

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Embratel TVSAT Telecomunicações S.A.) File No. _____
)
Petition for Declaratory Ruling To Add)
the Star One C4 Satellite at 70° W.L.)
Permitted Space Station List)

PETITION FOR DECLARATORY RULING

Embratel TVSAT Telecomunicações S.A., (“Embratel”), by its attorneys, respectfully petitions the Commission, pursuant to Section 25.137 of the Commission’s rules, the *DISCO II First Reconsideration Order*, and the *Space Station Licensing Reform Order*,¹ to add the Star One C4 satellite at 70° W.L. to the Permitted Space Station List (“Permitted List”).² Embratel proposes to operate Star One C4 as a Ku-band replacement satellite, with new frequencies and an expanded coverage area, for its Star One C2 satellite, which was authorized to access the U.S. market from the 70 W.L. through placement on the Permitted Space Station List in September 2005.² Pursuant to the Commission’s fleet management procedures, Embratel has notified the Commission of its intent to relocate Star One C2 from the 70° W.L. to 65° W.L., where it will replace the Star One C1 satellite that has reached the end of its life and will soon be deorbited.³

¹ See 47 C.F.R. §25.137; see also Amendment of the Commission’s Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, *First Order on Reconsideration*, 15 FCC Rcd. 7207 (1999) (“*DISCO II First Reconsideration Order*”); Amendment of the Commission’s Space Station Licensing Rules and Policies, *First Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd. 10760 (2003) (“*Space Station Licensing Reform Order*”).

² *Stamp Grant*, File No. SAT-PPL-20050708-00144, Call Sign S2678 (granted Sep. 9, 2005) (“*Star One C2 Order*”).

³ See Satellite Policy Branch Information, *Public Notice*, Report No. SAT-01580 (rel. Sep. 17,

Embratel has been licensed by Brazil to operate the Star One C4 satellite at the 70° W.L. orbit location. Today, the Star One C4 satellite provides Fixed-Satellite Service (“FSS”) using the Ku-band frequencies throughout North, Central and South America. Embratel proposes to offer satellite communications services on routes to, from, and within the United States using conventional and extended Ku-band spectrum,⁴ and grant of this petition will permit Star One C4 satellite to provide these important communications services in the United States. As demonstrated herein, Embratel is legally and technically qualified to operate its proposed replacement satellite with new frequencies and an expanded coverage area, and adding the Star One C4 satellite to the Permitted Space Station List would strongly serve the public interest.

I. PLACEMENT OF THE STAR ONE C4 SATELLITE ON THE PERMITTED SPACE STATION LIST WOULD SERVE THE PUBLIC INTEREST

The Commission has established a replacement expectancy for Embratel at the 70° W.L. orbital location to the extent Star One C4 seeks to operate in the same frequency bands, and the same coverage area, as the Star One C2 satellite it is replacing. The purpose of the replacement expectancy is to ensure that operators will be able to continue to serve customers from the same orbital location as they retire older satellites.⁵ Consequently, the Commission authorizes replacement satellites without considering competing applications.⁶

Additionally, in the *DISCO II Order*, the Commission set forth the public interest analysis applicable in evaluating requests to use non-U.S. licensed space stations to provide satellite

2021).

⁴ The conventional Ku-band includes the 11.7-12.2 GHz (downlink) and 14.0-14.5 GHz (uplink) bands. The extended Ku-band includes the 13.75-14.0 GHz (uplink) and 10.95-11.2 GHz (downlink) bands.

⁵ PanAmSat Licensee Corp, *Memorandum Opinion and Order*, 27 FCC Rcd. 2479, 2483 ¶ 10 (2012).

⁶ *See id.*

service in the United States.⁷ This analysis considers the effect on competition in the United States, spectrum availability, eligibility and operating (*e.g.*, technical) requirements, and national security, law enforcement, foreign policy and trade concerns.⁸ Embratel fully satisfies the Commission’s criteria for inclusion of the Star One C4 satellite on the Permitted Space Station List.

A. Replacement for Embratel’s Star One C2 satellite

Grant of this application is consistent with the Commission’s policy regarding satellite replacements. Section 25.165(e) of the Commission’s rules defines a “replacement space station” as one that is (1) “authorized to operate at an orbital location which is $\pm 0.15^\circ$ of the assigned location of a GSO space station to be replaced”; (2) “authorized to operate in the same frequency bands, and with the same coverage area as the space station to be replaced”; and (3) is “scheduled to be launched so that it will be brought into use at approximately the same time as, but no later than, the existing space station is retired.”⁹

In this case, Embratel holds a replacement expectancy for Ku-band frequencies at the 70° W.L. orbital location because the Commission authorized Embratel to operate Star One C2 at this location. Star One C4 will operate on all of the frequencies authorized for and within $\pm 0.15^\circ$ of the Star One C2 satellite, covers the entire coverage area of the Star One C2 satellite, and has already been launched and brought into use outside the United States.

