

Your response

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<p>Questions for stakeholders that are interested in using 2 GHz MSS</p>	
<p>Question 1: Which services do you wish to provide using 2 GHz MSS spectrum?</p> <p>When do you expect that you could provide these services, and what UK geography would these services cover?</p> <p>Where applicable, please provide evidence to support your response (including but not limited to): business plans, internal market forecasts, board papers, analyst reports, etc.</p>	<p>The upcoming expiry of the current S-band authorizations presents a unique opportunity to reimagine the use of the 2GHz MSS spectrum band to enable competition and innovation via allowing access to new uses and players.</p> <p>The 2GHz MSS spectrum can be used for a mixture of governmental and commercial use cases, and for the testing of innovative technologies and new applications (e.g. direct communication between satellites and an array of terrestrial devices, incl. smartphones, cars and other vehicles, IoT devices, etc.)</p> <p>The MSS 2GHz band can be used to, <i>inter alia</i>, deliver messaging and voice communications, as well as (narrow-band) internet access via satellite, serving as a complement to terrestrial network infrastructure, assisting in connecting currently unserved/underserved geographical areas in the UK, or in any area in case of emergency (disruption of terrestrial networks), adding resiliency.</p> <p>We thus respectfully ask Ofcom to consider enabling access to new entrants and different services (e.g. MSS, IoT, D2D) focusing on a specified number of options, and clear band segmentation and to align with the EU framework to ensure effective coexistence, avoid interference risks and enable scaling.</p> <p>Both GSO and NGSO systems could work in a complementary way for the provision of such services, thus covering the entire UK territory.</p>
<p>Question 2: Please explain any barriers to your deployment of a service and your plans to address them.</p>	<p>Eutelsat believes that to facilitate the development of a competitive market for MSS services, financial incentives, including potentially public funding, and institutional support could serve as key drivers to justify investments in the S-band, especially to encourage the provision of governmental applications and public services. Such an approach would also facilitate commercial exploitation, maximizing returns for the country, and would stimulate</p>

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	<p>the local market, making the overall business case economically more attractive.</p> <p>Furthermore, long term access to spectrum shall be secured with extended license durations to allow for predictability and give the necessary time to operators to invest in new use cases and services, allowing technologies and applications to mature.</p> <p>As new market entrants need clear, predictable and harmonised licensing conditions and spectrum usage rights, careful management of possible regulatory constraints is important to justify and secure investments.</p> <p>In this light, we encourage Ofcom to follow a similar timeline and seek close alignment with the EU framework to minimise fragmentation, ensure coexistence and allow for seamless operation of services across markets.</p>
<p>Question 3: What benefits might be realised by enabling the service(s) you wish to provide through to 2032 (short term)? Similarly, through to 2045 (the long term).</p>	<p>Opening the use of the 2GHz band to new Direct-to-Device services like Internet-of-Things, messaging and voice services, and car connectivity in areas under-served by terrestrial networks (including at sea and in the air) would bring multiple benefits to the UK business ecosystem and the citizens and would further respond to the need for secure and resilient space-based communications, thus enabling critical and non-critical applications.</p> <p>Specifically, D2D services in the 2GHz MSS band could provide reliable connectivity when terrestrial infrastructure is damaged or unavailable, allowing resilient communication for first responders and continuity of essential services in emergencies or disaster scenarios, supporting response missions. They could further offer strong advantages for governmental and defense customers or the ability to continuously monitor critical infrastructures across the country, etc.</p> <p>It would also allow partner terrestrial telecom operators to optimize their investment in terrestrial networks and reallocate them towards services and infrastructure with a higher cost vs. benefits ratio.</p> <p>Overall, enabling UK and European players to get access to the S-band to deploy such services would further support sovereign satellite capabilities and contribute to the UK and broader European space ecosystem, bringing multiple socioeconomic benefits across the region.</p>

