

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?	Confidential? – N Worcestershire County Council (WCC) supports Ofcom's use of the Map Your Mobile (MYM) good performance metric as it represents a positive shift away from assessing mobile connectivity solely through coverage predictions and towards measuring the real-world experience of users. The inclusion of download speed, upload speed and latency provides a more meaningful indication of whether residents, businesses and visitors can successfully use the digital services that increasingly underpin daily life. The metric also aligns more closely with the issues frequently reported by residents, where a mobile signal may be available, but performance remains insufficient to support everyday digital activities. The use of crowdsourced performance data is particularly valuable as it reflects actual user experience in the places where people live, work and travel. This is relevant for Worcestershire, where mobile performance can vary significantly between urban areas such as Worcester, Redditch and Kidderminster and more rural parts of the county, including the Malvern Hills, Wychavon and Wyre Forest districts. A metric based on user experience provides a more realistic picture of service quality than predicted coverage alone. However, Ofcom should continue to evolve the measure over time. We would support: - Regular review of the performance thresholds to ensure they reflect changing consumer and business needs. - Exploration of the benefits of using additional measures such as jitter and packet loss, particularly as more services rely on video calling, cloud applications and real-time data. - Visibility of peak demand period performance, which is often when users experience the greatest difficulties. - Separate reporting for urban, rural, indoor and transport environments, recognising

Question	Your response
What are your views on the usefulness of: the 90% figure as a benchmark applicable across geographies and based on crowdsourced data?, and	that the challenges and user expectations may differ. Increased local-level reporting, enabling local authorities to better identify priority areas for intervention and support. As digital services continue to evolve and the use of AI-enabled applications, cloud services and mobile-first public services grow, the definition of "good performance" should remain under review to ensure it remains aligned with user expectations and future connectivity requirements. WCC considers the proposed 90% benchmark to be a useful and understandable indicator of reliable mobile connectivity. A benchmark that aims to ensure users receive good performance nine out of ten times provides a clear and meaningful measure for consumers, businesses and policymakers alike. It also establishes a consistent national standard against which network performance can be assessed and compared. We support the principle that the benchmark should apply consistently across geographies. It is important that rural communities are not subject to a lower standard of expectation simply because they are more challenging or expensive to serve. Rural residents and businesses in Worcestershire depend on mobile connectivity for many of the same activities as those in urban centres, including access to public services, business operations, education, healthcare and emergency communications. However, there are limitations to relying solely on crowdsourced data. As Ofcom notes, crowdsourced measurements reflect locations where users are present and able to obtain a connection and therefore do not fully capture areas where coverage is absent or extremely poor. This is particularly relevant in rural counties such as Worcestershire where some locations may generate limited data samples despite experiencing significant connectivity challenges. We therefore recommend that the 90% benchmark reported in MYM is complemented by transparent reporting of sample sizes and confidence levels where crowdsourced data is limited.

Question	Your response
Whether the 90% benchmark is realistic and sufficiently ambitious?	In addition, exploration of supplementing areas where crowdsourced data is limited, with measured data could be worthwhile. Ofcom's supplementary report to this discussion document about mobile connections in Manchester has shown that Opensignal's crowdsourced data is consistent with Streetwave's systematically measured data. This means the possibility of combining the data sources within MYM should be explored further. This would provide a more complete understanding of the user experience and help local authorities identify areas requiring further investment or intervention. WCC believes the 90% benchmark is both realistic and appropriately ambitious to drive up standards. However, it should not be seen as a final target. Ofcom's analysis indicates that current UK mobile performance typically falls between 70% and 80%, meaning that achieving 90% would require a substantial improvement in network quality and user experience. Evidence consistently shows that real-world mobile coverage in the UK is often worse than that predicted by mobile network operators. Our own 'drive-trials' conducted since 2017 have found that operators' coverage maps based on computer modelling can materially overstate coverage when compared to real world testing. Our most recent trials conducted in 2025 in partnership with Streetwave again showed discrepancies between predicted and actual signal strength so a 90% benchmark is a good starting point. At the same time, evidence from international markets suggests that similar performance levels have already been achieved elsewhere, supporting the view that the benchmark is challenging but attainable. From a Worcestershire perspective, the benchmark also reflects the growing importance of mobile connectivity to economic growth, business productivity and social inclusion. As mobile connectivity becomes increasingly essential for accessing services and participating in the economy, residents and businesses should reasonably expect reliable performance most of the time. A lower benchmark may fail to drive the level of improvement required, whilst a significantly higher benchmark may be