The Commission recognizes a “replacement expectancy” in orbital locations in order to protect the large investments made by satellite operators. In its words:

⁷ See Amendment of the Commission’s Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, *Report and Order*, 12 FCC Rcd. 24094 (1997) (“*DISCO II Order*”).

⁸ See generally *id.* at 24107-172 ¶¶ 30-182.

⁹ 47 C.F.R. § 25.165(e).

[G]iven the huge costs of building and operating satellite space stations, there should be some assurance that operators will be able to continue to serve their customers. The Commission has therefore stated that, when the orbit location remains available for a U.S. satellite with the technical characteristics of the proposed replacement satellite, it will generally authorize the replacement satellite at the same location.¹⁰

The Commission “afford[s] non-U.S.-licensed satellites the same replacement expectancy as [it] do[es] U.S.-licensed satellites.”¹¹ Grant of this application is therefore merited, consistent with the Commission’s long-standing policy.

In addition, grant of this application will serve the public interest by ensuring continuity of service to consumers from the 70° W.L. orbital location. Star One C4 is already launched, and ready to serve the United States upon a grant of access to the U.S. market. The Star One C4 satellite will also allow Embratel to expand its service offering in the region by adding new extended Ku-band capacity at the location, as well as expand coverage to include the entire continental United States. This expansion of capacity and coverage will benefit consumers and thus serves the public interest. Even if the Commission does not consider this a “replacement” satellite, it should still accept the application and process it as a new satellite and grant it in the public interest.

B. Competition Considerations

Embratel operates the Star One C4 satellite at the 70° W.L. orbital location pursuant to authorizations granted by the Brazilian National Telecommunications Agency (“Anatel”).¹²

¹⁰ Columbia Communications Corporation Authorization to Launch and Operate a Geostationary C-band Replacement Satellite in the Fixed-Satellite Service at 37.5° E.L., *Memorandum Opinion and Order*, 16 FCC Rcd. 20176, 20178 ¶ 7 (2001).

¹¹ *Space Station Licensing Reform Order*, 18 FCC Rcd. at 10879 ¶ 324.

¹² See Anatel Term Right of Exploitation PVSS/SPV No. 002/2003 (Oct. 8, 2003) (granting authorization to Star One S.A. for 15 years), Anatel Document 2666008, Deed No. 3200 (Apr. 26., 2018) (transferring authorization to Claro S.A.), Anatel Document 4540214 – Amendment (Aug. 19, 2020) (extending authorization until 2033), and Anatel Document 5524886, Deed No. 2530 (May 8, 2020) (transferring authorization to Embratel) (attached as Exhibit 1).

Brazil is a member of the World Trade Organization (“WTO”), and Embratel seeks access to the U.S. market to provide satellite services covered by the WTO Basic Telecommunications Agreement. Accordingly, the Commission applies a presumption in favor of entry to Embratel’s request to place the Star One C4 satellite on the Permitted Space Station List, and Embratel is not required to make the effective competitive opportunities demonstration set forth in Section 25.137(a)(2) of the Commission’s rules.¹³

As discussed above, the Commission has already authorized Embratel to access the U.S. market from the 70° W.L., using conventional Ku-band frequencies, through placement of the Star One C2 satellite on the Permitted Space Station List. Nothing has changed that would alter the Commission’s prior conclusions with respect to the procompetitive benefits of Embratel’s access to the U.S. market from the 70° W.L. orbital location via the Permitted Space Station List.

Access to the U.S. market for the Star One C4 satellite will help continue to fulfill the promise of the WTO Basic Telecommunications Agreement with respect to satellite communications services. The ability of ALSAT-designated and receive-only U.S. earth stations to communicate with the Star One C4 satellite would enhance competition in the FSS market, thereby stimulating lower rates, improving service quality, increasing service options and fostering technological innovation.¹⁴ The Commission has consistently relied on these same

¹³ See 47 C.F.R. § 25.137(a)(2); see also *DISCO II Order*, 12 FCC Rcd. at 24112 ¶ 39 (“We adopt our proposal to apply a presumption in favor of entry in considering applications to access non-U.S. satellites licensed by WTO Members to provide services covered by the U.S. commitments under the WTO Basic Telecom Agreement.”), 24123 ¶ 64 (“[W]e will not evaluate the effective competitive opportunities in the route market for non-U.S. satellites licensed by a WTO Member providing WTO-covered services. Thus, we will not perform an ECO-Sat test on any route, whether a WTO route market or a non-WTO route market.”).