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<p>Question 4: Please explain what you consider would be the appropriate license period for the service(s) you wish to provide? Please explain why, including providing evidence, such as asset use life, where applicable.</p>	<p>It is important that Ofcom grants licenses with long durations to allow for predictability and regulatory stability, that are essential elements to justify investments in nascent services and applications.</p> <p>However, as technologies and business plans mature and consumer needs might evolve, we advocate for flexibility and for an active spectrum management approach whereby Ofcom may monitor actual usage and allow for reconfiguration of spectrum under well-established predefined conditions in alignment and close cooperation with the EU, in particular during the 2027-2032 time period where higher visibility should progressively be available – from a technical and financial standpoint - on a number of initiatives.</p>
<p>Question 5: What is the minimum amount of spectrum you would need to provide your service(s) to deliver a basic service to customers? What additional service features and/or customer numbers could you meet with a larger allocation (please specify the amount of spectrum)?</p> <p>Please include details of any guard bands that you would consider necessary within this spectrum for coexistence purposes.</p>	<p>Eutelsat is of the view that a minimum of 2x10MHz (up to 15MHz) is required for D2D services to meet critical governmental demands and potentially additional commercial service needs with the same technical requirements. We further support the allocation of at least another 2x5MHz to address IoT service demands, and to accommodate new entrants. We believe that part of the block could be opened for test purposes, especially for the initial period following the expiration of the current authorizations (2027-2032). Dynamic sharing models could be considered to ensure coexistence and efficient use depending on the services offered.</p> <p>Nevertheless, any chosen band segmentation should remain open for reconsideration or modification during the authorization period to allow the MSS framework to adapt to changing realities, evolution of technologies and standards and accommodate future uses and services. This, however, shall be performed under well-established, predefined conditions to allow for regulatory transparency and predictability.</p> <p>Moreover, due to the geographical proximity with the EU and to ensure compatibility, band segmentation options and licensing conditions will need to be aligned.</p>
<p>Question 6: For each service, please explain why you wish to use 2GHz MSS. Please explain why this is a more</p>	<p>The 2GHz MSS band combines favourable technical properties which offer a unique opportunity for enabling next-generation services, like D2D.</p>

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<p>suitable frequency compared to alternatives.</p>	<p>More specifically, the MSS S-band:</p> <p>(1) has good propagation properties compared to higher frequencies, that suffer from weather impairments, and to lower frequencies that require bigger antennas in the user terminal;</p> <p>(2) it is adjacent to terrestrial spectrum already used in terrestrial networks; consequently, integration in user equipment, such as handsets, is greatly simplified, lowering the costs and shortening the time to market;</p> <p>(3) it is identified and allocated globally for satellite use, so problems of avoiding interference from terrestrial networks are greatly simplified. Any terrestrial usage of these frequencies should be closely monitored to avoid impact on satellite service performance.</p> <p>(4) there is enough quantity to deploy high-throughput services, also considering frequency reuse patterns. For example, 5G NR services require at least 5MHz per cell.</p> <p>The 2 GHz MSS band represents a valuable and strategic asset in supporting secure and resilient satellite communications. Its technical properties, as per above, make it well-suited for D2D connectivity, reducing reliance on terrestrial networks and helping ensure continuity of service during emergencies, natural disasters, or malicious disruptions. By enabling innovative services such as IoT and direct-to-device satellite links, the band also creates opportunities to enhance national security, strengthen critical communications resilience, and maintain the UK's leadership in next-generation satellite services.</p> <p>For all these reasons, fragmentation should be avoided.</p>
<p>Question 7: To what extent are there economies of scale across the UK and the EU for each service you wish to provide?</p> <p>What is the minimum number of users/devices you would need for each service to be economically viable?</p>	<p>There is undeniably growing evidence of global market demand for MSS services, particularly for D2D and IoT.</p> <p>Eutelsat believes that there is clear potential for achieving economies of scale in deploying MSS services across both the UK and the wider European market. To do so, harmonized use of the 2 GHz MSS band remains crucial to enabling the development of interoperable devices and terminals, lowering unit costs and ensuring wider availability for consumers and enterprises.</p> <p>For services such as D2D satellite connectivity and IoT, economic viability depends on reaching a critical mass of users across multiple markets, rather than within the UK</p>