Question	Your response
	unrealistic in the short-term given geographical, technical and economic constraints. We therefore support the 90% benchmark as an appropriate national aspiration. However, we would encourage Ofcom to keep both the benchmark and the underlying performance thresholds under periodic review to ensure they remain aligned with future user expectations, technological developments and international best practice.
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?	Confidential? – N Customers increasingly need information that reflects their likely real-world experience rather than simply whether a signal is predicted to be available. While traditional coverage maps remain important, consumers are primarily concerned with whether they can reliably make calls, access online services, conduct business, stream media and use navigation or public service apps in the places that matter to them. Ofcom's research highlights that consumers expect mobile services to work consistently where they live, work and travel. Ofcom's Connected Nations reporting demonstrates that while 4G coverage from at least one operator now exceeds 94% of UK landmass, coverage from all operators remains significantly lower in rural regions, leaving large areas as partial or total not spots. From a user perspective, the distinction between "no coverage" and "coverage only on another network" is immaterial as both result in service failure. From a Worcestershire perspective, customers would benefit from information that allows them to understand: - Network performance at a highly local level, including towns, villages and rural communities. - Reliability of connectivity during busy periods and local events. - Indoor as well as outdoor performance. - Performance on key transport corridors, including rail routes and major roads. - Comparisons between operators based on real-world user experience.

Question	Your response
How well does Map Your Mobile currently meet customer and stakeholder needs, and what specific improvements would make it more useful?	- Expected performance for common activities such as video calling, streaming, remote working and access to public services. - The vital distinction between network availability (coverage) and network usability (quality). Current information provision still has several gaps. Coverage information remains more readily available than performance information, despite Ofcom's recognition that coverage alone does not indicate whether a user can access a service reliably in practice. The main gaps include: - Limited visibility of indoor mobile performance, particularly in public buildings and community facilities. - Insufficient information about peak-time congestion and network reliability. - A lack of easily accessible information for rural communities where performance can vary significantly over short distances. - Limited information relating to transport routes and commuter journeys. - Insufficient data to help businesses understand the suitability of networks for mobile working and digital services. For Worcestershire's predominantly rural geography, local variations can be significant. Customers require information that reflects these local differences and supports informed decisions about network choice in the places where they spend most of their time. WCC welcomes the introduction of MYM and considers it an improvement on previous approaches that focused primarily on coverage predictions. The inclusion of crowdsourced performance data alongside coverage information provides a more realistic indication of user experience and encourages competition based on network quality. The fact that Ofcom reports that the tool has already received over one million visits, demonstrates clear public demand for this type of information.

Question	Your response
	However, limiting users looking at the “performance” metric to information at a “postal district” level seriously undermines the accurateness of the tool and potentially misleads users on that accuracy. Postal Districts can be very large and we know from our own work with Street-wave at WCC that mobile signal quality can vary within a street let alone across a whole town. For instance, the postal district WR5 covers part of the City of Worcester, the large village of Kempsey, smaller villages such as Kerswell Green and Littleworth, and rural farmland. Providing an average across such a large area is not meaningful for someone looking for information relating to their own street or workplace. Therefore, it seems illogical to average scores across such large areas in terms of usefulness to the user. We understand you need a certain number of measurements to make a robust prediction but believe it would be more useful to focus on smaller areas (like a whole postcode) where you do have enough readings. Areas that do not have enough readings should just show that. At the very least we expect to see a stronger caveat and associated map that explains the size of the Postal District being reported on. From a customer perspective, MYM provides a useful starting point by: • Bringing together coverage and performance information within a single platform. • Allowing comparisons between operators. • Presenting information in a format that is accessible to non-technical users. • Supporting more informed consumer choice based on likely user experience. From a local authority perspective, MYM also has value as a source of evidence that can help identify areas where connectivity challenges may exist and where further discussion with network operators may be beneficial. However, there are several opportunities to make the tool more useful for both consumers and stakeholders. WCC would support the following enhancements:

Question	Your response
	More localised reporting The ability to view performance at parish, village and community level would provide greater insight into connectivity issues, particularly in rural areas where conditions can vary significantly across small geographic areas. Improved rural visibility Additional information highlighting areas with low sample volumes or persistent connectivity challenges would help local authorities understand where intervention or engagement may be required. Indoor performance information As Ofcom's own research identifies poorer performance indoors compared with outdoor environments, greater visibility of indoor connectivity would provide significant value, particularly for public buildings, transport hubs and community facilities. Peak-time and reliability reporting Customers often experience problems during periods of high demand rather than at average times. Providing information on performance during busy periods would offer a more realistic picture of user experience. Transport corridor performance Additional reporting on rail routes and key transport corridors would be particularly useful given Ofcom's findings regarding variable connectivity performance during journeys. Stakeholder data access Providing local authorities and strategic partners with access to more detailed datasets, trend information and downloadable reporting would strengthen local decision-making and support efforts to improve connectivity. Future investment indicators Where possible, information on planned network improvements or major infrastructure upgrades could help communities and stakeholders understand future changes in connectivity provision.

Question	Your response
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? – N WCC agrees with Ofcom's assessment that the principal challenge in busy urban areas is often not a lack of coverage, but a lack of capacity. In locations such as Worcester city centre, Redditch town centre, Kidderminster, transport hubs, shopping areas and major events, mobile networks can become congested at peak times, resulting in reduced speeds, higher latency and an inconsistent user experience despite users displaying a strong signal. We believe the key barriers are: Planning and deployment challenges – Delays and inconsistencies in planning processes can make it difficult for operators to deploy new infrastructure, upgrade existing sites or introduce small-cell solutions needed to increase capacity. Ofcom's research highlights significant variation in planning outcomes across local authorities, creating additional uncertainty and deployment costs. Access to suitable sites and street furniture – Operators require access to buildings, rooftops, lampposts and other assets to improve network density. In many urban environments, identifying suitable locations and securing permissions can be complex and time consuming. Growing demand for data services – The increasing use of streaming, cloud services, contactless payments, navigation, digital public services and AI-enabled applications is placing greater demands on mobile networks, especially in high-footfall areas. Existing infrastructure does not always keep pace with growing demand. Physical constraints within urban environments – Buildings, street layouts and modern construction materials can create signal obstructions and variable user experiences, particularly in dense commercial areas. Coordination between stakeholders – Delivering improved connectivity often requires cooperation between network operators, local authorities, landowners, developers and infrastructure

Question	Your response
What do you think should be Ofcom's main priorities for our future work in this area?	providers. Misaligned priorities and lengthy negotiation processes can delay improvements. For WCC, addressing these barriers is increasingly important as towns and city centres seek to support economic growth, digital inclusion, tourism and modern public services. WCC supports Ofcom focusing on activities that help remove barriers to investment and enable stakeholders to make evidence-based decisions. Key priorities should include: Supporting better local evidence and performance data Ofcom should continue developing granular performance datasets that allow local authorities and operators to understand where network performance falls short and why. Local evidence is essential to prioritising interventions and monitoring improvements. Promoting mobile connectivity as critical infrastructure Mobile connectivity should increasingly be treated as essential infrastructure alongside transport, utilities and broadband. Ofcom should continue highlighting the economic and social value of high-quality mobile performance to support investment and policy development. Supporting planning reform and deployment efficiency Ofcom should continue providing evidence and technical expertise to Government's review of planning processes for telecommunications infrastructure. Improving consistency and predictability within planning systems could significantly accelerate network upgrades. Encouraging infrastructure sharing and innovative deployment models There may be opportunities to support increased use of small cells, neutral host solutions, shared infrastructure and street furniture access arrangements that improve capacity in busy locations while reducing deployment costs.