¹⁴ In the *DISCO II First Reconsideration Order*, the Commission determined that U.S.-licensed earth stations with an “ALSAT” (all U.S.-licensed space stations) designation may communicate with U.S.-licensed satellites and non-U.S. licensed satellites on the Permitted Space Station List in conventional Ku-band frequencies. *DISCO II First Reconsideration Order*, 15 FCC Rcd. at 7210-11 ¶ 6. As part of the changes in the *Part 25 Streamlining Second R&O*, the Commission

public interest benefits in granting similar requests for foreign satellites to access the U.S. market via the Permitted Space Station List.¹⁵

C. Spectrum Availability

In the *DISCO II Order*, the Commission determined that, given the scarcity of geostationary orbit locations and spectrum resources, it would consider spectrum availability as a factor in determining whether to allow a foreign satellite to serve the United States.¹⁶ The Commission further stated that when grant of access would create interference with U.S.-licensed systems, it may impose technical constraints on the foreign system's operations in the United States or, when conditions cannot remedy the interference, deny access.

The Star One C4 satellite will provide service from the 70° W.L. orbit location pursuant to satellite authorizations issued by Anatel and satellite network coordination information filed by Brazil with the International Telecommunication Union ("ITU"). Specifically, Star One C4 will operate under the B-SAT-1C satellite network, which has been notified at the ITU. In addition, in conformity with the Commission's two-degree spacing policies,¹⁷ Embratel has entered into coordination agreements with operators of authorized co-frequency satellites at nearby orbital locations, including SES Americom at 72° W.L. Thus, allowing Embratel to serve the United States using the Star One C4 satellite at 70° W.L. will not adversely affect the operations of any

expanded the definition of the Permitted Space Station List to include all GSO FSS space stations licensed or granted U.S. market access in bands with routine licensing criteria for earth stations, including the extended Ku-band. As a result, operators of receive-only earth stations no longer need to apply for a license for the extended Ku-band. *See* Comprehensive Review of Licensing and Operating Rules for Satellite Services, *Second Report and Order*, 30 FCC Rcd. 14713, 14794-96 ¶¶ 247-251 (2015) ("*Part 25 Second Report and Order*").

¹⁵ *See, e.g.*, SES DTH do Brasil Ltda, *Stamp Grant*, File No. SAT-PPL-20160918-00093, Call Sign S2974 (granted Feb. 9, 2017) ("*SES DTH Order*").

¹⁶ *See DISCO II Order*, 12 FCC Rcd. at 24159 ¶ 150.

¹⁷ *See* 47 C.F.R. § 25.140(a)(2).

U.S.-licensed satellites, nor contravene the Commission's spectrum/frequency management policies.

D. Eligibility Requirements

The Commission has concluded that it will require non-U.S. space station operators to meet the same qualifications that U.S.-licensed space station operators must meet to obtain a satellite license.¹⁸ The information provided in this Petition, associated exhibits, Schedule S, and the accompanying FCC Form 312 demonstrate that Embratel satisfies the Commission's requirements.

1. Legal Requirements

The Commission will grant a petition for declaratory ruling filed by a foreign satellite operator to be added to the Permitted Space Station List where the request is accompanied by the information demonstrating compliance with Sections 25.114 (applications for space station authorizations) and 25.137 (application requirements for earth stations operating with non-U.S. licensed space stations) of the Commission's rules.¹⁹

The general legal information required by Section 25.114 (e.g., submission of a comprehensive proposal on FCC Form 312 and applicant information)²⁰ is set forth in the accompanying FCC Form 312 and its attachments, and the public interest considerations supporting grant are discussed throughout this Petition.²¹ Embratel provides the following additional information required by Section 25.114:

¹⁸ See *DISCO II Order*, 12 FCC Rcd. at 24161-63 ¶¶ 154-59.

¹⁹ See *DISCO II First Reconsideration Order*, 15 FCC Rcd. at 7212, 7214, 7218 ¶¶ 10, 16, 28-30. Section 25.114 sets forth certain technical application requirements which are addressed, *infra*, in Section I.D.b of this Petition and the Technical Appendix attached hereto as Exhibit 2.

²⁰ See 47 C.F.R. § 25.114(a), (c)(1)-(2).

²¹ See *id.* at § 25.114(d)(6).

