

Consultation response form

Question	Your response
Question 1: Do you agree with our proposal to make spectrum available for aeronautical and maritime ESIMs connecting with GSO satellites in 12.75-13.25 GHz, in line with the ITU framework?	N/A
Question 2: Do you agree with our proposal to make additional spectrum available for aeronautical and maritime ESIMs connecting with GSO and NGSO satellites in Ka band (authorisations across 27.5-30 GHz), in line with the ITU framework?	Telesat would like to congratulate Ofcom for its proposal to make additional Ka band spectrum available for aeronautical and maritime NGSO ESIMs in the 27.5-29.1 GHz and 29.5-30 GHz. We welcome Ofcom's recognition of the growing and significant role that NGSO ESIMs play in delivering connectivity to ships and aircrafts. We particularly welcome the the authorisation of aeronautical NGSO ESIMs in the Ka band, which are not currently allowed in the UK. This will deliver significant additional services benefitting UK consumers, UK-registered ships and aircraft, and the businesses that operate them, supporting innovation and growth. We support alignment with the ITU framework and the adoption of the associated technical conditions for NGSO use in line with WRC-23 Resolution 123. Given the international nature of these services, alignment with ITU Resolution 123 technical conditions allows capacity to be unlocked quickly by leveraging an established and well-studied co-existence regime, while protecting incumbent users.
Question 3: Do you agree with our proposed technical conditions for ensuring co-existence?	We commend Ofcom's pragmatic approach to maritime NGSO use. Rather than applying the 70 km coastal separation requirement uniformly, Ofcom proposes to waive it in the frequencies (27.8185-27.9405 GHz and 28.8265-28.9485 GHz) where fixed links are not present and are not being considered for future terrestrial use. This maximises the practical value of the spectrum for maritime operators closer to shore, while applying the separation distance only for the parts of the spectrum allocated to Spectrum Access Licensees. Ofcom also proposes to im-

Question	Your response
	pose the separation distance for the part of the spectrum (27.9405-28.0525 GHz and 28.9485-29.0605 GHz) that is returned by Arqiva and remains under review for potential fixed link use. We encourage Ofcom to go further and consider making this remaining returned Arqiva spectrum available for land and maritime NGSO ESIM use — without the coastal separation distance — rather than reserving it for potential future fixed links, thereby enabling land and maritime NGSO ESIM operations closer to shore. As Ofcom states in https://www.ofcom.org.uk/spectrum/innovative-use-of-spectrum/call-for-input-review-of-the-use-of-fixed-wireless-links-and-spectrum-implications, "The overall number of fixed links are expected to continue to decline. This is mainly driven by a continued reduction in the number of links used by mobile network operators as they migrate more of their backhaul links to fibre networks." At the same time, demand for high capacity fixed links mainly in higher frequency bands (E-band, 71-76 / 81-86 GHz) is observed. Given these trends, the case for reserving this spectrum for future fixed links in the Ka band — and therefore applying the separation distance — appears weak, while its value for land and maritime NGSO ESIM use operating without restriction would be high. In any case, Telesat understands that this spectrum is currently unallocated and is not in use by the Fixed Service. Ofcom could therefore consider making it available at least for maritime NGSO ESIM use without any separation distance restriction. Should the Fixed Service be introduced in this spectrum in future, Ofcom could at that point impose an amendment applying the appropriate separation distance. This approach would allow the spectrum to deliver value for maritime NGSO ESIM use in the near term, while preserving Ofcom's flexibility to protect any future fixed links.
Question 4: Do you agree with our proposed amendments to the Earth Station Network, Aircraft radio, and Ship radio licence products to extend the authorisation for aeronautical	We agree with Ofcom's proposed amendments to the Earth Station Network (ESN), Aircraft radio and Ship radio licences to extend the authorisations for aeronautical and maritime ESIMs connecting to NGSO satellites, and

Question	Your response
and maritime ESIMs connecting to GSO and NGSO satellites?	we support including compliance with WRC Resolutions 123 as an ESN license condition. We welcome Ofcom's clarification (footnote 77 of the consultation document) that the Resolution 123 separation distances are not transferred to the Ka band authorization in the ESN license, as ESN license authorizes use within UK territory. However, we are of the view that, while the ESN license makes the separation distances inherently inapplicable since it authorizes use in the UK territory, an explicit statement in the license — rather than only in a footnote in the consultation document — would provide certainty, prevent the Resolution 123 condition being read as importing the separation requirement, and align the ESN with the Ship radio license, which already states the position explicitly. In addition, and consistent with our response to Question 3, we propose the remaining Arqiva-returned spectrum (27.9405-28.0525 GHz and 28.9485-29.0605 GHz) be treated on the same basis and added for maritime use without the separation restriction. Based on these proposals, we propose some amendments regarding the clauses of 3.5 and 3.8 of ESN license in bold as below: 3.5. Maritime station(s) operating with non-geostationary satellites shall: i) transmit within one or more of the following frequency ranges: 14.0-14.5 GHz, 27.5-27.9405 28.0525 GHz, 28.4545-28.9485 29.0605 GHz and 29.5-30 GHz; j) transmit only to the satellite network specified in Schedule 2; 3.8. The Licensee shall ensure that the establishment and use of the Licensed Radio Equipment is in accordance with the technical provisions for operation (excluding requirements which apply exclusively to the notifying administration) set out in the World Radiocommunication Conference ("WRC") Resolutions below. i. In the frequency band 12.75 - 13.25 GHz, where the Licensee operates an aeronautical ESIM... [unchanged] ii. In the frequency bands 27.5 - 29.1 GHz and 29.5 - 30 GHz, where the Licensee operates an aeronautical or

Question	Your response
	maritime ESIM with a non-geostationary satellite orbit network, the Licensee shall comply with the technical provisions of WRC-23 Resolution 123, as in force in March 2026. The 70 km coastal separation distance in Resolution 123 does not apply to NGSO maritime ESIM in the frequencies 27.5-27.9405 28.0525 GHz, 28.4545-28.9485 29.0605 GHz and 29.5-30 GHz(in the case that Ofcom decides that the whole Arqiva spectrum is not subject to a separation distance). Otherwise, the frequencies referenced would be 27.5-27.9405 GHz, 28.4545-28.9485 GHz and 29.5-30 GHz.
Question 5: Do you agree with our proposal to reflect these changes in the relevant Interface Requirements?	We agree with Ofcom's proposal to reflect the maritime and aeronautical NGSO ESIM authorizations in the Ka band in IR 2077 (Table 3.2) and IR 2093 (Table 2.2) and we welcome the approach of embedding compliance with WRC-23 Resolution 123 as a note in the Remarks fields. However, consistently with our response to Question 4, we note that the IR drafting for maritime NGSO use in the Ka band would benefit from clearer indication of the frequencies in which the coastal separation distance of 70 Km does not apply. As the relevant note referring to WRC-23 Resolution 123 is the same in both tables, we propose adding the following statement to the Remarks field of both IR 2077 Table 3.2 and IR 2093 Table 2.2 (proposed addition shown in bold): The 70 km coastal separation distance specified in Resolution 123 (WRC-23) does not apply to the frequencies authorized for maritime NGSO ESIM use, namely the 27.5-27.9405 28.0525 GHz, 28.4545-28.9485 29.0605 GHz and 29.5-30 GHz (in the case that Ofcom decides that the whole Arqiva spectrum is not subject to a separation distance).
Question 6: Do you have any other comments on our overall approach to authorising ESIMs in these frequencies, and implementing this in our licensing framework?	No

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