crowdsourced data remains representative and explain how seasonal

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	variation, major events and temporary changes in network performance will be reflected. Ofcom should publish confidence indicators such as sample size to indicate statistical robustness.
Whether the 90% benchmark is realistic and sufficiently ambitious?	The 90% benchmark is a reasonable starting point for introducing a quality-based performance measure, but it should not be regarded as a long-term target. Expectations of mobile connectivity vary by geography and use case, and more demanding thresholds may be appropriate for dense urban areas, transport hubs and other high-demand locations. Ofcom should publish a clear timetable for reviewing the benchmark and compare its approach with international best practice, including that adopted by other OECD countries, to ensure that the measure remains ambitious and relevant as networks and user expectations evolve.
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? - How well does Map Your Mobile currently meet customer and stakeholder needs, and what specific improvements would make it more useful?	Confidential? – ~~Y~~ N Coverage remains a necessary but insufficient indicator of mobile service quality. Consumers increasingly need information that reflects the quality of the service they are likely to experience, including reliability, consistency, latency, performance during busy periods, and expected performance indoors, outdoors and while travelling. They also need to understand how service quality varies across the locations that matter most to them, such as their home, workplace and regular travel routes. Map Your Mobile represents an important step forward by combining operator coverage predictions with crowdsourced information. However, in its current form it remains focused primarily on service availability rather than the quality of the user experience. The service should continue to evolve to incorporate wider quality of service and quality of experience measures, enabling consumers to make decisions based on the performance they are likely to receive rather than simply whether coverage is predicted to exist. From a wider stakeholder perspective, Map Your Mobile could play a more significant role in monitoring the UK's mobile infrastructure. Given the Government's ambition for standalone 5G to be available across all populated areas by 2030, and the commitments made by individual

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	mobile network operators, Ofcom should include specific reporting on standalone 5G availability and performance. This would provide an independent means of tracking progress towards both national policy objectives and operator deployment commitments. The service could also provide greater value by reporting on legacy network availability, particularly 2G, to support planning and preparedness for the proposed 2G switch-off. This information would be valuable for local authorities, healthcare providers and other organisations that continue to rely on legacy connectivity for critical services and connected devices. Looking ahead, Ofcom should consider how emerging technologies such as Direct-to-Device (D2D) satellite services will be represented within Map Your Mobile. As these services become commercially available, consumers and stakeholders will increasingly require clear information on where terrestrial and satellite connectivity can complement one another and what level of service users can realistically expect over non-terrestrial networks vs terrestrial networks.
Section 4: Connectivity in busy areas What do you think are the biggest barriers to achieving better mobile performance in town and city centres and why?	Confidential? – ~~Y~~/ N The principal challenge to improving mobile performance in towns and city centres is maintaining sufficient network capacity as demand for mobile data continues to grow. Addressing this requires ongoing network densification through additional macro sites, rooftop installations and small cell deployments, together with continued investment in fibre backhaul and supporting infrastructure. However, the ability of mobile network operators to deliver this additional infrastructure is constrained by a number of factors. As recognised by Ofcom, obtaining planning approval remains one of the most significant barriers to deploying new sites and small cells in urban areas. Delays associated with planning processes, street works, power availability and access to suitable assets can significantly slow network expansion. A further challenge is the retention of existing infrastructure. The current Notice to Quit (NTQ) regime continues to divert operator investment towards replacing existing

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	sites rather than expanding network capacity. While the Electronic Communications Code (ECC) provides a minimum notice period of 18 months, identifying, securing and deploying a suitable replacement site can often take considerably longer in practice. As a result, operators are frequently required to invest significant time and resources simply to maintain existing levels of service rather than improving network performance through further densification. Reducing planning barriers, improving access to public assets, streamlining the site acquisition processes and providing greater certainty over long-term site retention would enable operators to focus investment on expanding capacity and improving the quality of service experienced by users in urban areas.
What do you think should be Ofcom's main priorities for our future work in this area?	Ofcom should continue to support a stable regulatory environment for mobile infrastructure investment. Existing protections within the Electronic Communications Code (ECC) should be maintained and strengthened where appropriate to reduce the unnecessary loss of established mobile sites through Notice to Quit (NTQ) processes. Measures that require landowners to provide stronger justification for terminating agreements, together with greater certainty over long-term site retention, would enable operators to focus investment on improving network performance rather than replacing existing infrastructure. Ofcom making available the remaining 25 MHz in the 1.4 GHz spectrum band will help alleviate capacity and performance issues faced by some operators and we encourage Ofcom to keep to the published auction timeframes to ensure this is awarded in the first half of 2027. We also encourage Ofcom to continue to work closely with both DSIT and MHCLG on their recent consultations and the proposed targeted reforms for telecoms within the planning frameworks including publishing the initial conclusions from these consultations and next steps for the mobile industry. We also highlight that planning legislation is generally the responsibility of the devolved governments in Scotland, Wales and Northern Ireland.