- Embratel seeks to add the Star One C4 satellite to the Permitted Space Station List and provide satellite service in the United States using conventional and extended Ku-band frequencies;²²
- Embratel seeks to provide service in the United States using any available conventional and extended Ku-band transponder with U.S. coverage on a noncommon carrier basis only through satellite transponder leases and other individual contractual arrangements;²³
- Star One C4, which was launched on July 15, 2015, has an operational lifetime of approximately 15 years;²⁴ and
- Star One C4 is a replacement satellite²⁵ that is not subject to the Commission's milestone or bond requirements;²⁶ in any event, the Star One C4 satellite is already launched, provides non-U.S. operations from the 70° W.L. orbital location, and will commence U.S. operations consistent with its authorization upon grant of this Petition.

With respect to the legal qualification information required by Section 25.137, the Star One C4 satellite is licensed by Brazil, a WTO member nation, and will provide services covered by the WTO Basic Telecommunications Agreement. Accordingly, Embratel is not required to make an effective competitive opportunities demonstration and the Commission instead applies a presumption in favor of entry.²⁷ The additional legal information required by Section 25.137 of the Commission's rules is provided in this Petition, the associated FCC Form 312, and the ownership exhibit attached to the Form 312. In view of the foregoing, Embratel plainly meets the Commission's legal requirements for placement of the Star One C4 satellite on the Permitted Space Station List.

2. Technical Requirements

²² See *id.* at § 25.114(c)(3).

²³ *Id.* at § 25.114(c)(11).

²⁴ See *id.* at § 25.114(c)(10).

²⁵ See *id.* at § 25.165(e).

²⁶ See *id.* at § 25.164(a); *id.* at § 25.165(a).

²⁷ See 47 C.F.R. § 25.137(a)(1)-(2).

As noted above, the Commission concluded that it will grant a petition for declaratory ruling to be added to the Permitted Space Station List filed by a foreign satellite operator where the request complies with Sections 25.114 and 25.137 of the Commission's rules.²⁸ The Commission also confirmed that:

U.S. earth stations with ALSAT licenses should be permitted to communicate with any non-U.S. satellite just as easily as they communicate with any U.S.-licensed satellite, provided that those communications do not cause harmful interference to or require protection from adjacent satellite operations, and otherwise comply with *DISCO II*.²⁹

Embratel provides the following technical information required by Sections 25.114 and 25.137 of the Commission's rules:

- **General Description of the Star One C4 Satellite.** The Star One C4 satellite is a Ku-band communications satellite based on the Space Systems/Loral 1300E spacecraft bus. Designed to provide service throughout the Americas, the satellite will offer services in the United States using the conventional and extended Ku-bands. Star One C4 will have up to twenty-eight (28) active transponders (24 in conventional Ku-band and 4 in extended Ku-band), covering parts of North America employing full frequency reuse through dual linear polarization and/or spatial diversity for and Ku-band payloads. Additionally, detailed technical information regarding the Star One C4 satellite is provided in the attached Technical Description and in Schedule S of FCC Form 312.
- **Technical Information.** The information required in Section 25.114(c) may be found in the Technical Appendix and in the relevant sections of Schedule S, FCC Form 312.
- **Orbital Debris Mitigation.** The Orbital Debris mitigation plan is attached as Exhibit 3, providing information demonstrating Embratel's compliance with the Commission's orbital debris mitigation rules.

The data provided by Star One in this Petition, the attached Technical Appendix, and Schedule S of FCC Form 312 satisfies the technical information requirements of the Commission's rules.

3. Waiver Requests

Embratel hereby requests a few limited waivers of the Commission's technical and other

²⁸ See *DISCO II First Reconsideration Order*, 15 FCC Rcd. at 7212, 7214, 7218 ¶¶ 10, 16, 28-30.

²⁹ *Id.* at 7214 ¶ 16.

rules. The Commission will waive its rules “if good cause therefor is shown.”³⁰ Consistent with past precedent and the public interest, the Commission should grant these waivers and add Star One C4 to the Permitted Space Station List.

First, Embratel seeks a waiver of footnote NG52 to permit the reception of U.S. domestic services in the 10.95-11.2 GHz band on an unprotected, noninterference basis. Footnote NG52 was intended to preserve access to the 10.7-11.7 GHz spectrum for terrestrial fixed service (“FS”) stations by limiting FSS use of the band to international operations only.³¹ The Commission has granted waivers of this limitation where the FSS applicant demonstrated that its transmissions would comply with power-flux-density (“PDF”) limits on the ground to protect FS operations and has committed to accepting any interference from existing or future FS networks.³² As the Commission explained in a prior case granting an EchoStar entity a waiver of footnote NG104:

waiver of footnote NG 104 would not undermine the rule’s purpose because it involves only passive receive-only earth stations that are not capable of causing interference into FS stations operating in this band. Further, because, EchoStar has agreed to accept any level of interference from FS stations into its receive-only earth stations’ operations in the extended Ku-bands, FS operators will not be required to coordinate their station operations with the EchoStar receive-only earth stations’ operations. Under these circumstances, we determine that additional coordination burden would not be placed upon FS operators and that their ability to expand service in the future would not in any manner be restricted.³³

Embratel’s request for authority to allow U.S. earth stations to receive domestic signals from Star One C4 in the 10.95-11.2 GHz band on an unprotected basis fits squarely within this line of precedent.

