October 31, 2017

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Request for Special Temporary Authority to Conduct In-Orbit Testing of Intelsat 37e;
Call Sign S2972
Expedited Treatment Requested

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests an expedited grant of Special Temporary Authority ("STA")[1] for 30 days, beginning immediately upon grant, to conduct in-orbit testing ("IOT") of the Intelsat 37e satellite (Call Sign S2972) at 84.55° E.L., and to drift the satellite to its permanent location of 18.0° W.L.[2] Intelsat 37e was launched September 29, 2017. The IOT period is expected to last approximately 45 days and the drift to 18.0° W.L. is expected to last approximately 50 days.

Intelsat previously requested and was granted STA for IOT of Intelsat 37e at 84.55° E.L.[3] The grant included a condition that explicitly withheld Federal Communications Commission ("FCC") consent to use Intelsat 37e for "bringing into use or continuing the use of frequency assignments."[4] Intelsat

[1] Intelsat has filed this STA request, an FCC Form 159, and a $945.00 filing fee electronically via the International Bureau's Filing System.

[2] *See Policy Branch Information; Actions Taken*, Report No. SAT-01243, SAT-LOA-20160915-00089 (June 9, 2017) (Public Notice). During the drift from 84.55° E.L. to 18.0° W.L., only the satellite's TT&C frequencies will be utilized. Intelsat previously filed for, and was granted STA to perform IOT at 17.5° W.L. and 84.55° E.L. *See Policy Branch Information; Actions Taken*, Report No. SAT-01264, File No. SAT-STA-20170718-00105 (Sep. 1, 2017) (Public Notice); *See Policy Branch Information; Actions Taken*, Report No. SAT-01274, File No. SAT-STA-20170921-00135 (Oct. 6, 2017) (Public Notice). This request for STA supersedes and replaces both prior STAs. To the extent necessary, Intelsat asks that the FCC terminate the prior IOT STAs once grant of this STA is effective.

[3] *See Policy Branch Information; Actions Taken*, Report No. SAT-01274, File No. SAT-STA-20170921-00135 (Oct. 6, 2017) (Public Notice).

[4] *See Intelsat License LLC Request for Special Temporary Authority to Conduct In-Orbit Testing of Intelsat 37e*, Call Sign S2972, File No. SAT-STA-20120921-00135 (condition #6, stamp grant issued Oct. 2, 2017 by Stephen J. Duall).

recently filed an Application for Authority to Launch and Operate Intelsat 15R at 85.0° E.L.[5] This replacement satellite will include new frequencies that are not operated on the current Intelsat satellites at the nominal 85° E.L. orbital location. For these new frequencies, Intelsat will submit new U.S. filings that will be notified and brought into use in due course. However, because of the late receipt date of these new filings vis-à-vis other non-U.S. filings at nearby locations, Intelsat also seeks to bring into use an existing non-U.S. filing that Intelsat has previously submitted through another administration.[6] The terms of the agreement between Intelsat and this other administration give Intelsat full control of this filing such that it cannot be assigned to any other operator without Intelsat's consent. By bringing into use this non-U.S. filing, Intelsat will be able effectively to operate Intelsat 15R's new Ka-band capacity at the location, which serves the public interest. Accordingly, Intelsat respectfully requests expedited grant of this STA without a prohibition on the use of Intelsat 37e to bring into use frequency assignments at 84.55° E.L.

Intelsat 37e payload testing will be performed in the following frequency bands:

- 3400-4200 MHz, 10700-11950 MHz, and 12500-12750 MHz, 18300-18800 MHz, and 19700-20200 MHz (space-to-Earth); and
- 5850-6650 MHz, 13000-13250 MHz, 13750-14500 MHz, 28350-28850, and 29500-30000 MHz (Earth-to-space).

Telemetry, Tracking, and Command ("TT&C") services for Intelsat 37e will be performed at the following center frequencies and in the following frequency bands:

- 4197.75 MHz, 4198.25 MHz, 4198.75 MHz, and 4199.25 MHz (space-to-Earth); and
- 5850.5-5853.0 MHz and 6421.5-6425 MHz (Earth-to-space), selectable via ground command in 100 kHz steps.

In support of its request, Intelsat submits the following information.

During the IOT of Intelsat 37e, Intelsat will operate in the above referenced C-, Ku-, and Ka-bands. Intelsat has completed coordination with operational satellites within +/-6 degrees of the IOT location. In the unlikely event that harmful interference occurs, Intelsat will take all necessary steps to eliminate the interference.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collision with large debris or other operational space stations during IOT at 84.55° E.L. Intelsat 37e will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another satellite. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Intelsat 37e at 84.55° E.L. In addition, Intelsat is not aware of

[5] *See Intelsat License LLC Application for Authority to Launch and Operate Intelsat 15R, a Replacement Satellite with new Frequencies at 85.0 E.L.*, File No. SAT-LOA-20171027-00145 (filed Oct. 27, 2017).

[6] This non-U.S. filing will not adversely affect any U.S. filing in the vicinity and will be fully coordinated with all affected U.S. filings.

any system with an overlapping station-keeping volume with Intelsat 37e at 84.55° E.L. that is the subject of an International Telecommunication Union ("ITU") filing and that is either in orbit or progressing towards launch.

The IOT of Intelsat 37e's C-, Ku-, and Ka-band payloads at 84.55° E.L. is a critical step in ensuring that the satellite will be fully operational at 18.0° W.L. This, in turn, will provide additional capacity to customers at the 18.0° W.L. location, and thereby promotes the public interest.

For the reasons set forth herein, Intelsat respectfully requests that the Commission expeditiously grant this request.

Sincerely,

Susan H. Crandall
Associate General Counsel
Intelsat Corporation

cc: Jose Albuquerque
Stephen Duall
Jay Whaley
Cindy Spiers