Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
ITC Global USA, LLC	)	File No.: SES-MOD-_____
	)	
Application to Modify Earth Station Onboard Vessel ("ESV") Blanket License	)	Call Sign: E070239

APPLICATION TO MODIFY ESV BLANKET LICENSE

Pursuant to Section 25.117 of the Federal Communications Commission's ("Commission") rules, ITC Global USA, LLC ("ITC Global") seeks to modify its blanket earth station onboard vessel ("ESV") license[1] by (i) including authority to operate up to 250 of each of four (4) additional Ku-band terminal types (the "ESV Terminals"); (ii) adding the Yamal 300K satellite as an authorized point of communication to serve the U.S. market in the relevant frequency bands; and (iii) permitting operations of the ESV Terminals in U.S., foreign, and international waters, including in and around the contiguous United States ("CONUS"), Alaska, Hawaii, and U.S. Territories, as well as expanding the area of operations for all remotes in the ESV Blanket License to include the same coverage area.[2]

Grant of this application, including expanded U.S. market access for the Yamal 300K satellite, will enable ITC Global to optimize its broadband maritime satellite communications infrastructure to provide critical communications services to its customers, while meeting its growing business needs.

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[1] *See* ITC Global, File No. SES-MOD-20190711-00903, Call Sign E070239 (granted Nov. 23, 2020) ("ESV Blanket License").

[2] The Form 312 associated with this application includes entries for the currently authorized Intellian V100 and V130 ESV terminals. *See* ESV Blanket License. ITC Global clarifies that it does not seek to modify the operational parameters or add additional terminals of these types. However, due to limitations of the electronic Form 312, these entries cannot be removed.

I. DISCUSSION

A. Additional Terminal Types

ITC Global seeks to operate the Ku-band ESV Terminals, all of which have previously been authorized by the Commission. ITC Global seeks to operate up to 250 of each terminal in spectrum identified for ESV operations – 10.95-11.2 GHz and 11.45-11.7 GHz (space-to-Earth) (the "Extended Ku-band"), and 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) (the "Conventional Ku-band") – with satellites on the Commission's Permitted Space Station List ("Permitted List") and the Yamal 300K satellite at the power levels indicated below.

The Commission's Table of Frequency Allocations ("Table of Allocations") contemplates use of the 10.95-11.7 GHz (space-to-Earth) bands by ESV terminals on an unprotected basis only and permits such operations in the 11.7-12.2 GHz (space-to-earth) and 14-14.5 GHz (Earth-to-space) bands on a primary basis.[3] Use of this available Ku-band downlink spectrum is essential to ITC Global's maritime connectivity offering.

Table 1: Terminal Types and Licensing Information

Manufacturer	Model	Call Sign	Prior FCC File Number	Max EIRP	Max EIRP Density (dBW/4kHz)
Intellian	V240M	E090176	SES-MOD-20151210-00928	66.3	29.3
Intellian	V240MT	E190555	SES-LIC-20190627-00861	68.37	8.37
Intellian	V100NX	WB36	SES-STA-20200615-00643	54.9	24.6
Intellian	V150NX	WB36	SES-STA-20200615-00643	66.9	31.1

The ESV Terminals will be located on vessels in U.S., foreign, and international waters. They will be utilized to provide maritime connectivity in the same manner as previously authorized by the Commission and will be operated in full compliance with the requirements of the Commission's earth station in motion ("ESIM") and ESV regulations as set forth in Section 25.228 and elsewhere in the Commission's rules, including operating at all times in compliance

[3] *See* 47 C.F.R. § 2.106, n. NG52 and n. NG527A; 47 C.F.R. § 25.228.

with relevant EIRP spectral density masks. Therefore, this modification application is eligible for routine processing under the Commission's rules.

ITC Global hereby incorporates by reference the equivalent materials provided with the above-referenced license proceedings, an approach that has previously been accepted by the Commission.[4] ITC Global will operate the terminals in accordance with the Commission's two-degree spacing limits and ITC Global will not claim protection from interference from any authorized terrestrial stations to which frequencies are either already assigned, or may be assigned in the future, in the Extended Ku-band.[5]

B. Yamal 300K Satellite

ITC Global requests authority for the ESV Terminals, as well as previously licensed ESVs, to communicate with the Yamal 300K satellite in the Ku-band frequencies at 10.95-11.2 GHz and 11.45-1.7 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) bands. The Commission permits non-U.S. licensed satellites to access the U.S. market through applications for earth stations upon establishing compliance with Sections 25.114 and 25.137 of the Commission's Rules,[6] and demonstrating that the public interest would be served by such authority. Grant of this modification application and expanded U.S. market access for the Yamal 300K satellite would be consistent with the Commission's rules and policies.[7]

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[4] *See* ITC Global, File No. SES-MFS-20180829-02321, Call Sign E070239 (granted May 28, 2019).

[5] *See* 47 C.F.R. § 2.106, n. NG527A ("In the bands 10.7-11.7 GHz … ESIMs may be authorized for the reception of FSS emissions from geostationary … satellites, subject to the conditions that these earth stations may not claim protection from transmissions of non-Federal stations in the fixed service").

[6] 47 C.F.R. §§ 25.114 & 25.137.