Question	Your response
What information would stakeholders, especially local authorities / planning authorities find useful for Ofcom to provide further insights on and why?	Developing stronger local authority engagement Many councils are increasingly seeking to play an active role in improving connectivity. Ofcom should continue building relationships with local authorities and sharing best practice examples that demonstrate successful approaches to improving connectivity. Monitoring the impact of market developments The anticipated network improvements arising from the VodafoneThree merger and wider industry investment programmes should be tracked closely to understand how far market-led investment improves urban performance outcomes. Local authorities require increasingly detailed and accessible information to support planning decisions, economic development and digital infrastructure strategies. WCC would welcome the following: Local performance dashboards Performance data at district, ward or postcode level showing: - Mobile performance by operator. - Trends over time. - Areas performing below benchmark levels. - Urban and rural comparisons. This would allow councils to identify priority areas for engagement and investment. Identification of connectivity hotspots and bottlenecks Information highlighting locations where capacity constraints regularly occur, such as: - Town centres. - Retail areas. - Transport interchanges. - Major visitor attractions. - Event venues. This would help target interventions where they could have the greatest impact.

Question	Your response
	Benchmarking between local authorities Comparative data showing how different areas perform against national and regional averages would help local authorities understand relative performance and identify examples of best practice. Planning and deployment intelligence Information on: • Planning approval trends. • Common planning barriers. • Successful deployment approaches. • Examples of effective council-operator collaboration. This could help create more consistent approaches across planning authorities. Future demand forecasting Insights into emerging usage patterns, projected capacity requirements and future technology developments would help local authorities incorporate connectivity needs into wider regeneration, transport and economic development planning. Enhanced access to Map Your Mobile data Providing local authorities with more detailed access to the datasets underpinning MYM would support evidence-based decision making and allow councils to investigate local issues in greater detail.
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? – N WCC agrees with Ofcom's assessment that indoor mobile connectivity presents a distinct set of challenges compared to outdoor coverage. While mobile coverage may be available outside a building, this does not necessarily translate into reliable indoor performance. Ofcom's research found that mobile performance indoors is often significantly weaker and less predictable than outdoors, with outcomes heavily influenced by building design, materials and occupancy levels. The main barriers are:

Question	Your response
	Building design and construction materials Modern buildings are increasingly energy efficient and often use materials that reduce signal penetration. Thick walls, insulated glazing, steel structures and dense construction materials can significantly weaken mobile signals, particularly those using higher frequency bands. This can lead to poor connectivity throughout a building, not just in basements or isolated locations. Lack of dedicated indoor infrastructure Many public buildings continue to rely solely on outdoor mobile networks to provide indoor service. Ofcom's research suggests that reliable performance in larger and busier venues often requires dedicated indoor solutions such as Distributed Antenna Systems (DAS), neutral host infrastructure or enhanced Wi-Fi provision. Commercial complexity and funding challenges Improving indoor connectivity frequently requires collaboration between property owners, mobile operators, infrastructure providers and, in some cases, local authorities. The costs and benefits are not always shared equally, creating challenges in agreeing ownership, investment responsibilities and operational arrangements. Ofcom identifies misaligned incentives between venue owners and mobile operators as a significant barrier. Increasing demand in shared public spaces Locations such as hospitals, transport hubs, libraries, shopping centres, leisure facilities and event venues experience high levels of mobile usage. As demand grows, indoor infrastructure may lack the capacity required to deliver a consistent user experience, particularly during busy periods. Limited awareness during building design and refurbishment Connectivity is not always considered as a core design requirement when buildings are developed or refurbished. As a result, opportunities to incorporate connectivity infrastructure early in the design process can be missed, leading to higher retrofit costs later.

