

AMENDMENT

By this application, United Teleports, Inc. (“United Teleports”) respectfully amends its pending application for modification of its E160081 earth station license.¹ Specifically, United Teleports seeks authority to operate in extended Ku-band frequencies and to add the Luxembourg-authorized ASTRA 2C spacecraft as a point of communications for the purposes of providing Tracking, Telemetry and Command (“TT&C”) during the satellite’s drift from its current position at 23.7° E.L. to 72.5°W.L. and to maintain it at that location.² United Teleports also provides corrected coordinates for the E160081 earth station.

SES ASTRA S.A. (“ASTRA”), holds an authorization from the Luxembourg Ministry of State, Office of Media and Communications³ for the ASTRA 2C spacecraft. An affiliate of ASTRA, SES Americom Inc. (“SES”), has requested that United Teleports assist with providing TT&C to support the drift and operation of ASTRA 2C at 72.5° W.L. ASTRA 2C is operating in inclined orbit.

United Teleports is not requesting U.S. market access or any other authorization from the Commission relating to the non-U.S.-licensed ASTRA 2C spacecraft, and therefore is not providing full technical information about the ASTRA 2C satellite as part of this application.⁴

¹ United Teleports, Inc., Call Sign E160081, File No. SES-MFS-20180907-02493.

² The ASTRA 2C TT&C frequencies are as follows:

Telecommand: 13754.5 MHz (bicone) horizontal polarization

13996.5 MHz (pipe) circular polarization

Telemetry: 10951.5 MHz (pipe) circular polarization / (bicone) vertical polarization

11197.0 MHz (pipe) circular polarization

In compliance with Section 25.202(g)(1) of the Commission’s rules, the proposed TT&C operations will cause no greater interference and require no greater protection from harmful interference than would communications traffic in these bands.

³ Ministère d’État, Service des Médias et des Communications of the Grand Duchy of Luxembourg.

⁴ See Waiver Request, *infra*.

Changes to the E160081 license needed to accommodate the ASTRA 2C TT&C operations are provided in the Form 312 Schedule B filed with this application. An orbital debris mitigation statement for ASTRA 2C is already on file with the Commission.⁵ As discussed below, communications with ASTRA 2C will not adversely affect the operation of any adjacent satellites.

Additional Extended Ku-band Authority. United Teleports requests authority to add the 10.95-11.2 GHz downlink and 13.75-14.0 GHz uplink bands to the E160081 earth station license. On April 8, 2021, Comsearch submitted a frequency coordination notice on behalf of United Teleports to all existing terrestrial licensees in the 10.95-11.2 GHz frequencies within the coordination contours of the E160081 antenna. Once the final report is issued, United Teleports will file the report as a supplement to this application

Co-primary Federal Government Radiolocation services operate in the 13.75-14.0 GHz band. Attached to this application is a 13 GHz Study, prepared by Comsearch, which shows that the proposed earth station operations in this band will not interfere with these Radiolocation services. In addition, United Teleports acknowledges that it will need to coordinate the earth station's use of the 13.75-13.8 GHz band with NTIA on a case-by-case basis in order to minimize harmful interference to the Tracking and Data Relay Satellite System's (TDRSS) forward space-to-space link.⁶ As Comsearch's 13 GHz Study shows, there should be no interference to TDRSS links as the proposed earth station will comply with the uplink power density limits applicable in the 13.75-14.0 GHz band.

Corrected Coordinates. The current E160081 license has an error in the site coordinates. The license lists 27° 16' 56.5" N 80° 28' 58.6" W as the NAD83 coordinates for

⁵ See SES Americom, Inc., Call Sign E110104, File No. SES-MFS-20210308-00443, Attachment 1.

⁶ 47 C.F.R. § 2.106 US337.

the earth station, but the longitude value should end in 56.8", rather than 58.6". United Teleports respectfully requests that the Commission update the E160081 license to reflect the corrected NAD83 coordinates.

