Question	Your response
Question 1: 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.	The 2GHz MSS spectrum is ideal for creating ubiquitous satellite coverage for devices that are designed to operate with the 3GPP standards. SES plans to establish such ubiquitous coverage of the UK and the EU to (1) develop narrowband services to the European automotive manufacturers and (2) develop a pan-European eCall service. 1. Narrowband service for the European Automotive OEMs SES plans to offer narrowband connectivity (up to 400 Kbps) to the European automotive sector, including UK manufactures and consumers, enabling tens of millions of vehicles to connect via an integrated terrestrial network (TN) and non-terrestrial network (NTN). This will enable the deployment of critical vehicle services well into the next decade—such as warning systems, traffic guidance, driver assistance, and other essential communications—aligned with industry-defined use cases (e.g., 5GAA). (See 5GAA Technical report: Maximising the benefit of future satellite communications for automotive, 2 September 2024, available at https://5gaa.org/maximising-the-benefit-of-future-satellite-communications-for-automotive/.) These services will be available across the UK and remain uninterrupted even in TN dead zones or areas with limited TN coverage or congestion. Furthermore, many of these applications—especially those supporting assisted driving—depend on ultra-low latency connectivity. SES's planned D2D network will be well positioned to meet this growing industry demand, delivering sub-50ms latency through a dedicated constellation of satellites operating in low Earth orbit ("LEO"). SES estimates that these services will eventually be used by an estimated 12 million vehicles within the UK by 2040. 2. Pan-European eCall Service All vehicles equipped with SES's NTN service will feature emergency voice and text capabilities. Currently, emergency services rely solely on TN coverage, meaning vehicles cannot initiate an emergency response in areas without TN signal. This issue becomes especially critical

Question	Your response
	during natural disasters — when TN infrastructure may be down or congested. SES's NTN-enabled vehicles will be able to support eCall functionality even when the TN is not available. Under the proposed provisioning parameters for narrowband, the vehicle's SIM will automatically prioritize emergency calls on a dedicated channel. This will allow passengers to make free SOS calls and receive emergency alerts seamlessly. SES expects that the system will also be operable with the public warning system described in the 3GPP standard. (See 3GPP Technical Standard 22.268 and Technical Standard 23.041, available at https://portal.3gpp.org/#/.)

Question	Your response
Question 2: Please explain any barriers to your deployment of a service and your plans to address them.	Confidential? – N The main barrier that any new technology or new entrant faces in the satellite industry is access to sufficient spectrum. The UK can address this by implementing a licensing process for the 2GHz MSS spectrum that will create certainty for licensees who can then invest and roll out services to the benefit of UK consumers.
Question 3: What benefits might be realised by enabling the service(s) you wish to provide through to 2032 (the	While the UK has succeeded in building out terrestrial networks across the country, 8% of the geographical

Question	Your response
short term)? Similarly, through to 2045 (the long term).	area lack even 4G coverage. (See Converging Earth and Space: Advancing Automotive Connectivity, ESA CSC (Connectivity and Secure Communications) Space for 5G/6G and Sustainable Connectivity, July 2025.) Total new vehicle sales in the UK is estimated at 2.1 million passenger vehicles and 500,000 commercial vehicles per year by 2032 , growing cumulatively to 6.5 million vehicles by 2035 and up to 12million vehicles by 2040. SES's narrowband service operating between 100-250 Kbps with E-Call capabilities will meet the near-term demands of those new vehicles.