Question	Your response
What do you think should be Ofcom's main priorities for our future work in this area?	For WCC, these challenges are particularly relevant for public buildings, healthcare facilities, transport interchanges, educational establishments, visitor attractions and community venues that support both residents and visitors. WCC supports Ofcom focusing on activities that improve awareness, facilitate investment and provide stakeholders with practical evidence and guidance. Key priorities should include: Improving the evidence base on indoor connectivity Ofcom should continue measuring and publishing data that illustrates the extent of indoor connectivity challenges and identifies the factors that influence good and poor performance. This will support informed investment decisions by both public and private sector organisations. Supporting building owners and developers Many organisations responsible for buildings are not telecommunications specialists. Ofcom should develop practical guidance and case studies that help building owners understand available solutions, expected costs and the benefits of investing in connectivity infrastructure. Ofcom references similar work undertaken by the Norwegian regulator, which could provide a useful model. Encouraging connectivity-by-design Mobile connectivity should increasingly be treated as an essential utility in new developments and major refurbishments. Ofcom should work with Government, local authorities, developers and industry to promote the inclusion of connectivity infrastructure within building design standards and planning processes. Supporting neutral host and shared infrastructure models In many public buildings and high-footfall venues, shared infrastructure solutions may represent the most efficient

Question	Your response
What information would you find useful for Ofcom to provide further insights on in relation to connectivity indoors and why?	approach. Ofcom should continue exploring opportunities to encourage neutral host models that deliver benefits across multiple operators. Promoting collaboration between stakeholders Successful solutions often require cooperation between building owners, network operators, infrastructure providers and public authorities. Ofcom can play an important role in convening stakeholders and sharing successful examples of collaboration. Monitoring emerging technologies Ofcom should continue to assess opportunities created by new technologies, including mmWave deployments, 5G Standalone services and future access to additional spectrum bands that may improve indoor performance. WCC would welcome more detailed information and practical guidance that supports evidence-based decision making and helps building owners understand how to improve indoor connectivity. The following would be particularly valuable: Indoor performance mapping Data showing how mobile performance varies across different building types and environments, including: - Hospitals and healthcare facilities. - Libraries and community buildings. - Shopping centres. - Transport hubs. - Leisure venues. - Educational establishments. This would help stakeholders understand where problems are most likely to occur. Case studies and best practice examples Examples of successful indoor connectivity deployments, including information on: - Technologies used. - Delivery models. - Costs and benefits. - Stakeholder arrangements.

Question	Your response
	- Measured outcomes. The Co-op Live example included within the discussion paper demonstrates the value of this type of practical evidence. Guidance for building owners and developers Clear, non-technical guidance covering: - Connectivity considerations during design and refurbishment. - Available technical solutions. - Funding and partnership models. - Roles and responsibilities of different stakeholders. Insights into user demand and future requirements Information on how mobile usage patterns are expected to evolve would help local authorities and building owners future-proof investments. Local and regional benchmarking Comparative information showing how indoor connectivity performance varies between areas would enable local authorities to assess their position relative to peers and identify opportunities for improvement. Data on public sector assets Information that helps local authorities understand how council-owned buildings and infrastructure could support mobile connectivity improvements would be particularly valuable. This could assist with wider digital infrastructure strategies and improve connectivity outcomes for local communities.
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?	Confidential? – N WCC agrees with Ofcom's assessment that achieving reliable mobile connectivity on trains remains one of the most complex connectivity challenges in the UK. The evidence presented in the discussion paper demonstrates that mobile performance on rail routes is substantially lower than general mobile performance across the UK, with all operators performing significantly below Ofcom's proposed 90% benchmark.