³⁰ 47 C.F.R. § 1.3.

³¹ See 47 C.F.R § 2.106, Footnote NG52. This policy was previously codified in footnote NG104.

³² See *SES DTH Order* ¶ 8; PanAmSat Licensee Corp., *Order and Authorization*, 20 FCC Rcd. 14642, 14646 ¶¶ 10-11 (2005).

³³ EchoStar KuX Corp., *Order and Authorization*, 20 FCC Rcd. 919, 923 ¶ 13 (2004).

To the extent necessary, Embratel also requests waiver of the “same frequency bands” and “same coverage area” portions of the definition of “replacement satellite” in Section 25.165(e)(1) of the Commission’s rules.³⁴ In addition to the frequency bands authorized for Star One C2, Embratel is requesting authority to operate in the extended Ku-band frequencies of 10.95-11.2 GHz (downlink) and 13.75-14.0 GHz (uplink). Star One C4 also seeks a larger coverage area than authorized Star One C2, which would cover the entire continental United States. In the *Space Station Licensing Reform Order*, the Commission specifically contemplated that replacement satellites would request greater coverage areas and/or extended band authority, where no other applicants have been licensed to provide those services.³⁵ No satellite operator is authorized to provide service in the United States from the 70° W.L. orbital location using the 10.95-11.2 GHz or 13.75-14.0 GHz frequency bands.

In addition, in the event that the Commission concludes that Star One C4 satellite does not qualify as a replacement satellite, Embratel hereby requests, to the extent necessary, waiver of the Commission’s milestone and bond posting requirements.³⁶ Good cause exists for the Commission to grant such waivers because the purpose of the bond requirement—to secure compliance with the Commission’s satellite construction milestones—would not be undermined. Under Section 25.137(d) of the Commission’s rules, the bond requirement only applies to non-U.S.-licensed space stations that are not in orbit and operating.³⁷ As discussed above, the Star One C4 satellite is already launched and provides non-U.S. operations from the 70° W.L. orbital location, and thus the milestones of launching the satellite and positioning it in its assigned orbital location have already

³⁴ 47 C.F.R. § 25.165(e)(1).

³⁵ *Space Station Licensing Reform Order*, 18 FCC Rcd. at 10857-58 ¶ 258.

³⁶ See 47 C.F.R. § 25.164; 47 C.F.R. § 25.165.

³⁷ See 47 C.F.R. § 25.137(d)(4).

been completed. And the final milestone—placing the satellite into operation pursuant to the terms of its authorization within five years of the authorization’s grant—is of limited relevance to Star One C4; Embratel seeks to commence U.S. operations upon grant of this Petition, meaning that all of the milestones would be satisfied before the initial milestone requiring positing of a bond would even take place.

In sum, the Star One C4 satellite substantially complies with the Commission’s technical and other requirements and, to the extent the satellite does not comply with certain provisions, the Commission should waive such requirements.

II. CONCLUSION

Granting Embratel access to the U.S. market via placement of the Star One C4 satellite at 70° W.L. on the Permitted Space Station List would strongly serve the public interest. Specifically, Star One C4 is a replacement satellite for the Star One C2 satellite, with new frequencies and an expanded coverage area. As such, Star One C4 would be able to commence U.S. operations immediately upon grant of the Petition. Additionally, placing Star One C4 on the Permitted Space Station List would enhance competition by providing consumers more alternatives in choosing communications providers and services, thereby stimulating lower rates, improving service quality, increasing service options and fostering technological innovation. There are no national security, law enforcement, foreign policy, or international trade concerns that arise in the context of the instant Petition for Declaratory Ruling; and the operations of the Star One C4 satellite will not adversely affect the operations of any U.S.-licensed satellite nor contravene the Commission’s spectrum and frequency management policies.

In view of the positive public interest benefits and the absence of any harm, Embratel respectfully requests that the Commission issue a declaratory ruling to add the Star One C4 satellite to the Permitted Space Stations List.

Respectfully Submitted,

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