[7] The Yamal 300K satellite is nominally positioned at 177° W.L. and is licensed by Russia, a member of the World Trade Organization ("WTO") for services covered under the WTO Basic Telecommunications Agreement. Because Russia is a member country in the WTO, ITC Global is not required to make the effective competitive opportunities showing set out in Section 25.137 of the Commission's Rules. 47 C.F.R. § 25.137.

The Commission has previously authorized communications with Yamal 300K and ITC Global hereby incorporates by reference the relevant information to permit expanded market access for the Yamal 300K satellite.[8] Pursuant to Section 25.137(d) of the Commission's Rules, 47 C.F.R. § 25.137(d), these prior granted applications and authorizations establish that the proposed operations of the Yamal 300K satellite comply with applicable Commission requirements for non-U.S. licensed satellites to provide service in the United States.

The operator of Yamal 300K, Gazprom Space Systems, has reviewed the technical characteristics of ESV terminal operations and confirmed that such operations are consistent with its coordination agreements and will not result in unacceptable interference to other satellites within +/- 6 degrees of Yamal 300K.

C. Areas of Operation

ITC Global seeks to operate the ESV Terminals and its previously licensed ESVs in U.S., foreign, and international waters, including in and around CONUS, Alaska, Hawaii, and U.S. Territories. Currently, the license includes Oceans, Various, U.S. Waterways, and certain specific locations as the area of operation for the terminals. This request would harmonize the area of operation for all of the ESV terminals authorized under the ESV Blanket License as noted above.

D. Radiation Hazard Analyses

A radiation hazard analysis for each additional antenna is provided in the Technical Appendix attached hereto.[9] Radiofrequency ("RF") hazard issues have been fully assessed in the

[8] *See* Denali 20020, LLC, File No. SES-MFS-20160404-00304, Call Sign E120043 (granted June 27, 2016); *see also* Panasonic Avionics Corporation, File No. File No. SES-MFS-20150609-00349, as amended by SES-AFS-20160107-00003, Call Sign E100089 (granted June 30, 2016) (providing relevant coverage map); Intelsat Inflight Licenses LLC, File No. SES-MFS-20151022-00735, Call Sign E120106 (granted June 30, 2016).

[9] *See* Technical Appendix.

context of prior licensing of the ESV Terminals and the strategy to prevent RF exposure in excess of FCC-established limits is similar for all ESVs.

Specifically, ITC Global will ensure that the ESV Terminals are mounted high on a vessel or rig superstructure in areas that are inaccessible to the general public. The ESV Terminals will include appropriate labeling regarding RF hazards and will not be operated during maintenance, and technicians/operators will receive appropriate training regarding RF hazards. ITC Global is fully cognizant of the Radiation hazard issues associated with each ESV terminal type must be considered in the context of installation onboard individual vessels. In this connection, ITC Global acknowledges Section 25.228(d)[10] and will ensure that each ESV installation complies with the requirements of this provision.

E. Other Issues

Because ITC Global seeks modification of its existing ESV blanket license, this application includes only that information that changes with respect to its licensed operations, and ITC Global certifies that the remaining information has not changed.[11] In the interest of administrative convenience and consistent with ESV licensing precedent, ITC Global is also incorporating by reference the detailed technical information that supported previous Commission grants of operating authority for the ESV Terminals.

[10] Section 25.228(d) provides that "ESIM licensees must ensure installation of ESIM terminals on vehicles by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the vehicle and equipment. An ESIM terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm^2 in accessible areas, such as at the exterior surface of the radome, must have a label attached to the surface of the terminal warning about the radiation hazard and must include thereon a diagram showing the regions around the terminal where the radiation levels could exceed the maximum radiation exposure limit specified in 47 CFR 1.1310 Table 1." 47 C.F.R. § 25.228(d).

[11] *See* 47 C.F.R. § 25.117(c).

F. Public Interest Statement

Grant of this modification and request for market access will strongly serve the public interest by allowing ITC Global to optimize its maritime broadband operations to provide more efficient services to its customers. This, in turn, will facilitate improved satellite services to companies and personnel in industries that rely on satellite connectivity for critical operational and employee support at remote locations that may be unable to obtain communications services through alternative facilities.

As described herein, as well as in the application materials incorporated by reference, the ESV Terminals comply fully with the Commission's rules and policies governing Ku-band ESV operations. Compliance with these rules ensures that the proposed ESV operations can be conducted without adverse effects on other users of the spectrum.

In addition, granting U.S. market access for the Yamal 300K satellite would enhance competition in the satellite service marketplace. ITC Global would provide robust broadband maritime satellite communications services to a wide array of customers that are unable to obtain communications services through alternative facilities. Moreover, grant would ensure sufficient capacity to utilize high-speed Internet access, email, voice, and other services throughout U.S. and international waters.

G. FAA Notification

The proposed antennas are exempt from notification to the Federal Aviation Administration ("FAA") under Section 17.7(e) of the Commission's rules because the antennas are adjacent to structures of greater overall height.[12]

[12] 47 C.F.R. § 17.7.

II. CONCLUSION

Considering the foregoing, ITC Global respectfully requests that the Commission modify the ESV Blanket License to (i) include authority to operate up to 250 of each of the ESV Terminals; (ii) add the Yamal 300K satellite as an authorized point of communication on the license by granting it authority to serve the U.S. market in the relevant frequency bands; and (iii) permit operations of the ESV Terminals, as well as previously licensed ESVs, in U.S., foreign, and international waters, including in and around CONUS, Alaska, Hawaii, and U.S. Territories.