Question	Your response
Question 4: 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.	Confidential? – N As noted elsewhere in our comments, we recommend aligning the license term with the term adopted by the EU to ensure licensees can efficiently use the spectrum to offer services across the UK and EU.
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)? Please include details of any guard bands that you would consider necessary within this spectrum for coexistence purposes.	Confidential? N SES believes that the 2x30 MHz of MSS spectrum will be put to its best use in support of D2D services across the UK. SES intends to offer services to automobiles in partnership with Lynk, who will offer additional services over the 2GHz MSS spectrum and IMT spectrum. Furthermore, licensees must have enough spectrum to expand services to meet broader consumer demands over the term of the license. Therefore, if Ofcom decides to split the spectrum amongst more than one licensee, the final licensed bands should be two licenses of 2x15MHz, and no more than three licenses of 2x10MHz. Any efforts to introduce frequency sharing into this technical framework will only serve to hamper full use of the spectrum for the benefit of consumers. We acknowledge that there are several parties who have suggested a small portion of the spectrum (e.g., 1MHz per operator) could be set aside as a spectrum pool (e.g., up to a pool of 5MHz under sharing) for narrowband internet-of-things (IoT) operations, but these uses are better placed in other spectrum bands. The 2GHz MSS spectrum over the UK should be dedicated to D2D services and so should not be carved up into small bands that cannot support service scaling that is anticipated over the next decade. It is also important as noted in response to this consultation that the UK align its frequency plan and licensing approach with that the EU to improve the opportunities for licensees to scale their services and to support implementation of services in UK automobiles built for the EU market.

Question	Your response
Question 6: 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.	Confidential? – N Our planned D2D service is preferred to operate in spectrum already identified for IMT, within the defined 3GPP TN or NTN band classes and within bands that are allocated to MSS. The 2GHz MSS band is the ideal candidate. Though the terrestrial IMT band could work, the domestic licensing for different MNOs would undermine the benefit of a ubiquitous layer of satellite service across the UK and the EU. Hence, relying solely on IMT spectrum would not achieve the true gap-filler capability D2D satellite service offers. For other satellite operations that do not need to rely on 3GPP-compatible devices, such as the current EAN services, they could operate in other bands, e.g., MSS L-band or MNO bands. Otherwise the in-flight connectivity service as offered by EAN could be covered by alternative satellite solutions in Ku and/or Ka.
Question 7: 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?	Confidential - Y

Question	Your response
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? What are minimum satellite beam footprint sizes that you consider feasible, and what cross-border sharing conditions do these facilitate?	Confidential? – N Typically MSS is difficult to share due to the nature of the receivers, which have limited directionality and so are not able to discriminate between wanted and unwanted signals when operating in overlapping frequency. In the ITU, several attempts since 1996, in accordance with Resolution 215 (Rev.WRC-97, Rev.WRC-12), were made to define a coordination process among MSS systems and efficient use of the MSS allocations in the 1-3 GHz range, including this 2 GHz MSS band under consultation, but the outcome as outlined in two currently inforce Recommendations ITU-R M.1086 and M.1186 implicitly indicated that coexistence of multiple co-frequency, co-coverage MSS systems is challenging, unless frequency separation or geographical isolation is implemented. (See ITU Recommendations M.1086 (03/06): Determination of the need for coordination between geostationary mobile satellite networks sharing the same frequency bands, available at https://www.itu.int/rec/R-REC-M.1086/en and M.1186 (03/06): Technical considerations for the coordination between mobile-satellite service networks utilizing code division multiple access and other spread spectrum techniques in the 1-3 GHz band, available at https://www.itu.int/rec/R-REC-M.1186/en, respectively).
Questions for stakeholders not interested in using 2 GHz MSS	
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 services require to (i) deliver basic services, and (ii) to deliver more advanced services?	Confidential? – N N/A
Questions for all stakeholders	

Question	Your response
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)?	Confidential? – N See response to Question 11.
Question 11: Do you consider there would be any benefits or risks from aligning with the EU regarding the types of 2 GHz MSS services being authorised, as well as the specific operators licensed to operate?	Confidential? – N SES believes there is a benefit to aligning the UK's approach to allocating and licensing the 2GHz MSS spectrum with the EU. As noted above, MSS is difficult to share due to the non-directional nature of the receivers. Aligning the UK approach with the EU will allow the ultimate licensees to provide services at a lower cost because of the scale they will be able to achieve. It will also benefit UK manufacturers, such as automobile manufacturers, who market their products in Europe.
Question 12: Do you have any other points that we should consider for our consultation on future proposals?	Confidential? – N N/A