

Exhibit A

Application to Modify License

I. DESCRIPTION OF AMENDMENT

ISAT US, Inc. (“ISAT US”), a subsidiary of Inmarsat Global Ltd. (“Inmarsat”), hereby seeks to modify its Global Xpress Ka-band land blanket earth station license, Call Sign E150097 (“License”), File No. SES-LIC-20150625-00383 (“GX Land Application”), to add a new GX Earth station terminal (“ATOM 99”) and to add the Inmarsat-5 F3 satellite (“I5F3”) at the 179.6° E.L. orbital location as a point of communication to each of the currently authorized earth station terminal types (GX Terminals) covered by the License as well as the ATOM 99 terminal proposed in this application. Section II addresses the proposed new earth station terminal and Section III addresses the addition of the I5F3 satellite as an additional point of communication.

No other changes are requested by this modification application. ISAT US incorporates by reference Exhibits E (response to Question E15 regarding Section 25.209 compliance), F (response to Question E17 regarding the remote control point), and G (24-hour point of contact)¹ of the GX Land Application, as well as certain other portions of the GX Land Application referenced below.

II. NEW EARTH STATION TERMINAL

This modification application seeks to add the ATOM 99 model terminal. The ATOM 99 terminal is manufactured by Skyware Technologies. The terminal will operate on the same frequencies as the GX Terminals in the current license: 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space). The ATOM 99 terminal model has a slightly asymmetrical antenna with an off-set feed. The half-power beam-width required in Section 25.130(f) is 1.1 degrees. The terminal will operate at either fixed or temporary fixed locations and allow organizations from sectors, including media, humanitarian, energy, and government to quickly deploy a communication network to meet mission needs.

¹ Exhibit G was submitted as a supplement to the GX Land Application on August 14, 2015.

The required technical data for the ATOM 99 Earth stations is provided in Form 312. In addition, for blanket licensing of transmitting Earth stations in the 29.5-30.0 GHz band, the Commission adopted off-axis EIRP spectral density levels contained in Section 25.138(a). As illustrated in the off-axis EIRP spectral density plots in Exhibit B, the ATOM 99 meets the performance requirements in Section 25.138 (a) under clear sky conditions.² In addition, this earth station model will be operated within the -118 dBW/m²/MHz power flux-density at the earth's surface of the I5F2 and I5F3 satellite.

Out of an abundance of caution, ISAT US provides gain patterns for receiver performance for protection of receive earth stations in the 19.7-20.2 GHz band from adjacent satellite interference based on the pattern specified in Section 25.209(a) and (b), even though the Commission has deleted the requirement in Section 25.138(e). As illustrated in Exhibit B, in the receive 19.7-20.2 GHz frequency band, the ATOM 99 terminal generally conforms to the relevant antenna performance patterns in Section 25.209. Inmarsat acknowledges that there are minor exceedance at certain off-axis angles for the ATOM 99, and understands and agrees to accept interference from adjacent FSS satellite networks to the extent the relevant receiving antenna performance requirements of Section 25.209 are exceeded.

