

ATTACHMENT TO GRANT
SpaceX Services, Inc.
ICFS File No. SES-STA-20260511-01302

ICFS File No(s):	SES-STA-20260511-01302	GRANTED - With Conditions  Space Bureau
Licensee/Grantee:	SpaceX Services, Inc.	
Call Sign:	E260360	
Satellite Name:	Starlink NGSO Gen1 (S2983/3018) and Gen2 (S2992/3069) satellite system	
Orbital Location: (required station-keeping tolerance)		
Administration:		
Nature of Service:		
Scope of Grant:	SpaceX Services, Inc ("SpaceX Services"), is granted a 60-day special temporary authority (STA), to operate its quad-band gateway earth station with 40 technically identical 1.99 m antennas to communicate with the Starlink NGSO Gen1 (S2983/3018) and Gen2 (S2992/3069) satellite system.	
Service Area(s):	33° 23' 16.9" N, 112° 0' 14.4" W in Phoenix, AZ	
Frequencies:	Operations will be performed in the following frequency bands: 27.5–30.0 GHz (Earth-to-space) 47.2–50.2 GHz (Earth-to-space) 50.4–52.4 GHz (Earth-to-space) 81.0–86.0 GHz (Earth-to-space) 92.0–94.0 GHz (Earth-to-space) 94.1–100.0 GHz (Earth-to-space) 102.0–109.5 GHz (Earth-to-space) 111.8–114.25 GHz (Earth-to-space) 17.3–20.2 GHz (space-to-Earth) 37.5–42.0 GHz (space-to-Earth) 71.0–76.0 GHz (space-to-Earth)	
Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions: 1. STA operations must not exceed the operational power levels and parameters requested and coordinated, and must comport with the technical specifications described in the underlying application, except as conditioned in this grant of STA. 2. STA operations must use the minimum power level necessary to establish communications links in order to minimize potential interference to licensed users. 3. All operations under this grant of STA must be on an unprotected and non-interference basis (NIB), i.e., SpaceX Services must not cause harmful interference to and must not claim protection from interference caused to it by any other lawfully operating station. 4. Because operations of STAs are on an NIB basis, they cannot rise to the level of causing unacceptable interference as any interference would potentially be in violation of the non-interference basis the operations are authorized for (<i>See SpaceX Ex Parte</i> (June 11, 2026)). Therefore, because STA operations are NIB and cannot rise to the level of causing unacceptable interference, and because they are by design temporary in nature, SpaceX Services has sufficiently demonstrated that the operations authorized by the STA will not		

cause unacceptable interference. Therefore, as it relates to the STA operations authorized herein only, Iridium's Petition is denied. No determination is made as the petition relates to any associated license application.

5. In the event of any harmful or unacceptable interference caused by operations under this grant of STA, SpaceX Services must immediately cease operations upon notification of such interference. SpaceX Services must immediately inform the Commission, in writing, of such an event.

6. STA operations in the 47.2–50.2 and 50.4–51.4 GHz (Earth-to-space) bands shall not exceed the following unwanted emission limits (per earth station uplink beam, as measured at the antenna port) to protect EESS (passive) operations in the 50.2–50.4 GHz band:

- a. –42 dBW into the 200 MHz of the EESS (passive) band for earth stations not employing uplink power control, or
- b. –42 dBW into the 200 MHz of the EESS (passive) band at zenith increasing to a maximum level of –35 dBW into the 200 MHz of the EESS (passive) band at a minimum elevation angle of 15° for earth stations employing uplink power control.

7. STA operations in the 51.4–52.4 GHz (Earth-to-space) band are not permitted until coordination with NASA and NOAA is completed.

8. Gateway earth station uplink operations in the 81–86 GHz band must comply with the following conditions:

- a. Maximum of 32 total simultaneously transmitting uplink beams per operational gateway site;
- b. Minimum elevation angle of 25 degrees with respect to the local horizontal plane per uplink beam for sites below 62 degrees north latitude.
- c. SpaceX Services assumes the risk that this grant may be subject to additional conditions, modification, or cancellation to bring it into conformance with (i) the above operational restrictions or (ii) any rules or policies that may result from future Commission action.

9. Uplink transmissions from user terminals to the SpaceX Gen2 system are expressly prohibited in the 81–86 GHz frequency band.

10. In order to protect Earth exploration-satellite service (EESS) operations in the 86–92 GHz band, the received unwanted emission power from all adjacent-band interference sources, including SpaceX gateways, shall be limited to –169 dBW per 100 MHz within the 86–92 GHz passive band, as described in Recommendation ITU-R RS.2017-0.

