

## Your response

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<b>Questions for stakeholders that are interested in using 2 GHz MSS</b>	
<p><b>Question 1:</b> Which service(s) do you wish to provide using 2 GHz MSS spectrum? When do you expect that you could provide these services, and what UK geography would these services cover? 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>	Confidential - Y
<p><b>Question 2:</b> Please explain any barriers to your deployment of a service and your plans to address them.</p>	Confidential - Y
<p><b>Question 3:</b> What benefits might be realised by enabling the service(s) you wish to provide through to 2032 (the short term)? Similarly, through to 2045 (the long term).</p>	Confidential - Y
<p><b>Question 4:</b> Please explain what you consider would be the appropriate licence period for the service(s) you wish to provide? Please explain why, including providing evidence, such as asset use life, where applicable.</p>	Confidential - Y
<p><b>Question 5:</b> 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)? Please include details of any guard bands that you</p>	Confidential - Y

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<p>would consider necessary within this spectrum for coexistence purposes.</p>	
<p><b>Question 6:</b> For each service, please explain why you wish to use 2 GHz MSS. Please explain why this is a more suitable frequency compared to alternatives.</p>	<p>Confidential? N</p> <p>The identification of the 2 GHz MSS band as the 5G NTN band n256, coupled with the fact that both IoT-NTN and NR-NTN services are based on 3GPP Release 17 and beyond, ensures seamless interoperability with terrestrial networks adhering to 3GPP standards. As the 2 GHz MSS band is vital for enabling innovative satellite-based MSS solutions due to their harmonized global allocation and strong signal propagation capabilities.</p> <p>The alternative to this band is the L-Band (n255). However, there are currently no plans by any administration to change this situation anywhere in the world. Therefore, if a satellite operator intends to provide a solution that complements terrestrial networks based on 3GPP standards, it must access the 2 GHz MSS band. Plan-S also offers another satellite IoT solution; however, this is designed to complement networks based on the LoRaWAN standard. NB-IoT technologies based on 3GPP Release 17 and beyond, operating in the 2 GHz MSS band represent a suitable solution as they complement mobile networks through interoperability, seamless coverage and resilience.</p> <p>By integrating satellite connectivity, MNOs can extend their network reach to rural, remote, and underserved areas, enabling seamless cross-border IoT deployments. This extended coverage allows operators to support innovative use cases that were previously impractical due to connectivity limitations, such as large-scale agricultural monitoring, global asset tracking, and environmental conservation projects.</p> <p>Additionally, this approach is expected to significantly increase customer satisfaction by improving overall service availability and performance. Furthermore, this collaboration between terrestrial and satellite networks promotes interoperability, enhancing the efficiency and scalability of IoT applications while driving the adoption of global IoT standards.</p>

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<p><b>Question 7:</b> To what extent are there economies of scale across the UK and the EU for each service you wish to provide? What is the minimum number of users/devices you would need for each service to be economically viable?</p>	<p>Confidential - Y</p>
<p><b>Question 8:</b> 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? What are minimum satellite beam footprint sizes that you consider feasible, and what cross-border sharing conditions do these facilitate?</p>	<p>Confidential - Y</p>
<p><b>Questions for stakeholders not interested in using 2 GHz MSS</b></p>	
<p><b>Question 9:</b> 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 services require to (i) deliver basic services, and (ii) to deliver more advanced services?</p>	<p>Confidential - Y</p>
<p><b>Questions for all stakeholders</b></p>	
<p><b>Question 10:</b> 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>Satellites provide global coverage, and since the UK and the EU share borders, satellite operators naturally seek to obtain licences in both jurisdictions to avoid interference problems at borders and to enable the development of cross-border use cases. This approach would deliver clear benefits not only for operators but also for both the EU and the UK.</p>
<p><b>Question 11:</b> Do you consider there would be any benefits or risks from aligning with the EU regarding the</p>	<p>We respectfully recommend that, should Ofcom decide to dedicate spectrum within the 2 GHz MSS band for satellite IoT services, such assignments be aligned with</p>

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types of 2 GHz MSS services being authorised, as well as the specific operators licensed to operate?	those of the EU. Alignment with the EU would deliver significant benefits by ensuring consistency, minimising cross-border issues, and providing clarity for the definition of spectrum ranges for satellite IoT services across the Europe.
<b>Question 12:</b> Do you have any other points that we should consider for our consultation on future proposals?	Confidential - Y