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	Therefore, we also encourage Ofcom to work closely with the devolved governments to ensure any planning reform introduced to improve to deployment of telecoms infrastructure is replicated across all the UK.
What information would stakeholders, especially local authorities / planning authorities find useful for Ofcom to provide further insights on and why?	Local authorities and planning authorities would benefit from greater insight into where mobile networks are experiencing capacity constraints, rather than simply where coverage is unavailable. Information identifying areas of persistent congestion, busy-hour performance, and forecast future demand would help planning authorities better understand the need for additional mobile infrastructure in town and city centres. Ofcom could also provide more detailed information on the need for network densification, including the role of small cells, rooftop sites and street-level infrastructure in improving user experience. This would help planning authorities assess planning applications within the context of wider network requirements rather than considering individual sites in isolation. In addition, benchmarking information comparing planning timescales, approval rates and deployment outcomes across local authorities could help identify best practice and highlight where planning processes are creating unnecessary barriers to improving mobile performance. While we acknowledge that Ofcom does not have direct control over issues relating to planning reform and planning decisions remain the responsibility of local authorities, we believe a more joined up approach with DSIT and MHCLG on reporting of these types of planning metrics would be beneficial. Potentially highlighting areas or issues with the current planning legislation that require further guidance and training to ensure that planning policies relating to telecommunications infrastructure are applied consistently. Finally, providing local authorities with forward-looking demand forecasts and evidence of expected growth in mobile data consumption would support strategic planning and help ensure that mobile infrastructure is considered as an essential component of wider urban development and regeneration.

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Section 5: Connectivity in indoor, shared public places What do you think are the biggest barriers to achieving better mobile performance indoors and why?	Confidential? – ~~Y~~/N The principal barrier to improving indoor mobile performance is that buildings increasingly attenuate mobile signals, particularly modern developments that incorporate energy-efficient materials, metallised glass and reinforced concrete. As a result, relying on outdoor macro networks to provide indoor coverage is becoming progressively less effective. A second barrier is the commercial challenge of deploying dedicated indoor infrastructure. In-building systems are typically more expensive to design, install and maintain than outdoor network upgrades, while often serving fewer users and generating lower commercial returns. Historically, regulatory obligations and coverage targets have also focused on outdoor coverage, providing limited incentive for operators to invest in indoor solutions. Addressing this challenge requires greater adoption of dedicated in-building infrastructure, together with improved coordination between mobile operators, building owners, developers and infrastructure providers. Building developers and owners should increasingly recognise that high-quality mobile connectivity is an essential utility and incorporate mobile infrastructure into both new developments and major refurbishments. We welcome Ofcom’s decision to permit indoor public land mobile networks (PLMNs) within the 3.8–4.2 GHz Shared Access Licence (SAL) band. Solutions based on Multi-Operator Core Network (MOCN) architecture have the potential to reduce deployment costs by allowing multiple operators to share common active infrastructure, avoiding the need for separate installations by each operator. Although technically complex, this approach could significantly improve the commercial viability of in-building mobile solutions, particularly for small and medium-sized buildings and venues.
What do you think should be Ofcom’s main priorities for our future work in this area?	Ofcom’s priority should be to create the conditions that make high-quality indoor mobile connectivity commercially and operationally viable. This includes providing clear guidance for building owners, developers and landlords on the technical options available for delivering indoor mobile coverage, together with the commercial