No Harmful Interference to Other Spacecraft. ASTRA's ASTRA 1D spacecraft at 73.0° W.L. is the only satellite within 0.5 degrees of 72.5° W.L. with spectrum that overlaps with the ASTRA 2C TT&C frequencies.⁷ The ASTRA 2C command carriers overlap with frequencies used by the ARSAT 1 satellite at 71.8° W.L., but that spacecraft has coverage only of the southern portion of South America. The combination of the 0.7 degree orbital separation between the satellites and the significant geographic separation between their coverage areas will ensure that the E160081 command transmissions will not cause interference to ARSAT 1.

Grant of this Application Will Serve the Public Interest. Grant of this request is in the public interest as the requested TT&C authority will facilitate the safe relocation to and operation of ASTRA 2C at 72.5° W.L.

Waiver Requests. United Teleports requests limited waivers of the Commission's requirements in connection with the instant request. Grant of these waivers is consistent with Commission policy:

The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested would not undermine the policy objective of the rule in question and would otherwise serve the public interest.⁸

⁷ Neither the Canadian-licensed Nimiq 5 satellite at 72.7° W.L. nor SES's AMC-3 satellite at 72° W.L. has any frequency overlap with ASTRA 2C.

⁸ *PanAmSat Licensee Corp.*, 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

Request for Limited Waiver of International Service Restriction – United Teleports

acknowledges that use of the extended Ku-band frequencies in the United States is limited to international service only.⁹ United Teleports will abide by this restriction. However, to the extent that use of a portion of this band to perform TT&C with ASTRA 2C constitutes a domestic (i.e. non-international) service, United Teleports respectfully requests a limited waiver of the international-service-only restriction.

Such a waiver is warranted in the circumstances. As the Commission has recognized, TT&C operations generally require uplink and downlink capability from the same earth station. For this reason, the Commission has previously granted waivers of the international service restriction to enable TT&C to be performed in the U.S. using the extended Ku-band.¹⁰

Grant of the requested waiver would not undermine the purpose of the rule, which is to ensure that earth station deployments in the extended Ku-band do not negatively impact the deployment of fixed service (“FS”) in the same band or cause interference to such operations. The telemetry downlink from ASTRA 2C will comply with the power flux density limits in the Commission’s rules and, thus, will not interfere with FS station operations. Moreover, only a small number of U.S. earth stations will be used to perform TT&C with ASTRA 2C, which means that no significant restrictions will be placed on the deployment of FS in the same band.¹¹

Sections 25.137 and 25.114. United Teleports requests a waiver of Section 25.137 and the other Commission rules cross-referenced therein. United Teleports seeks authority in

⁹ 47 C.F.R. §§ 2.106 NG52.

¹⁰ See *EchoStar KuX Corporation*, 20 FCC Rcd 919 (Int’l Bur. 2004) (“*EchoStar 83W Order*”); *EchoStar Satellite LLC*, 20 FCC Rcd 930 (Int’l Bur. 2004) (“*EchoStar 109W Order*”); *EchoStar KuX Corporation*, 20 FCC Rcd 942 (2004).

¹¹ See *EchoStar 83W Order*, at ¶ 16 (“The Commission has waived this requirement [i.e. NG104] where the number of potential earth stations in a particular service is inherently small.”); *EchoStar 109W Order*, at ¶ 16 (same); *EchoStar 121W Order*, at ¶ 17 (same).

connection with providing TT&C for ASTRA 2C, a foreign-licensed spacecraft.

Section 25.137 requires that applicants proposing to use U.S.-licensed earth stations to communicate with foreign-licensed spacecraft demonstrate that the Commission's policies for U.S. market access are satisfied. Section 25.137 also incorporates by reference other requirements for Commission-licensed space stations, including the obligation to file detailed technical information as specified in Section 25.114.