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	<p>alone. While precise thresholds vary by service model, large-scale adoption at a European level is essential to driving down costs and delivering affordable services to UK users. In this sense, coordinated action across the UK and EU would maximize the benefits of the 2 GHz MSS band and help ensure commercial sustainability.</p>
<p>Question 8: For the service(s) you wish to provide in the UK, what is the extent and nature of potential technical coexistence issues with other jurisdictions, particularly the EU?</p> <p>What are minimum satellite beam footprint sizes that you consider feasible, and what cross-border sharing conditions do these facilitate?</p>	<p>Potential cross-border coexistence issues in the 2GHz MSS band primarily arise from the size of satellite beam footprints and the need to align national license conditions with those in neighboring jurisdictions, particularly the EU due to geographical proximity.</p> <p>The 2 GHz MSS band is uniquely sensitive to fragmentation because non-directional antennas used in D2D terminals require strict spectrum segmentation to ensure compatibility of services and devices. If the UK were to adopt a different approach from the EU in allocating or licensing the band, it would create cross-border interference risks with neighboring markets, like the EU, undermine device interoperability, and reduce economies of scale by forcing manufacturers and service providers to design for divergent regimes. Such divergence would also weaken the benefits that pan-European MSS can provide.</p> <p>Given that the current regime and licenses were originally coordinated at EU level — with the UK participating as a Member State at the time —, and that the European Commission has recently launched a public consultation on the future of the band, Eutelsat strongly encourages Ofcom to pursue close alignment with the upcoming EU framework and cross-border coordination.</p> <p>This would minimize interference risks, ensure compatibility, and preserve the UK’s ability to benefit from secure and resilient satellite communications, being offered seamlessly across the European region.</p>
<p>Questions for stakeholders not interested in using 2 GHz MSS</p>	
<p>Question 9: What service(s) do you think could use 2 GHz MSS in the UK? What benefits do you think these services could provide, and how much spectrum do you consider these ser-</p>	<p>N/A</p>

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<p>vices require to (i) deliver basic services, and (ii) to deliver more advanced services?</p>	
<p>Questions for all stakeholders</p>	
<p>Question 10: Overall, to what extent does demand for 2 GHz MSS spectrum to provide services in the UK relate to demand for spectrum to provide 2 GHz MSS services in the EU (and vice versa)?</p>	<p>Eutelsat believes that demand for the 2GHz MSS spectrum in the UK is inherently linked to demand in the EU. The two markets share similarities and are closely interconnected, with high volumes of cross-border travel, trade and governmental cooperation, and with users frequently moving between the UK and continental Europe.</p> <p>MSS services must ensure continuity if they are to deliver real value. Divergent spectrum frameworks would risk undermining service availability, roaming and device interoperability, whereas harmonised conditions would enable manufacturers and service providers to achieve real economies of scale.</p> <p>Given the similarities in user needs and market structures, a coordinated UK-EU approach is essential to ensure consistent service quality, secure communications, and the resilience of next-generation MSS solutions.</p>
<p>Question 11: Do you consider there would be any benefits or risks from aligning with the EU regarding the types of 2GHz MSS services being authorised, as well as the specific operators licensed to operate?</p>	<p>To achieve economies of scale, harmonised use of the band is pivotal (see Question 7).</p> <p>To the contrary, failure to align with the EU on both the types of 2 GHz MSS services authorised and the operators licensed would create significant risks. Divergent approaches would increase the likelihood of cross-border interference, particularly given the use of non-directional user terminals in D2D services, which depend on consistent spectrum segmentation across neighbouring markets. Fragmentation would also undermine economies of scale for terminals and services, raise costs for UK users, and weaken the seamless roaming experience. Moreover, inconsistency in operator licensing could complicate coordination, delay service rollouts, and reduce the resilience and security benefits of a pan-European MSS framework.</p> <p>For these reasons, alignment with EU authorisation and licensing practices is critical to safeguard service continuity, affordability, and strategic resilience for the UK.</p>

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Question 12: Do you have any other points that we should consider for our consultation on future proposals?	N/A