11. STA operations in the 81–86 and 92–94 GHz (Earth-to-space) bands shall not exceed the following unwanted emission limits (per earth station uplink beam, as measured at the antenna port) to protect EESS (passive) operations in the 86–92 GHz band:

$-39.2 - 16.3 * (F - 86)$	dBW / 100 MHz for $86.05 \leq F < 87$ GHz;
–59	dBW / 100 MHz for $87 \leq F < 91$ GHz;
$-41 - 36 * (91.5 - F)$	dBW / 100 MHz for $91 \leq F < 91.5$ GHz;
$-38.5 - 12.5 * (91.7 - F)$	dBW / 100 MHz for $91.5 \leq F < 91.7$ GHz;

$$-35.5 - 10 * (92 - F) \quad \text{dBW / 100 MHz for } 91.7 \leq F \leq 91.95 \text{ GHz;}$$

where F is the center frequency of the 100 MHz reference bandwidth expressed in GHz.

12. The unwanted emission power level per gateway uplink beam in the 95–100 GHz band, as measured at the antenna port, shall not exceed –57.5 dBW/100 MHz.

13. STA operations in the 111.8–114.25 GHz (Earth-to-space) band shall not exceed the following unwanted emission limits (per earth station uplink beam, as measured at the antenna port) to protect EESS (passive) operations in the 114.25–122.25 GHz band:

$$-36 \quad \text{dBW / 100 MHz for } 114.3 \leq F < 114.7 \text{ GHz;}$$

$$-36 - 10 * (F - 114.7) \quad \text{dBW / 100 MHz for } 114.7 \leq F < 115 \text{ GHz;}$$

$$-39 - 20 * (F - 115) \quad \text{dBW / 100 MHz for } 115 \leq F < 115.1 \text{ GHz;}$$

$$-41 - 50 * (F - 115.1) \quad \text{dBW / 100 MHz for } 115.1 \leq F < 115.2 \text{ GHz;}$$

$$-46 - 40 * (F - 115.2) \quad \text{dBW / 100 MHz for } 115.2 \leq F < 115.3 \text{ GHz;}$$

$$-50 - 100/45 * (F - 115.3) \quad \text{dBW / 100 MHz for } 115.3 \leq F < 119.8 \text{ GHz;}$$

$$-60 \quad \text{dBW / 100 MHz for } 119.8 \leq F \leq 122.2 \text{ GHz;}$$

where F is the center frequency of the 100 MHz reference bandwidth expressed in GHz.

14. SpaceX Services shall keep data logs of all transmissions in the 47.2–50.2 GHz, 50.4–51.4 GHz, and 81–86 GHz bands that include the following parameters, at a minimum: timestamp, which gateway antennas were actively transmitting during a given timestamp, transmit power levels, and the azimuth and elevation pointing angles for all antennas during overflights (above horizon) of the Suomi NPP (NORAD ID: 37849), NOAA-20/JPSS-1 (NORAD ID: 43013), NOAA-21/JPSS-2 (NORAD ID: 54234), and QuickSounder (NORAD ID: TBD, subject to launch) satellites. Unwanted emission levels within the following adjacent EESS bands shall also be retained: 50.2–50.4 GHz, 52.6–54.25 GHz, and 86–92 GHz. These data logs shall be made no less frequent than 1 Hz, or greater upon request if feasible, and retained for at least 90 days following operations and shall be made available to Federal agencies upon request.

15. All operations pursuant to this grant are subject to the terms and conditions of the in-force version of any signed Memorandum of Agreement(s) (MOA) established between SpaceX Services and Federal Agencies. In the event the conditions above conflict with the terms of the in-force version of a signed MOA between SpaceX and Federal Agencies, then such terms of the MOA shall prevail, and these conditions will be deemed to be amended accordingly.

16. SpaceX Services' request for waiver of the U.S. Table, section 2.106(a) of the Commission's rules, to permit the use of the 29.1-29.5 GHz (Earth-to-space) bands for FSS operations that are not limited to MSS feeder links is GRANTED.

17. SpaceX Services' request for waiver of the U.S. Table, section 2.106(a) of the Commission's rules, to permit NGSO FSS uplink (Earth-to-space) operations in the 51.4-52.4 GHz band is GRANTED.

18. SpaceX Services' request for waiver of the U.S. Table, section 2.106(a) of the

Commission's rules, for NGSO uplink (Earth-to-space) operations in the 92.0-94.0 GHz, 94.1-95.0 GHz, 95.0-100.0 GHz, 102.0-109.5 GHz, and 111.8-114.25 GHz bands, is GRANTED.

19. The 24/7 point of contact in the United States, with authority and ability to cease all emissions, for this operation is rf_interference@spacex.com, which links to the pagers of appropriate technical personnel.

20. STA operations must be in compliance with earth station applicable operations allowed by the space station authorization(s) or grant(s), including all relevant conditions, waivers, and findings therein.

This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release. This STA is authorized pursuant to the Commission's rule 47 CFR § 25.120.

Action Date:	07-09-2026	
Term Dates	From: 07-10-2026	To: 09-07-2026
Approved:	SIGNATURE:	