Waiving Section 25.137 is consistent with the purpose of the rule, which was intended to address situations in which a non-U.S.-licensed satellite is to be used to serve the United States. Here, the E160081 earth station will be used solely for TT&C, not for commercial operations. Thus, United Teleports is not seeking authority to communicate with ASTRA 2C for purposes of providing U.S. service within the meaning of Section 25.137.

To the extent the Commission disagrees, United Teleports requests a waiver of the market access and other requirements imposed in Section 25.137. Grant of a waiver will not undermine the objectives of these requirements. The market access test described in the rule is intended to ensure that U.S.-licensed systems have "effective competitive opportunities."¹² Because United Teleports is not seeking authority to provide commercial services in the United States, the requested amendment does not raise any concerns about competitive equality.¹³

Strict adherence with Section 25.114's requirements for detailed technical information is also unnecessary and would be unduly burdensome. United Teleports is proposing to use the E160081 earth station only for the limited purpose of performing TT&C for ASTRA 2C

¹² 47 C.F.R. § 25.137(a).

¹³ In any event, the ASTRA 2C spacecraft at 72.5° W.L. will be operating under the authority of Luxembourg, a World Trade Organization member country, and therefore is exempt from the requirement to make a showing of effective competitive opportunities. 47 C.F.R. § 25.137(a)(2).

while it relocates to 72.5° W.L. and to maintain it at that location. The relevant technical characteristics of those transmissions are provided in this application. In these circumstances, no valid purpose would be served by requiring a complete description of the ASTRA 2C spacecraft.

United Teleports' request is consistent with Commission precedent. In similar cases in which limited communications by U.S. earth stations with a foreign-licensed satellite were proposed, the Commission has granted operational authority without requiring a market access showing under Section 25.137 or full technical data as required by Section 25.114.¹⁴

Section 25.210(j). The ASTRA 2C satellite is authorized by the Luxembourg Government to operate at 72.5° W.L. within a +/- 0.1 degrees east/west station keeping box. To the extent necessary, United Teleports respectfully requests a waiver of Section 25.210(j) of the Commission's rules, which requires geostationary space stations to be operated within a +/- 0.05 degrees east/west station keeping box. The Commission has previously waived this rule based on a finding that allowing an increased station keeping volume would "not adversely affect the operations of other spacecraft, and would conserve fuel for future operations."¹⁵

The facts here fit squarely within this precedent. Allowing ASTRA 2C to be maintained within an increased station keeping volume will not harm other operators. ASTRA 2C's station keeping volume will not overlap with that of any other satellites. In

¹⁴ See, e.g., Hawaii Pacific Teleport, L.P., File No. SES-STA-20131030-00914 (Call Sign E030115), granted Nov. 18, 2013 (granting authority for earth station to provide TT&C services to ASTRA 3A operating at 176.85° W.L.); PanAmSat Licensee Corp., File Nos. SES-STA20090922-01211 (Call Sign E4132) & SES-STA-20090922-01212 (Call Sign E040125), both grant-stamped Oct. 16, 2009 (granting authority for earth stations to communicate with foreign-licensed NSS-12 spacecraft for purposes of providing launch and early operations services).

¹⁵ See, e.g., *SES Americom, Inc.*, File Nos. SAT-MOD-20080124-00030 & SAT-AMD-20080311-00070, grant-stamped May 19, 2008, Attachment at ¶ 1.

addition, allowing ASTRA 2C to be flown at 72.5° W.L. in an expanded east-west station keeping volume of +/-0.1 degrees will result in fuel savings for the spacecraft. This will prolong the time during which ASTRA 2C will be available to provide service. Under these circumstances, grant of any necessary waiver of Section 25.210(j) will serve the public interest.

United Teleports hereby certifies that no party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

For the foregoing reasons, United Teleports respectfully amends its pending application for modification of its E160081 earth station license to communicate with ASTRA 2C using extended Ku-band frequencies in order to provide TT&C for the satellite while it drifts to and is located at 72.5° W.L.