



INTELSAT.

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August 20, 2019

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 and Operate the Intelsat 39 Satellite at 61.95° E.L.; Call Sign S3023

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) herein requests a grant of Special Temporary Authority (“STA”)¹ for 60 days, beginning September 20, 2019, to conduct in-orbit testing (“IOT”) of the Intelsat 39 (Call Sign S3023) satellite at 61.95° E.L.;² and to operate Intelsat 39 at 61.95° E.L. The IOT at 61.95° E.L. is expected to last approximately 20 days. Intelsat will be filing an application to support permanent operation of Intelsat 39 at 61.95° E.L.

Intelsat 39 was successfully launched on August 6, 2019. Intelsat expects to begin IOT for part of the satellite payload at 55.3° E.L. by the end of August.³ After completing IOT at 55.3° E.L., and subject to Federal Communications Commission (“FCC” or “Commission”) authorization, Intelsat will drift Intelsat 39 to 61.95° E.L. and complete IOT.⁴ Once IOT at 61.95° E.L. is complete, Intelsat will transfer traffic from Intelsat 902 (Call Sign S2406) to Intelsat 39.⁵

¹ Intelsat has filed this STA request, an FCC Form 159, and a \$980.00 filing fee electronically via the International Bureau's Filing System.

² Intelsat will no longer be performing IOT of Intelsat 39 at 62.0° E.L. *See Policy Branch Information, Actions Taken*, Report No. SAT-01405, File No. SAT-STA-20190715-00061 (Aug. 2, 2019) (authorizing the IOT of Intelsat 39 at 55.3° E.L., the drift of the satellite from 55.3° E.L. to 62.0° E.L., and further IOT at 62.0° E.L.) (“55.3° E.L. STA”).

³ *See id.*

⁴ Intelsat will drift to 61.95° E.L. under the authority granted in the 55.3° E.L. STA. *See id.*

⁵ Out of an abundance of caution, and to the extent necessary, Intelsat requests a waiver of Condition 19 of the Intelsat 39 grant, which requires that Intelsat 902 continue providing service from 62.0° E.L. in the 3625-4200 MHz, 10.95-11.2 GHz, and 11.45-11.7 GHz frequency bands until

Intelsat 39 IOT payload testing at 61.95° E.L. will be performed in the following frequency bands:

- 10950-11200 MHz (space-to-Earth) and
- 14000-14250 MHz (Earth-to-space).

On station at 61.95° E.L. Intelsat 39 will operate in the following frequency bands:

- 3625-4200 MHz (space-to-Earth);
- 5850-6425 MHz (Earth-to-space);
- 10700-11700 MHz (space-to-Earth);
- 12250-12750 MHz (space-to-Earth);
- 13000-13250 MHz (Earth-to-space); and
- 13750-14500 MHz (Earth-to-space).

Telemetry, Tracking, and Command (“TT&C”) services on-station at 61.95° E.L. will be performed in the following center frequencies: 3948.5 MHz, 3949.0 MHz, 3951.0 MHz, 3953.0 MHz, and 3953.5 MHz (space-to-Earth); and 6174.7 MHz and 6177.3 MHz (Earth-to-space).⁶

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

During the IOT of Intelsat 39 at 61.95° E.L., Intelsat will operate in the above referenced Ku-bands. Intelsat has identified the operational satellites within +/-6 degrees of 61.95° E.L and has completed

Intelsat 39 begins providing services at 62.0° E.L. *See* Intelsat License LLC Application for Authority to Launch and Operate Intelsat 39, a Replacement Satellite with New Frequencies, File No. SAT-LOA-20171205-00164 (Condition 19, stamp grant issued June 26, 2018 by Stephen J. Duall). As noted above, Intelsat is seeking to modify the Intelsat 39 license to allow permanent operation of the satellite at 61.95° E.L. Waiver of Condition 19 will allow the redeployment of Intelsat 902 once the customers on the satellite have been transitioned onto Intelsat 39, regardless of whether the Intelsat 39 license modification has been granted at the time of redeployment. This accommodation prior to the commencement of operations on Intelsat 39 ensures uninterrupted customer service at the nominal 62.0° E.L. and the efficient use of on-orbit assets. Grant of the requested waiver is therefore in the public interest. Further, the FCC has previously found waiver of this condition unnecessary for a similar redeployment. *See* Intelsat License LLC Application for Special Temporary Authority to Drift Intelsat 805 (S2404) to, and Operate at, 169.1° E.L., File No. SAT-STA-20180719-00054 (Condition 1 at note 1, stamp grant issued Aug. 1, 2018 by Stephen J. Duall).

⁶ Intelsat 39 is equipped with a tunable command receiver which allows Intelsat to tune the center frequencies within 6154.5-6195.5 MHz in 100 kHz steps. Intelsat seeks authority to utilize this tunable range on-station at 61.95° E.L.

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coordination with any potentially affected operators. 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 at 61.95° E.L. With the exception of Intelsat 902, which operates at 62.0° E.L.,⁷ Intelsat 39 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 at 61.95° E.L. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the Commission, having an overlapping station-keeping volume with Intelsat 39 at 61.95° E.L. In addition, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 39 at 61.95° E.L. that is the subject of an International Telecommunications Union filing and that is either in orbit or progressing towards launch.

The IOT of Intelsat 39 is a critical step in ensuring that the satellite will be fully operational at 61.95° E.L. This, in turn, will allow Intelsat to provide continuity of service to customers at the nominal 62° E.L. location, and thereby promotes the public interest.

For the reasons set forth herein, Intelsat respectfully requests that the Commission grant this request. Please direct any questions regarding this request to the undersigned at (703) 559-6949.

Sincerely,

/s/ Cynthia J. Grady

Cynthia J. Grady
Senior Counsel
Intelsat US LLC

cc: Stephen Duall
Jay Whaley
Cindy Spiers

⁷ The station-keeping volume of Intelsat 902 and Intelsat 39 will overlap until such time as Intelsat 902 is redeployed. See *Policy Branch Information, Actions Taken*, Report No. SAT-01199, File No. SAT-MOD-20160816-00084 (Public Notice) (Nov. 4, 2016).