Question	Your response
	Technical barriers The most significant technical barriers include: • Limited trackside coverage, particularly where rail routes pass through rural areas. Worcestershire is served by rail routes that pass through both urban and rural environments, and connectivity can deteriorate significantly where network infrastructure is sparse. • Signal penetration into train carriages. Modern rolling stock can significantly reduce mobile signal strength due to carriage construction materials, glazing and passenger density, making it difficult for users to maintain a reliable connection. • Mobility and handover challenges. Trains travel at speed through multiple cells, requiring devices to hand over frequently between sites. This can create interruptions, particularly where coverage is inconsistent. • Capacity constraints on busy routes. Large numbers of passengers may attempt to use mobile services simultaneously, creating congestion on available infrastructure, particularly on commuter and inter-city services. Commercial barriers The principal commercial barriers are: • High deployment costs. Enhancing connectivity along rail corridors often requires significant infrastructure investment, particularly in rural sections of track. • Weak commercial incentives for Mobile Network Operators. The benefits of investment are often spread across multiple operators and stakeholders, while the costs may fall disproportionately on individual providers. This can reduce incentives to invest. • Fragmented responsibilities. Delivering improved train connectivity typically requires collaboration between train operators, Network Rail, government, mobile operators and infra-

Question	Your response
Do you agree with our proposal to work with government to support improvements in train connectivity?	structure providers. The complexity of these relationships can delay delivery and investment decisions. Most significant barrier From WCC's perspective, the most significant barrier is the combination of limited commercial incentives and the high cost of deployment. While technical solutions increasingly exist, the challenge is often creating a viable business case for investment across the rail network. This is particularly relevant where routes pass through lower-density rural areas that are important to local communities but may not provide sufficient commercial returns to justify standalone investment. Yes. WCC strongly supports Ofcom's proposal to work closely with Government and industry partners to improve train connectivity. The discussion paper highlights that improving connectivity on trains will require coordinated action involving the Department for Transport, DSIT, Network Rail, train operators, mobile operators and infrastructure providers. No single organisation is able to deliver a comprehensive solution independently. Improved rail connectivity would deliver significant benefits including: - Supporting economic productivity by enabling passengers to work while travelling. - Improving the attractiveness of rail compared with other modes of transport. - Supporting tourism and visitor economies. - Enhancing access to digital services and information during journeys. - Improving passenger experience and customer satisfaction. - Supporting wider Government ambitions for digital infrastructure and economic growth. For WCC, reliable connectivity on rail services is particularly important given the county's role as a commuter,

Question	Your response
What information would you find useful for Ofcom to provide further insights on in relation to connectivity on trains and why?	business and visitor destination, with regular travel connections to Birmingham, the West Midlands, London and neighbouring counties. We also support Ofcom's intention to work with Government on future reporting of rail connectivity and on assessing whether additional spectrum options could support future solutions. Continued collaboration will be essential to identifying the most effective combination of mobile, Wi-Fi, satellite and track-to-train technologies. WCC would welcome a stronger evidence base on rail connectivity to support strategic planning and help stakeholders understand where improvements are most needed. The following information would be particularly valuable: Route-level performance data Detailed reporting on performance by rail line and operator, similar to the analysis included within the discussion paper, would enable local authorities and transport stakeholders to identify specific areas of poor performance and monitor improvements over time. Connectivity mapping along routes Visual information showing connectivity performance by section of track would help identify persistent not-spots, congestion hotspots and infrastructure gaps. This would support targeted investment and partnership discussions. Passenger experience metrics Information showing how connectivity affects common user activities such as: - Video calls. - Remote working. - Streaming. - Journey planning. - Accessing public services. This would provide a more user-focused understanding of performance than technical measures alone.

