

December 6, 2016

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

Re: Request for Further Extension of Special Temporary Authority to Conduct In-Orbit Testing of Intelsat 33e; Call Sign S2939

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests an additional 30 days of the Special Temporary Authority (“STA”)¹ previously granted Intelsat to conduct in-orbit testing (“IOT”) of the Intelsat 33e satellite (Call Sign S2939) at 59.55° E.L. and to drift the satellite to its permanent location of 60.0° E.L.² Intelsat 33e was launched on August 24, 2016. Due to a malfunction of the satellite’s main thruster, the expected commencement of IOT has been delayed. The IOT period is expected to take approximately 45 days; and the drift to 60.0° E.L. is expected to last approximately four days.

Intelsat 33e IOT payload testing will be performed in the following frequency bands:

- 3625 – 4200 MHz, 10950 – 11200 MHz, 11200 – 11450 MHz,³ 11450 – 12200 MHz, 12500 – 12600 MHz, and 18300 – 20200 MHz, (space-to-Earth);
- 5850 – 6725 MHz, 13750 – 13850 MHz, 14000 – 14500 MHz, 17300 – 17800 MHz, and 28100 – 30000 MHz (Earth-to-space).

Telemetry, Tracking, and Command (“TT&C”) services for Intelsat 33e will be performed in the following center frequencies:

- 4197.25 MHz, 4197.75 MHz, 4198.25MHz, and 4198.75 MHz (space-to-Earth);
- 6422.00 MHz, 6424.5 MHz, 5850.5 MHz, and 5853.0 MHz (Earth-to-space).

During the IOT of Intelsat 33e, Intelsat will continue to 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.

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 e.g., *Policy Branch Information; Actions Taken*, Report No. SAT-01201, File No. SAT-STA-20161101-00104 (Nov. 18, 2016) (Public Notice). During the drift from 59.55° E.L. to 60.0° E.L., only the satellite’s TT&C frequencies will be utilized

³ Intelsat did not seek authority, and is not licensed, to operate in this band at 60.0° E.L.

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Intelsat expects to complete coordination discussions before launch of the Intelsat 33e satellite. 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 59.55° E.L. Intelsat 33e 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 33e at 59.55° E.L. In addition, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 33e at 59.55° E.L. that is the subject of an International Telecommunications Union ("ITU") filing and that is either in orbit or progressing towards launch.

Intelsat's IOT operations in the 12500 – 12600 MHz, 17300 – 17800 MHz, 18800 – 19300 MHz, and 19300 – 19700 MHz frequency bands at the 59.55° E.L. orbital location will only occur in Regions 1 and 3, consistent with the frequency allocations in Regions 1 and 3.

Finally, Intelsat requests that the waivers previously granted to Intelsat 33e at 60.0° E.L. continue to be extended to the satellite at 59.55° E.L. In particular, Intelsat requests that the previously-granted waivers of Sections 25.210(f) and 25.210(i)(1) be extended to the satellite at 59.55° E.L., for the reasons previously set forth in the previous grant.

The IOT of Intelsat 33e's C-, Ku-, and Ka-band payloads at 59.55° E.L. is a critical step in ensuring that the satellite will be fully operational at 60.0° E.L. This, in turn, will provide additional capacity to customers at the 60.0° E.L. location, and thereby promotes the public interest.

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

Sincerely,



Cynthia J. Grady
Regulatory Counsel
Intelsat Corporation

cc: Stephen Duall
Jay Whaley
Cindy Spiers