

Narrative

Application for L Band Mobile Earth Station License

By this application, Viasat, Inc. requests blanket authority to operate six types of mobile earth station antennas (the “Terminals”) in the mobile-satellite service (“MSS”). The Terminals would operate in the 1525-1559 MHz (space-to-Earth) and 1626.5-1660.5 MHz (Earth-to-space) band segments (“1.5/1.6 GHz” band) within the L band and would communicate with geostationary orbit (“GSO”) satellite networks on the Commission’s ISAT List (“ISAT List”)¹ and the SkyTerra-1 satellite. The Terminals would be used to provide service throughout the United States and its possessions and territories for low data rate sensors and monitoring applications. Grant of this application would promote the public interest by enabling Viasat to support a variety of IoT applications, including in the transportation, agriculture, and logistics sectors, by itself and in collaboration with various partners.

Satellite Points of Communication

Viasat seeks to operate the Terminals with the satellite networks on the ISAT List in eligible 1.5/1.6 GHz band segments, including specifically the INMARSAT 4F3² (98.0° W.L.) (“I4F3”) and INMARSAT 3F5³ (54.0° W.L.) (“I3F5”) satellite networks. Viasat also seeks to operate the Terminals with the SkyTerra-1 satellite network (101.3° W.L.) operated by Ligado.⁴ Operations with any particular satellite point of communication would be limited to the frequencies authorized by the Commission for that satellite and available under applicable coordination arrangements. All operations of the Terminals will be consistent with certifications and the terms and conditions of any relevant Commission authorization and coordination arrangement for the applicable satellite.⁵

Operations in the 1.5/1.6 GHz Band

Operation of the Terminals will be consistent with the Commission’s regulatory framework for the 1.5/1.6 GHz band. As a general matter, Viasat’s network utilizes network protocols that operate in accordance with 3rd Generation Partnership Project (“3GPP”) Release 17 Narrowband Internet of Things Non-Terrestrial Network (“NB-IoT NTN”). Further

¹ See *Request to Streamline Licensing of L-band Mobile-Satellite Service Terminals Using Inmarsat Satellites as Points of Communication*, Order, 23 FCC Rcd 15268 (IB 2008) (establishing the ISAT List).

² See Call Sign S2932, ICFS File Nos. SES-MFS-20080228-00207, SES-AFS-20080410-00448, SES-AFS-20080915-01200.

³ See Call Sign S2949, ICFS File No. SAT-PPL-20160111-00001.

⁴ See Call Sign S2358, ICFS File No. SAT-MOD-20251126-00344.

⁵ See 47 C.F.R. § 25.115(a)(1)(ii) (requiring no technical demonstration or other information that would be duplicative or unnecessary due to certification of compliance with space station license requirements).

demonstration of compliance with applicable technical limitations is included in technical annex attached hereto as Exhibit A, including prioritization requirements to accommodate distress, urgency and safety communications of the Global Maritime Distress and Safety System (“GMDSS”) and Aeronautical Mobile-Satellite (Receive) Service (“AMS(R)S”) in certain segments of the 1.5/1.6 GHz band.⁶ Viasat acknowledges that operations in the 1544-1545 MHz or 1645.5-1655.5 MHz are limited to distress and safety communications.⁷ Operation of the Terminals will be consistent with applicable coordination arrangements in the 1.5/1.6 GHz band.

The Commission has previously authorized the operation of L-band MSS terminals for Viasat and other operators under analogous parameters to those requested herein,⁸ and Viasat has conducted such operations for years without issue.

Radiation Hazard Analysis

A radiation hazard analysis for the Terminals is attached hereto as Exhibit B. As demonstrated therein, the general population would not be exposed to radiofrequency levels in excess of the Commission’s standard, and the Terminals do not present a risk to trained personnel in the controlled area in the immediate vicinity of the Terminals.

⁶ See *id.* § 25.287; see also *id.* § 2.106, n.5.353A, 5.357A (giving priority to GMDSS in the 1530-1544 MHz and 1626.5-1645.5 MHz bands and AMS(R)S in the 1545-1555 MHz and 1646.5-1656.5 MHz bands); *id.* § 2.106, n. US308, US309, US315, US380.

⁷ See *id.* § 2.106, n.5.356, 5.375; see also *id.* § 25.202(a)(4)(iii)(A).

⁸ See, e.g., ISAT US Inc., Call Sign E090032, ICFS File No. SES-RWL-20240920-02015 (granted Apr. 17, 2025) (renewal of Viasat mobile earth station license in the 1.5/1.6 GHz band to communicate with the ISAT List); see also Skylo Technologies, Inc., Call Sign E210107, ICFS File No. SES-LIC-20210505-00772 (granted Mar. 31, 2023) (granting use of mobile earth station terminals in the 1.5/1.6 GHz band to communicate with the ISAT List), *as modified by* ICFS File No. SES-MFS-20230901-02046 (granted May 16, 2024) (authorizing additional terminal types).