Question	Your response
	Performance across different technologies Comparisons between: • Direct-to-mobile services. • On-board Wi-Fi using mobile backhaul. • Satellite-enabled services. • Track-to-train solutions. This would help stakeholders understand which approaches are most effective in different operational environments. Information on future investment and improvement programmes Local authorities would benefit from greater visibility of planned connectivity initiatives, infrastructure upgrades and Government programmes affecting rail routes within their regions. Benchmarking and trend analysis Regular reporting showing: • Progress against Ofcom's performance benchmark. • Improvements over time. • Comparisons between operators and routes. • Regional variations in performance. This would strengthen accountability and help measure the effectiveness of interventions.
Section 7: Connectivity in rural areas • What do you think are the biggest barriers to achieving better mobile performance in rural locations and why?	WCC covers a largely rural county with significant areas of dispersed population, varied topography and agricultural land. While mobile connectivity has improved in many locations, rural communities continue to experience poorer mobile performance than urban areas. Our mobile signal measurement work with Streetwave and our own customer research that generated over a thousand reports of poor connectivity, show rurality is a real driver of where poor performance occurs. Ofcom's own analysis also shows a consistent decline in performance as areas become increasingly rural.

Question	Your response
	The principal barriers are: Limited commercial viability The greatest barrier is the economic challenge of investing in areas with relatively low population density. Rural locations often require substantial infrastructure investment to serve comparatively small numbers of residents, businesses and visitors. This can make the commercial case for network upgrades less attractive than investment in urban areas where a larger customer base can be reached. Geography and topography Parts of Worcestershire, particularly around the Malvern Hills and other rural landscapes, present physical challenges for mobile coverage. Hills, valleys, woodland and other natural features can reduce signal propagation and create localised coverage and performance issues. Ofcom recognises that topographical features can weaken or obstruct mobile signals, particularly in rural environments. Infrastructure availability Rural areas often have fewer mast locations and lower network density. While low-frequency spectrum provides broader coverage, it can have limited capacity compared with higher-frequency spectrum. This can result in capacity constraints even where basic coverage exists. Planning and site acquisition challenges Although planning processes are not the primary barrier in all locations, securing suitable sites, obtaining way-leaves and accessing power and backhaul infrastructure can present delays and increase deployment costs in rural areas. Network resilience Rural communities are more vulnerable to service disruption caused by power outages, severe weather events or infrastructure failures. In some areas, residents may rely on a limited number of sites for connectivity, increasing the impact of any outage. Growing expectations and demand Rural businesses, farms, tourism operators and residents increasingly depend upon digital services for everyday

Question	Your response
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?	operations. As reliance on mobile connectivity increases, existing infrastructure may struggle to meet evolving performance expectations. WCC supports a focus on ensuring that rural communities are not left behind as mobile connectivity becomes increasingly essential to economic activity, public services and social inclusion. Key priorities should include: Understanding persistent rural connectivity challenges Ofcom's proposed rural case study approach is welcomed and should help identify locations where connectivity challenges are likely to remain despite market-led investment and ongoing network developments. Monitoring the impact of the VodafoneThree merger and Shared Rural Network Ofcom should continue assessing whether existing market interventions and infrastructure commitments are delivering meaningful improvements for rural users and identify any remaining gaps that require further action. Supporting rural economic growth Connectivity should be recognised as a key enabler of rural productivity, supporting agriculture, tourism, small businesses, remote working and innovation. Future policy should focus on ensuring that rural communities can participate fully in the digital economy. Improving network resilience Given the importance of mobile connectivity during emergencies, resilience should remain a priority, particularly in isolated rural communities where alternative communications options may be limited. Encouraging collaboration between stakeholders Ofcom should continue bringing together local authorities, network operators, infrastructure providers and government to identify and remove barriers to rural deployment.