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	models that can support investment, including neutral host solutions and shared infrastructure. Ofcom should also continue to promote best practice by publishing case studies that demonstrate successful in-building deployments across a range of building types. This could include examples of where the mobile operators have used the recently awarded 26Ghz 'high density area' licenses to relieve capacity bottlenecks in indoor urban locations, neutral host deployments and emerging Multi-Operator Core Network (MOCN) solutions, enabling building owners and operators to better understand the costs, use cases and benefits and delivery models available. Ofcom should continue to support industry led initiatives such as JOTS Neutral Host in-building (NHIB) specification including ensuring this framework is adaptable to future technology including 5G to reduce the cost and complexity of deploying shared indoor mobile infrastructure. Future policy should encourage interoperable technology agnostic neutral host solutions. Recognising that indoor connectivity requirements vary significantly, Ofcom should encourage a targeted approach rather than a single national model. Priority should be given to buildings where reliable mobile connectivity delivers the greatest public and economic value, such as hospitals, transport hubs, airports, universities, large commercial developments and major public venues. Emergency calling and public safety within these types of buildings should also be a focus for Ofcom especially following the revisions made to the Terrorism (Protection of Premises) Act 2025 and the introduction of Martyn's Law. Finally, Ofcom should continue to work with those responsible for building regulation within Government and industry to ensure that future spectrum policy, regulatory frameworks and technical standards support the wider deployment of shared in-building mobile infrastructure where this represents the most efficient solution. Following any future decisions on the use of the UHF spectrum band, Ofcom should consider whether taking advantage of this bands ability to penetrate walls more effectively than higher bands means indoor coverage obligations could be introduced at specific locations if used by the mobile operators.

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	Looking ahead, Ofcom should continue to encourage technical and regulatory approaches that simplify the deployment of shared indoor infrastructure and promote collaboration between operators, property owners and equipment suppliers. This will be essential if indoor mobile performance is to keep pace with growing user expectations and increasing reliance on mobile connectivity.
What information would you find useful for Ofcom to provide further insights on in relation to connectivity indoors and why?	Stakeholders would benefit from greater insight into the causes of poor indoor mobile performance and the effectiveness of the different technical solutions available to address it. Ofcom could provide comparative information on the performance, suitability and indicative costs of approaches such as Wi-Fi, distributed antenna systems (DAS), small cells, repeaters, neutral host solutions and Multi-Operator Core Network (MOCN) deployments across different building types. Ofcom could also provide guidance on the impact of modern building materials and design standards on mobile signal propagation, together with practical advice for developers and building owners on how indoor connectivity can be incorporated into new developments and major refurbishments at the lowest cost. Case studies demonstrating successful indoor deployments, including technical architectures, commercial delivery models and lessons learned, would help improve understanding across the sector. In addition, information on emerging technologies, spectrum developments and regulatory changes affecting indoor connectivity would support stakeholders in planning future investments. Providing this information would enable building owners, developers, operators and public sector organisations to make better-informed investment decisions and encourage more consistent deployment of high-quality indoor mobile infrastructure.
Section 6: Connectivity on trains What do you think are the biggest barriers, technical and	Confidential? – ~~Y~~/ N The principal barriers to improving mobile performance on trains are commercial and organisational rather than

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commercial, to achieving better mobile performance on trains? Which are most significant and why?	technical. While there are technical challenges associated with delivering continuous high-quality connectivity to fast-moving train (including handover between cells, coverage in cuttings and tunnels, signal attenuation caused by modern rolling stock, and the provision of resilient backhaul) these challenges have been successfully addressed in a number of other countries and are not considered fundamental barriers. The more significant challenge is the commercial case for investment. Deploying and maintaining trackside mobile infrastructure is substantially more expensive than conventional mobile network deployment because of stringent railway safety requirements, restricted access to the rail corridor, possession costs and the complexity of working in an operational railway environment. These factors increase both capital and operating costs while limiting the commercial return for individual mobile network operators. A further barrier is the complexity of the stakeholder landscape. Improving mobile connectivity on the rail network requires coordinated action between Government, Ofcom, the Office for Rail and Road, Network Rail, train operating companies, mobile network operators, infrastructure providers and equipment suppliers. Without clear leadership, aligned incentives and coordinated investment, it is difficult to develop commercially viable solutions that deliver consistent passenger connectivity across the network. Overall, the greatest barriers are therefore commercial viability and stakeholder coordination, rather than technical capability. Addressing these issues is likely to deliver greater improvements than focusing solely on technological advances.
Do you agree with our proposal to work with government to support improvements in train connectivity?	Yes, this is essential as Ofcom can play an important role in helping to coordinate the multiple stakeholders involved and the public intervention that will be required.

