

## **Exhibit A**

### **I. DESCRIPTION OF MODIFICATION REQUEST**

ISAT US, Inc. (“ISAT US”) hereby requests to modify its existing maritime earth station license to include additional frequency bands to cover operation of US flagged ships in an area of the Southern Atlantic Ocean off the coast of South Africa using the Inmarsat 5 F2 (I5F2) satellite. The earth station antenna types are those included in the maritime license (“Antennas”) that are already licensed by the Commission to operate in the 29.5-30.0 GHz and 19.7-20.2 GHz bands. Operations of the Antennas would be within the envelope of the technical parameters of the existing license with the exception of additional frequency bands discussed below.<sup>1</sup> The Antennas will operate with the Inmarsat I5F2 satellite from the 55° W.L. orbital location and the Lino Lakes Satellite Access Station, which have both been authorized for U.S. market access.<sup>2</sup>

No other changes are requested by this application. The associated Schedule B provides the parameters for the proposed operations in the additional frequencies, but does not include any parameters already approved for each antenna type that are not being changed, such as the remote control point and the parameters in the 29.5-30 GHz and 19.7-20.2 GHz bands.

### **II. ISAT US SEEKS AUTHORITY TO OPERATE MARITIME TERMINALS ON US FLAGGED SHIPS ON ADDITIONAL FREQUENCY BANDS (29.1-29.5 GHz/19.3-19.7 GHz) IN THE ATLANTIC OCEAN OFF THE COAST OF SOUTH AFRICA**

ISAT US is already licensed to operate the Antennas in the 29.5-30 GHz (uplink) and the 19.7-20.2 GHz (downlink) bands. In this modification, ISAT US seeks authority to operate the Antennas on US flagged vessels in the 29.1-29.5 GHz (uplink) and 19.3-19.7 GHz (downlink) frequency bands in a limited area of the Southern Atlantic Ocean near the coast of South Africa. The operation on US flagged vessels requested in this modification will operate with one of the Global Xpress High Capacity (HCP) spot beams, the technical parameters of which were included in the Inmarsat Mobile Networks, Inc application for market access and incorporated by reference in this request.<sup>3</sup> The HCP beam will be centered at -33°N and -5.4°E. Figure 1

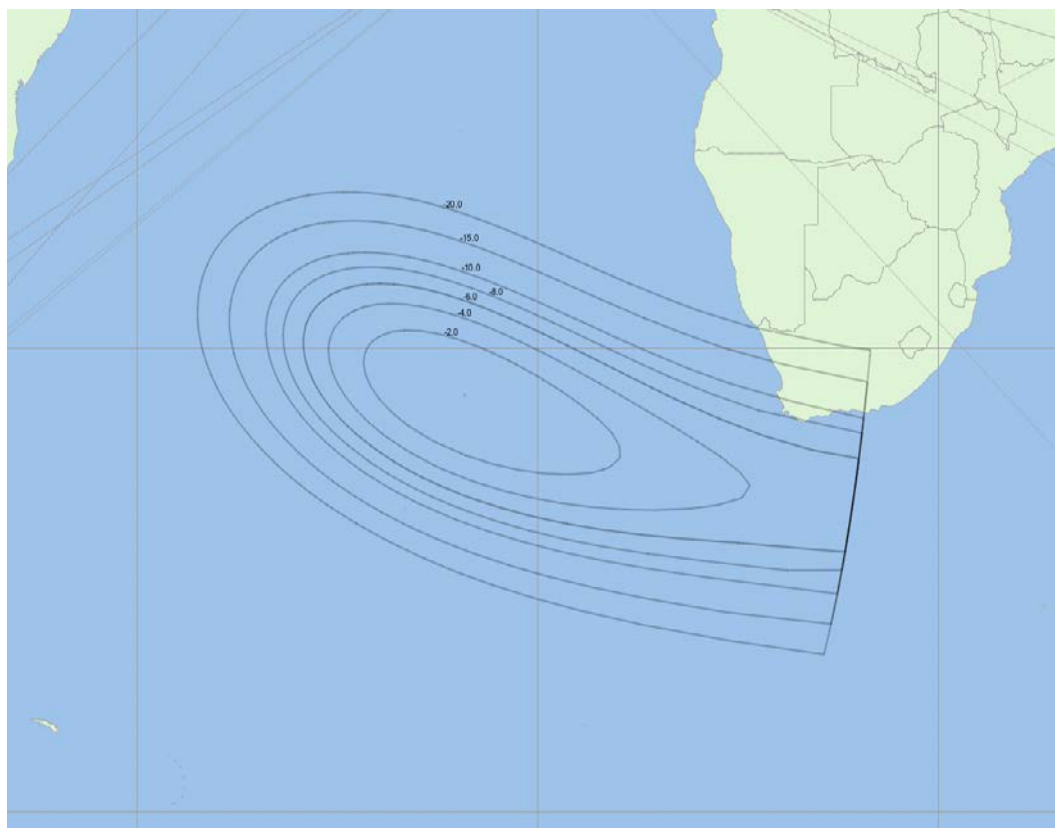
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<sup>1</sup> See, ISAT US GX maritime user terminal earth station Call Sign E140029.