Question	Your response
What solutions (technical, commercial, policy or delivery) could improve rural mobile performance?	Desired outcomes The outcomes Ofcom should seek include: - More consistent mobile performance across rural communities. - Reduced geographic disparities between urban and rural areas. - Improved resilience and reliability. - Better connectivity for rural businesses and visitors. - Increased confidence among residents that mobile services will work when needed. Greater transparency regarding future investment and expected improvements. There is unlikely to be a single solution that addresses all rural connectivity challenges. WCC supports a combination of approaches tailored to local circumstances. Technical solutions - Continued deployment of additional spectrum and newer technologies such as 5G Standalone. - Increased network sharing and infrastructure sharing between operators. - Greater use of neutral host models in locations where individual operator investment is not viable. - Exploration of satellite Direct-to-Device services as a complementary solution for coverage not-spots and resilience purposes. - Deployment of additional small-scale infrastructure in targeted rural locations where practical. Commercial solutions - Further collaboration between operators to reduce deployment costs. - Shared investment models where infrastructure can support multiple operators. - Partnerships with local authorities and public sector organisations where public assets may facilitate deployment.

Question	Your response
	Policy solutions • Continued support for programmes that address rural market failure. • Simplification of deployment processes where appropriate while respecting environmental considerations. • Promotion of connectivity as essential infrastructure supporting rural growth and inclusion. • In respect to geographic coverage, the Shared Rural Network (SRN) initiative provides strong evidence that market forces alone are insufficient to deliver high quality rural coverage. While the SRN has improved 4G coverage from all operators from around 66% to over 78% of UK landmass since 2020, Ofcom acknowledges that the hardest to reach areas remain costly and slow to serve. We believe Government could further support delivery by reconsidering options for customers to roam between networks in rural areas. Evidence from rural coverage studies highlights that consumers primarily care about whether their phone works, not which operator provides the signal. In areas where only one network is present, the lack of roaming effectively entrenches digital exclusion. Targeted rural roaming would: ○ Instantly reduce not spots without waiting for new mast deployment ○ Improve emergency access and public safety, especially for lone workers and rural transport routes ○ Complement, rather than undermine, long term infrastructure investment in high-cost areas ○ From our perspective as a rural county council, roaming represents a pragmatic, consumer focused tool

Question	Your response
What information would you find useful for Ofcom to provide further insights on in relation to rural connectivity and why?	that would materially improve outcomes while longer term network build continues. Delivery solutions - Greater use of local evidence and data to identify priority intervention areas. - Stronger engagement with local authorities and communities. - Improved coordination between mobile investment programmes and wider infrastructure projects such as transport, utilities and broadband upgrades. WCC would welcome additional evidence and analysis that supports local planning, infrastructure decisions and stakeholder engagement. Useful information would include: Localised performance data Performance information at district, ward, parish or post-code level would help identify specific rural communities experiencing persistent problems and support targeted interventions. Rural connectivity mapping Clear visual information showing: - Areas below the proposed performance benchmark. - Coverage gaps. - Capacity constraints. - Areas expected to benefit from future investment. This would assist local authorities, businesses and residents in understanding local connectivity challenges. Operator-specific performance information Comparisons between networks at a local level would support consumer choice and help identify best-performing operators in rural areas.

Question	Your response
	Case study findings The outcomes of Ofcom's proposed rural case studies should be published in sufficient detail to allow local authorities and stakeholders to understand what barriers exist, which interventions have proven effective and where future policy action may be required. Information on resilience Data on network robustness, power resilience and service continuity would help communities and public bodies better understand risks and prepare for outages. Information on emerging technologies Guidance on the likely role and limitations of technologies such as satellite Direct-to-Device services, network sharing and neutral host solutions would help stakeholders understand future opportunities and constraints. Progress reporting Regular updates on the impact of the Shared Rural Network, VodafoneThree commitments and other infrastructure programmes would help stakeholders assess whether policy interventions are delivering the expected benefits.

Please tell us how you came across this discussion paper.

- + Found it on Ofcom's website
- + Somebody told me or shared it with me

Please complete this form in full and return to mobileconnectivity@ofcom.org.uk.