Exhibit A

Application to Modify License E150097

I. DESCRIPTION OF AMENDMENT

ISAT US, Inc. ("ISAT US"), a subsidiary of Inmarsat Global Ltd. ("Inmarsat"), hereby seeks to modify its Global Xpress (GX) Ka-band blanket earth station license, Call Sign E150097 ("License"), File No. SES-LIC-20150625-00383 ("GX Land Application") (as modified by File Nos. SES-MFS-20160527-00458, SES-MOD-20160720-00669 and SES-MOD-20170425-00465), to add a new GX Earth station terminal type EXPLORER 8100GX ("8100GX") that will communicate with the Inmarsat-5 F2 ("I5F2") and Inmarsat-5 F3 ("I5F3") satellites. Section II addresses the proposed new Earth station terminal. No other changes are requested by this modification application. ISAT US incorporates by reference Exhibits 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 8100GX model terminal that is manufactured by Cobham. 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 terminal model employs a 1 meter antenna. The half-power beamwidth required in Section 25.130(f) is 1.0 degrees. The terminal will operate at fixed or temporary fixed locations and allow professional personnel from organizations from various 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 8100GX Earth stations is provided in the 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 8100GX meets the performance requirements in Section 25.138 (a) under clear sky conditions. In addition, the earth station model will be operated within the -118 dBW/m^2/MHz power flux-density at the earth's surface of the I5F2 and I5F3 satellite. Thus, the terminal will operate without causing unacceptable interference, consistent with the requirements of Section 25.209(f).[2]

The Commission has deleted the requirement to provide receive earth station patterns in the 19.7-20.2 GHz frequency band (see Sections 25.132 and 25.115). The 8100GX terminal generally conforms to the relevant antenna performance patterns in Section 25.209. To the extent that there are minor exceedance at certain off-axis angles for the 8100GX terminal, Inmarsat 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.

The radiation hazard analysis for the 8100GX antenna and a discussion of the results are provided in Exhibit C.

The proposed 8100GX 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 herein.

[2] See Section 25.209(f).

III. 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).