

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?	Confidential? – N Amazon Leo has no comments on Question 1. This response focuses on aeronautical and maritime ESIMs communicating with NGSO systems in the Ka band.
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?	Confidential? – N Yes. Amazon Leo supports Ofcom’s proposal to make additional Ka-band spectrum available for aeronautical and maritime ESIMs communicating with GSO and NGSO satellites. For NGSO systems, the proposed aeronautical ranges of 27.5–29.1 GHz and 29.5–30 GHz, together with the additional maritime ranges, are relevant to Amazon Leo’s planned services. For aeronautical use, Amazon Leo’s announced deployments with JetBlue from 2027 and Delta from 2028—initially covering over 500 aircraft—illustrate the demand for reliable gate-to-gate NGSO connectivity; this response does not depend on a specific UK deployment timetable. For maritime use, Amazon Leo supports Ofcom authorising M-ESIM operation under ESN licences in 27.8185–27.9405 GHz and 28.8265–28.9485 GHz within UK territorial waters without the 70 km separation distance, where Ofcom has concluded that no UK fixed links require protection (paragraphs 3.21 and 4.5–4.6). Amazon Leo also supports Ofcom’s continued treatment of these ESIM operations as applications of the Fixed-Satellite Service.
Question 3: Do you agree with our proposed technical conditions for ensuring co-existence?	Confidential? – N Yes, subject to the amendments and clarifications below. Amazon Leo supports Resolution 123 (WRC-23) as the international baseline for NGSO aeronautical and maritime ESIMs. We agree with the 3° minimum elevation angle and the 55 dBW per-terminal EIRP threshold, and support Ofcom’s proposed waiver of the 70 km maritime separation distance in the specified sub-bands. Aeronautical PFD treatment in identified sub-bands

Question	Your response
	Ofcom should give the prior agreement under Annex 1, paragraph 3.5, read with resolves 4.5 of Resolution 123, for A-ESIMs authorised by an ESN licence to exceed the PFD limits in paragraphs 3.1 and 3.2 within 27.8185–27.9405 GHz and 28.8265–28.9485 GHz in UK jurisdiction. To provide certainty, the ESN licence instrument itself should state expressly that authorisation under the licence constitutes the United Kingdom’s prior agreement for this purpose. Ofcom has identified no UK fixed links requiring protection in those sub-bands and proposes parallel maritime relief. Retaining the aeronautical PFD limits there solely for UK terrestrial protection would constrain service availability without a corresponding co-existence benefit. The varied ESN licence should record that agreement expressly. It should also confirm that, in 29.5–30 GHz, the Annex 1 terrestrial-protection limits apply only in respect of administrations listed in Radio Regulations No. 5.542; the United Kingdom is not listed. Any UK agreement must preserve the protection required for other administrations, as resolves 4.5 requires. Maritime e.i.r.p. spectral-density treatment in identified sub-bands Ofcom should also record, under Annex 1, paragraph 2.2, read with resolves 4.5 of Resolution 123, the United Kingdom’s prior agreement for M-ESIMs authorised by an ESN licence to exceed the 24.44 dBW per 14 MHz e.i.r.p. spectral-density limit towards UK territory within 27.8185–27.9405 GHz and 28.8265–28.9485 GHz. To provide certainty, the ESN licence instrument itself should state expressly that authorisation under the licence constitutes the United Kingdom’s prior agreement for this purpose. Ofcom has identified no UK fixed links requiring protection in those sub-bands and proposes to waive the separate 70 km restriction on that basis. The same finding supports less stringent paragraph 2.2 treatment there, subject to the other technical conditions of the licence and without affecting protection for other administrations. Clarity on Resolution 123 obligations In 27.5–29.1 GHz, where the United Kingdom has authorised co-frequency fixed or mobile services, the varied ESN licence should constitute the prior agreement required by Annex 1, paragraph 3.3, subject to its technical conditions.

Question	Your response
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 and maritime ESIMs connecting to GSO and NGSO satellites?	Confidential? – N Yes, subject to two targeted amendments. Amazon Leo supports Ofcom’s proposed route in paragraph 4.26: notifying existing ESN licensees and varying each licence to include the new frequencies, the Schedule 4 update and the associated editorial changes. Existing maritime authorisations The varied ESN licence should incorporate the protection stated in footnote 77 of the consultation. It should provide that, for M-ESIM operation within UK territorial waters in 27.5–27.9405 GHz, 28.4545–28.9485 GHz and 29.4625–30 GHz—in each case only to the extent authorised for the relevant satellite system—the licence constitutes the United Kingdom’s prior agreement and the applicable maritime separation distance does not apply. This would prevent condition 3.8’s incorporation of Resolution 123 and the other relevant WRC Resolutions from inadvertently narrowing existing authorisations, without affecting protections in other frequencies or jurisdictions. Airport-perimeter consent Ofcom should disapply the existing airport-authority consent condition (condition 3.7(p) of the ESN licence) for stations that comply with applicable EIRP and other technical conditions. Condition 3.7(p) already applies across the ESN licence; the consultation would newly extend its effect to A-ESIMs (paragraph 3.32). For ESIMs, Ofcom states that the 55 dBW limit permits operation without risk to ground-based aviation equipment (paragraph 3.29), and mobile stations are also subject to network-control and termination requirements. For other ESN stations, the consultation identifies no distinct residual site-specific risk requiring separate airport approval. Nor does it specify the criteria an airport authority should apply. The approval therefore appears unnecessary for compliant ESIM operation and would burden both ESN licensees and airport authorities.

Question	Your response
	If Ofcom retains condition 3.7(p), the airport-authority approval under that condition should be available at network or terminal-type level and, where relevant, operator or fleet level—not separately for each terminal, aircraft, deployment or operation. Ofcom should publish objective criteria, information requirements and response times, with a central CAA fallback where an airport cannot be contacted or multiple airports are involved. Approval should remain valid while the accepted configuration is unchanged. If condition 3.7(p) is retained, Amazon Leo supports adding Heathrow to Schedule 4 on that basis.
Question 5: Do you agree with our proposal to reflect these changes in the relevant Interface Requirements?	Confidential? – N Yes. The draft Interface Requirements broadly follow the proposed licensing arrangements. To avoid divergence in the final instruments, Amazon Leo recommends that Ofcom: • make the IR 2077 and IR 2093 frequency tables match exactly the authorisations in each applicable ESN, Aircraft radio or Ship radio licence; • place each binding requirement in the relevant licence or mandatory part of the Interface Requirement. Resolution 123 currently appears under ‘Informative’ but uses ‘shall comply’. If explanatory, it should cross-refer to condition 3.8(ii); if independent, it belongs in the mandatory section; and • reflect, or cross-refer clearly to, the final licence treatment of the United Kingdom’s prior agreements under Resolution 123, Annex 1, paragraphs 2.1, 2.2, 3.3 and 3.5, and the existing maritime authorisations addressed in consultation footnote 77.
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?	Confidential? – N Subject to these comments, Amazon Leo supports Ofcom’s overall approach. The proposals would improve UK authorisation for NGSO aeronautical and maritime connectivity while protecting incumbent services. To support prompt implementation, Ofcom should publish the settled ESN licence and Interface Requirements together, confirm the timing of ESN variations, explain how the United Kingdom’s Resolution 123 prior agreements and any retained airport-approval process will operate, and proceed without delay.