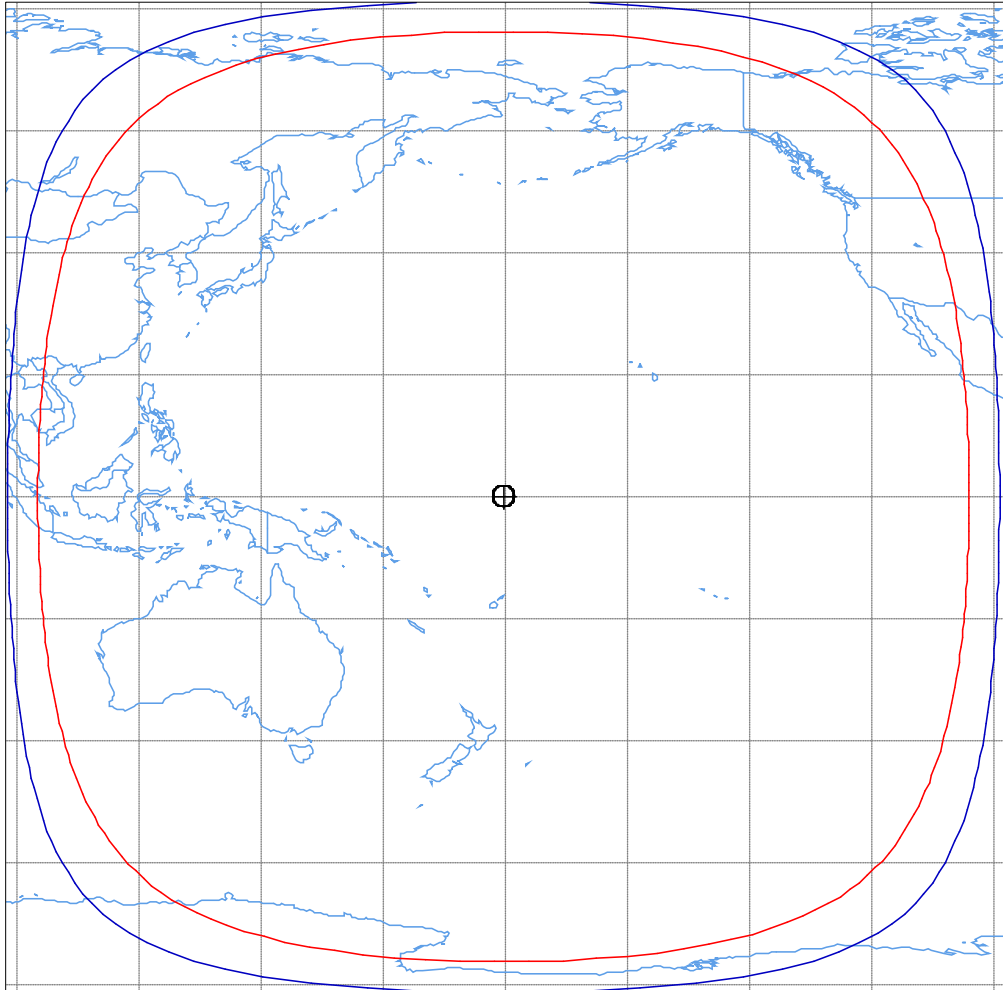
A radiation hazard analysis for the ATOM 99 antenna and a discussion of the results are provided in Exhibit C.

The proposed ATOM-99 GX Terminal will be subject to the same national security requirements described in Section 4 of the GX Land Application. That discussion is incorporated by reference.

² ISAT US provides the off-axis EIRP density plots in accordance with the consolidated and streamlined requirements for providing such information, as adopted in the Commission's order consolidating and streamlining the Part 25 rules. *See Comprehensive Review of Licensing and Operating Rules for Satellite Services, Second Report and Order*, 30 FCC Rcd 14713 ¶¶ 214-215 (2015) ("*Part 25 Second Report and Order*"). Although the modified rules are not yet in effect, the Commission has determined that gain measurements need to be plotted only at the bottom and top of each band, and thus, that it is in the public interest not to require plots at the middle of the frequency ranges.

III. I5F3 AS A POINT OF COMMUNICATION

ISAT US also seeks authority to modify the License to add I5F3 at the 179.6° E.L. as a point of communication for each of the terminal types covered by the License, as well as the ATOM 99 terminal types that is the subject of this modification application. The technical parameters of I5F3 have been approved by the Commission in its market access grant to ISAT US affiliate, Inmarsat Mobile Networks, Inc. *See* IBFS File Nos. SES-LIC-20150402-00188; SES-AMD-20150910-00577, Call Sign E150028. ISAT US incorporates by reference the relevant information regarding I5F3 in that application, as amended. The area of operations of all terminals authorized under the License will be modified to include the entire coverage area of I5F3, as illustrated below, including Alaska, Hawaii, and U.S. territories in the Pacific.



The requested modification would allow Inmarsat to expand its Ka-band land service to provide seamless coverage to users on land in the US and US territories not covered by the I5F2 satellite. Grant of this application would facilitate the expansion of communications through the Global Xpress network to meet the needs of enterprise and government users who increasingly demand ubiquitous, high-speed connectivity. Therefore, grant of this application is in the public interest. Inmarsat has completed US334 coordination for the I5F3 satellite with the applicable Federal users.

IV. RESPONSE TO QUESTION 36

ISAT US, Inc. submits this response to Question 36 of the FCC Form 312 out of an abundance of caution. In 2005, the Commission dismissed a Petition for Declaratory Ruling (the “Petition”) filed by Inmarsat Mobile Networks, Inc.’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 MSS in the United States to two other satellite operators, and thus dismissed Inmarsat Global’s Petition.³

³ *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).