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What information would you find useful for Ofcom to provide further insights on in relation to connectivity on trains and why?	Stakeholders would benefit from greater insight into the performance of mobile connectivity across the rail network, including route-level information on coverage, capacity, reliability and user experience. Identifying those routes where passenger demand is highest, connectivity is poorest and the economic or social benefits of improvement are greatest would help prioritise future investment. Ofcom could also provide analysis of the factors limiting performance on different routes, such as gaps in track-side infrastructure, tunnels, cuttings, station environments or capacity constraints, together with an assessment of the potential impact of different technical solutions. Finally, international benchmarking would provide valuable evidence of how other countries have successfully improved rail connectivity, including the commercial models, regulatory approaches and infrastructure-sharing arrangements adopted. This would help stakeholders identify best practice and inform future policy and investment decisions in the UK.
Section 7: Connectivity in rural areas What do you think are the biggest barriers to achieving better mobile performance in rural locations and why?	The principal barriers to improving mobile performance in rural areas are economic rather than technological. While the technical solutions to extend coverage and capacity are well understood, the combination of low population density, challenging terrain and long distances between sites means that the cost of deployment and ongoing operation is significantly higher on a per-user basis than in urban areas. These higher costs are compounded by the challenge of securing suitable sites, obtaining access to power and high-capacity backhaul, together with the practical challenges of constructing and maintaining infrastructure in remote locations. As a result, the commercial return on investment is often insufficient to justify deployment without public intervention, infrastructure sharing or other forms of support. Improving rural mobile performance will therefore depend less on technological innovation and more on reducing deployment costs, encouraging infrastructure

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	sharing, and creating commercial and regulatory frameworks that support investment in areas where the market alone is unlikely to deliver.
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?	Ofcom's priority should be to help create the conditions that make investment in rural mobile infrastructure commercially viable. This includes ensuring timely access to additional spectrum, continuing to support infrastructure sharing where it improves efficiency, and encouraging commercial models that reduce the cost of deployment and operation in low-density areas. Ofcom should also continue to recognise the importance of resiliency in mobile networks especially rural communities which are often served by single mast sites with limited or no power or transmission backup leaving these communities vulnerable and potentially without communications in the event of a power incident or severe weather as recently seen in Tiree. It is not clear how the target for 5G SA coverage to all populated areas affects rural and how Ofcom will measure and report this government target. The desired outcome should be a measurable improvement in the quality, reliability and resilience of mobile services experienced by rural residents, businesses and visitors. This should include more consistent connectivity on key transport corridors, support for rural economic activity, and improved access to digital services and emergency communications.
What solutions (technical, commercial, policy or delivery) could improve rural mobile performance?	Access to additional spectrum can help improve coverage and capacity, but it will not, on its own, overcome the weak commercial case for investment in many sparsely populated areas. In some locations, further public intervention may therefore be required, potentially including support for both capital investment and ongoing operating costs where the market is unlikely to deliver sustainable services. Greater infrastructure sharing between mobile network operators is also likely to play an increasingly important role in reducing deployment and operating costs. This could include expanded passive infrastructure sharing and, where appropriate, more extensive active sharing through models such as Multi-Operator Core Networks

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	(MOCN) or neutral host deployments. Although these approaches introduce additional technical and commercial complexity and may reduce opportunities for network differentiation, they may represent the most efficient and sustainable solution for the most remote rural areas. Following any future decisions on the use of the UHF spectrum band, Ofcom should consider whether rural coverage obligations or enhanced infrastructure-sharing requirements could form part of any future licensing framework to maximise public benefit from the spectrum. We also encourage Ofcom to continue reviewing the Shared Access Licence (SAL) framework, including the potential to permit outdoor Public Land Mobile Network (PLMN) deployments within the 3.8–4.2 GHz (n77) band where this would support improved rural connectivity without creating harmful interference. Finally, non-terrestrial networks (NTN), including direct-to-device satellite services, are likely to become an increasingly valuable complement to terrestrial mobile networks, particularly for emergency communications and basic connectivity in the most remote locations. However, these technologies should be viewed as complementary solutions rather than substitutes for investment in terrestrial mobile infrastructure, as they will not meet all capacity, performance or service requirements.
What information would you find useful for Ofcom to provide further insights on in relation to rural connectivity and why?	Stakeholders would benefit from more detailed insight into the state of rural mobile connectivity, including information on coverage, capacity, reliability and user experience at a more granular geographic level than is currently available. This would help identify where the greatest gaps remain and enable investment to be prioritised where it will deliver the greatest public benefit. Ofcom could also provide analysis of the underlying causes of poor rural performance, such as limitations in backhaul, power availability, terrain, or planning constraints. Better evidence on the costs and benefits of different deployment approaches—including infrastructure

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	sharing, neutral host models, public intervention and alternative technologies—would help inform future policy and investment decisions. Finally, regular international benchmarking would provide valuable insight into how other countries have addressed the challenges of rural mobile connectivity, including the regulatory frameworks, commercial models and funding mechanisms that have proved most effective. Sharing this evidence would help stakeholders adopt best practice and support the continued evolution of mobile connectivity in rural areas.

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