

September 21, 2017

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

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

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)<sup>1</sup> for 30 days, beginning no earlier than October 22nd, 2017, 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.<sup>2</sup> Intelsat 37e is scheduled to be launched no earlier than 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 30 days.

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 MHz, 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

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<sup>1</sup> Intelsat has filed this STA request, an FCC Form 159, and a \$945.00 filing fee electronically via the International Bureau’s Filing System.

<sup>2</sup> 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. See *Policy Branch Information; Actions Taken*, Report No. SAT-01264, File No. SAT-STA-20170718-00105 (Sep. 1, 2017) (Public Notice). This previously granted STA is no longer required.

- 5850.5-5853.0 MHz and 6422.0-6424.5 MHz (Earth-to-space), selectable via ground command in 100 kilohertz 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 identified the operational satellites within +/-6 degrees of the IOT location. Coordination is ongoing with several operators of such satellites to resolve potential interference issues. Additionally, Intelsat is internally coordinating the proposed testing with potentially affected Intelsat satellites. Intelsat expects to complete coordination discussions before IOT of the Intelsat 37e satellite commences. 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 Federal Communications Commission (“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 any system with an overlapping station-keeping volume with Intelsat 37e at 84.55° E.L. that is the subject of an International Telecommunications 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 grant this request.

Sincerely,

*/s/ Cynthia J. Grady*

Cynthia J. Grady  
Regulatory Counsel  
Intelsat Corporation

cc: Stephen Duall  
Jay Whaley  
Cindy Spiers