

EXHIBIT 1
REQUEST FOR SPECIAL TEMPORARY AUTHORITY

DIRECTV Enterprises, LLC (“DIRECTV”) respectfully requests a grant of space station special temporary authority (“STA”)¹ for 30 days commencing March 18, 2017 to drift the SKY-B1 satellite (Call Sign S2922) from its temporary location at 33° W.L. to its requested permanent location of 43.15° W.L.² and to conduct in-orbit testing (“IOT”) of the satellite in Ka-band frequencies at 43.15° W.L.

SKY-B1 successfully launched on February 14, 2017 and began conducting IOT at 33° W.L. on March 1 pursuant to a grant of space station special temporary authority.³ IOT of the satellite at 33° W.L. is expected to last until approximately March 18, 2017 under this existing grant of space station special temporary authority. The drift to 43.15° W.L. would occur under this request for special temporary authority and is expected to last approximately 10 days.⁴ Due to challenges coordinating with potentially affected Ka-band operators, DIRECTV now plans to conduct IOT of the Ka-band frequencies once the satellite arrives at 43.15° W.L. rather than at the satellite’s temporary location of 33° W.L. as previously contemplated.⁵ The SKY-B1 satellite is expected to arrive at 43.15° W.L. on March 28, 2017, and IOT in the Ka-band

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

² DIRECTV has a pending request to modify the SKY-B1 fixed-satellite space station license to relocate the satellite from its authorized location at 43.1° W.L. to 43.15° W.L. See File No. SAT-MOD-20170221-00019. See also *Policy Branch Information; Actions Taken*, Report No. SAT-01158, File No. SAT-AMD-20150806-00054 (May 13, 2016) (Public Notice).

³ See *Policy Branch Information; Actions Taken*, Report No. SAT-01214, File No. SAT-STA-20170123-00008 (Feb. 3, 2017) (Public Notice).

⁴ During the drift from 33° W.L. to 43.15° W.L., only the satellite’s TT&C frequencies will be utilized.

⁵ See *Policy Branch Information; Actions Taken*, Report No. SAT-01214, File No. SAT-STA-20170123-00008 (Feb. 3, 2017) (Public Notice).

frequencies is expected to last approximately four hours. The special temporary authority requested here would cover both the SKY-B1 drift and the Ka-band payload testing.

DIRECTV separately and simultaneously is requesting earth station special temporary authority to operate its Castle Rock, Colorado earth station (Call Sign E070027) to support IOT of the SKY-B1 satellite.

SKY-B1 payload testing will be performed in the following frequency bands:

- 19.7-20.2 GHz (space-to-Earth); and
- 29.5-30.0 GHz (Earth-to-space).⁶

Telemetry, Tracking, and Command (“TT&C”) services for SKY-B1 will be performed using the following center frequencies:

- 11.443 and 11.4435 GHz or 11.4465 and 11.447 GHz (space-to-Earth); and
- 13.2495 and 14.498 GHz (Earth-to-space).

During the IOT of SKY-B1, DIRECTV will operate in the above-referenced frequency bands. DIRECTV has not identified any operational co-frequency Ka-band satellites within +/-6 degrees of the requested IOT location of 43.15° W.L.⁷ In the unlikely event that harmful interference occurs during IOT, DIRECTV will take all necessary steps to eliminate the interference.

DIRECTV assessed and limited the probability of SKY-B1 becoming a source of debris as a result of collision with large debris or other operational space stations during IOT at 43.15°

⁶ This request for space station special temporary authority for in-orbit testing of the 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space) frequencies at 43.15° W.L. is not a request for any grant of market access to the United States in these frequencies. DIRECTV will conduct the in-orbit testing of the Ka-band frequencies at 43.15° W.L. on a non-interference basis. Operations in the Ka-band frequencies will be subject to the authority of the Telecommunications Regulatory Authority of the United Arab Emirates. See *DIRECTV Enterprises, LLC, Attachment to Grant*, File Nos. SAT-RPL-20140221-00026 and SAT-AMD-20150806-00054 (May 11, 2016).

⁷ Although SES DTH do Brasil Ltda’s SES-14 space station (Call Sign S2974) is authorized to operate a Ka-band beacon at 47.5° W.L., DIRECTV understands that this satellite has not yet been launched.

W.L. SKY-B1 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, DIRECTV 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 SKY-B1 at 43.15° W.L. In addition, DIRECTV is not aware of any system with an overlapping station-keeping volume with SKY-B1 at 43.15° W.L. that is the subject of an International Telecommunication Union (“ITU”) filing and that is either in orbit or progressing towards launch.

To the extent necessary, DIRECTV requests that the waivers previously granted to SKY-B1 at 43.1° W.L. be extended to the satellite at 43.15° W.L. In particular, DIRECTV requests that the previously granted waiver of footnote NG52 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, be extended as necessary to test the satellite at 43.15° W.L.

The IOT of SKY-B1’s Ka-band payload at 43.15° W.L. is a critical step in ensuring that the satellite will be fully operational. DIRECTV understands that grant of this space station STA is without prejudice to any Commission action on the pending request for permanent authority to operate SKY-B1 at 43.15° W.L. Accordingly, DIRECTV respectfully requests that the Commission grant this request.