<sup>2</sup> See, Inmarsat Mobile Networks, Inc., Granted March 30, 2015, (Call Sign E120072; IBFS File No. SES-LIC-20120426-00397) (“Lino Lakes Order”).

<sup>3</sup> See IBFS File No. SES-LIC-20120426-00397, Attachment A, Technical Appendix (“Inmarsat Market Access Application”).

below shows the beam location and the -2 dB, -4 dB, -6 dB, -8 dB, -10 dB, -15 dB and -20 dB contours.



Inmarsat has completed coordination of communications for the use of the additional frequencies with the I5F2 spacecraft at the 55° W.L. orbital location with other spacecraft operators, and operations will be consistent with these agreements.

ISAT US requests a waiver of the U.S. Table of Frequency Allocations,<sup>4</sup> as necessary, to allow the proposed FSS operations. Grant of a waiver would serve the public interest because it would allow US flagged vessels to benefit from broadband communications in a remote area of the South Atlantic Ocean where other means of communication are not readily available.

### **19.3-19.7 GHz band**

The Commission's Ka-band plan identifies the 19.3-19.7 GHz bands for non-geostationary (NGSO) mobile-satellite service (MSS) system feederlinks and the fixed service. Iridium operates NGSO MSS feederlinks in the 19.4-19.6 GHz portion of the band from

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<sup>4</sup> 47 C.F.R. § 2.106.

various earth stations in the US and elsewhere, however these earth stations are very far removed from the proposed location of operations in this modification. Additionally, Inmarsat has completed coordination with Iridium in these bands and the proposed operations fall well within the coordinated parameters of the agreement. Given the location of the proposed operations in this modification any fixed service operations in the US or its territories will not be impacted. Also, the Commission acknowledged in granting market access for the I5F2 spacecraft, the space-to-Earth transmissions comply with the pfd limits established under Article 21 of the ITU Radio Regulations established to protect all fixed earth stations.<sup>5</sup> Inmarsat has coordinated the proposed operations in the 19.3-19.7 GHz band with U.S. Federal Systems, including Federal operations to earth stations in foreign countries, in accordance with footnote US334 to the U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106.

### **29.1-29.5 GHz band**

The Commission's Ka-band band plan identifies the 29.1-29.25 GHz band for NGSO MSS feederlinks and Local Multipoint Distribution Service (LMDS). The 29.25-29.5 GHz is identified for NGSO MSS feederlinks and GSO FSS. Iridium operates its feederlinks in the 29.1-29.3 GHz band. As described above Inmarsat has completed coordination with Iridium and the proposed operations are consistent with that agreement. With respect to the LMDS service the area of the proposed operations are very far removed from the US mainland and any US territories and therefore there is no potential for interference to LMDS operations.

Grant of the requested waivers would not undermine the policy objective of the rule, as the primary operators in these bands under the U.S. Table would be protected from harmful interference.

### **Response to Question 36**

ISAT US provides this response to Question 36 of FCC Form 312 out of an abundance of caution. In 2005, the Commission dismissed a Petition for Declaratory Ruling (the "Petition") filed by ISAT US's affiliate, Inmarsat Global Limited ("Inmarsat Global"), seeking United States market access to provide MSS in the 2 GHz band. Subsequent to Inmarsat Global's filing, the Commission assigned all 2 GHz spectrum currently allocated for

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<sup>5</sup> *Lino Lakes Order* ¶ 27

MSS in the United States to two other satellite operators, and thus dismissed Inmarsat Global's Petition.<sup>6</sup>

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Grant of this modification will serve the public interest, convenience and necessity because it will enable ISAT US to provide maritime broadband communications to US flagged ships in a very remote area of the globe, where other forms of communication are not readily available, through its Global Xpress system using the I5F2 spacecraft, within technical parameters consistent with the parameters described herein.

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<sup>6</sup> *Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, 20 FCC Rcd 19696 (2005); *Inmarsat Global Limited, Petition for Declaratory Ruling to Provide Mobile Satellite Service to the United States Using the 2 GHz and Extended Ku-Bands*, 20 FCC Rcd 19409 (2005).