



File # SAT-PPL-20050706-00143
with attached conditions
Call Sign S2677 Grant Date 3/29/2006
(or other identifier)
Term Dates
From see conditions To: see conditions
Robert G. Nelson Chief Satellite Division
Approved by OMB
3060-0678

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File Number: SAT-PPL-20050706-00143
Callsign/Satellite ID: S2677

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	FCC Use Only
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Petition for Declaratory Ruling to Include the Star One C1 Satellite at 65 W.L. to the Permitted Space Station List

1-8. Legal Name of Applicant			
Name:	Star One S.A.	Phone Number:	552121219126
DBA Name:		Fax Number:	552121219321
Street:	Praia de Botafogo 228, 3o. and Rio de Janeiro	E-Mail:	lprates@starone.com.br
City:		State:	
Country:	Brazil	Zipcode:	-
Attention:	Mr Luiz Prates		

ATTACHMENT
SAT-PPL-20050706-00143, SAT-AMD-20050714-00147, SAT-AMD-20051118-00222
Conditions of Permitted Space Station List Grant
March 29, 2006

Pursuant to Sections 303(r), 308, 309, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 303(r), 308, 309, 310, and Sections 0.261 and 25.137(c) of the Commission's rules, 47 C.F.R. §§ 0.261, 25.137(c), the Petition for Declaratory Ruling filed by Star One SA (File No. SAT-PPL-20050706-00143, as amended by SAT-AMD-20050714-00147¹ and SAT-AMD-20051118-00222²) to add the hybrid C and Ku-band Star One C1 satellite (Call Sign S2677) located at the 65° W.L. orbital location, which is licensed by Brazil, to the Commission's Permitted Space Station List is GRANTED.

Accordingly, each U.S.-licensed earth station with "ALSAT" designated as a point of communication, IS GRANTED authority to provide Fixed Satellite Services (FSS) in the 14000-14500 GHz (Earth-to-space), 11700-12200 GHz (space-to-Earth), 5925-6425 MHz (Earth-to-space) and 3700-4200 MHz (space-to-Earth) frequency bands, to, from, or within the United States, by accessing the Star One C1 satellite (Call Sign S2677) at the 65° W.L. orbital location, in accordance with the technical specifications set forth in its petition for declaratory ruling, this Attachment, and the Commission's Rules and subject to the following conditions:

a) Star One C1 is not authorized to provide any Direct-to-Home (DTH) service, Direct Broadcast Satellite (DBS) service, or Digital Audio Radio Service (DARS) to, from, or within the United States;

b) Communications between ALSAT-designated routine earth stations and the Star One C1 satellite shall be in compliance with the satellite coordination agreements reached between Brazil and other administrations;

c) Star One's request for waiver of Section 25.210(a)(3), 47 C.F.R. 25.210(a)(3), of the Commission's rules is GRANTED as conditioned. Section 25.210(a)(3) requires that all space stations in the FSS used for domestic service in the C-band shall be capable of switching polarity upon ground command. This provision is required for two reasons: to permit U.S.-licensed satellites the flexibility to be assigned to different U.S. orbital positions and to mitigate potential interference between adjacent FSS systems transmitting analog TV signals. The transmission polarization of the C-band payload of the Star One C1 satellite cannot be reversed from the ground. Star One indicates that it has not completed international coordination of the Star One C1 with the operators of the adjacent satellites serving the U.S. market. Thus, as a condition of this waiver, Star One is prohibited from transmitting or receiving analog TV signals to, from or within the

¹ Star One Supplement to Petition for Declaratory Ruling to Add Star One C1 at 65° W.L. to the permitted list, filed July 14, 2005. This supplement requests a waiver of the full frequency reuse requirement of Section 25.210(f), 47 C.F.R. § 25.210(f).

² Star One Amendment to Incorporate an Amended Orbital Debris Mitigation Plan into Petition for Declaratory Ruling for Star One C1, filed November 18, 2005.

United States until such time as it has completed coordination. Further, Star One must accommodate future satellite networks serving the United States that are two-degree compliant. Grant of this waiver request is consistent with our precedent;³

d) Star One's request for waiver of Section 25.210(i), 47 C.F.R. § 25.210(i) of the Commission's rules IS GRANTED as conditioned. Section 25.210(i) directs, "Space station antennas in the Fixed-Satellite Service must be designed to provide a cross-polarization isolation such that the ratio of the on axis co-polar gain to the crosspolar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area." Star One indicates although the cross-polarization isolation of the Star One C1 satellite's antennas will comply with 30 dB minimum isolation over 80% the coverage area, the isolation of the C-Band BSC antenna may be as low as 27 dB and the Ku-Band MK antenna may be as low as 28 dB in the remaining 20% of the coverage area (typically at edge of coverage). The shortfall will not produce a significant increase in interference, except to Star One C1. Further, Star One must accommodate future satellite networks serving the United States that are two-degree compliant. Grant of this waiver request is consistent with our precedent.⁴

e) Star One's request for waiver of sections 25.211(a) and (b), 47 C.F.R. §§ 25.211(a) and (b) IS GRANTED as conditioned. Section 25.211(a) requires C-band analog video transmissions to occur at specific center frequencies and Section 25.211(b) requires carrier frequencies for Ku-band TV/FM transmissions to be identified for coordination with adjacent U.S. satellite systems and affected satellite systems of other administrations. Star One states that it has not completed coordination with all potentially affected U.S. satellite operators and thus it is not certain what center frequencies may be used for C-band and Ku-band FM/TV transmissions. Star One has agreed to provide such information after completion of the coordination with potentially affected U.S. satellite operators and request any necessary waivers at that time. Under these circumstances, we find that Star One's failure to identify the center frequencies to be used for C-band and Ku-band FM/TV transmissions does not preclude grant of the petition for declaratory ruling in this instance as we have already precluded this type of transmission. Specifically, as noted above as a condition of inclusion on the Permitted List, U.S. licensed earth stations are prohibited from transmitting or receiving FM/TV transmissions from television signals from the satellite. In addition to the points discussed above, this condition will only be lifted upon the filing of a modification request that demonstrates compliance with the Commission's rules, including section 25.211(a) and (b).

³ See Mabuhay Philippines Satellite Corp. Petition for Declaratory Ruling, Application of Loral CyberStar, Inc. for Authority to Operate Two Transmit/Receive Earth Stations at Kapolei, Hawaii, for Use in Conjunction with the Mabuhay Satellite Located at 146 E.L., *Order and Authorization*, 15 FCC Rcd 23671, 23676 para. 13 (2000) (granting a waiver of section 25.210(a)(3) and imposing the same condition imposed here).

⁴ Star One S.A.; Petition for Declaratory Ruling to Add The Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, *Order*, 19 FCC Rcd 16334 (Sat. Div. 2004) (finding that the impact on neighboring satellite systems of a 3-5 dB difference from the required cross polarization isolation ratio would be negligible).

f) Star One's request for waiver of the frequency reuse requirement of section 25.210(f), 47 C.F.R. § 25.210(f), with respect to the Ku-band payload⁵ IS GRANTED as conditioned. Section 25.210(f) requires all FSS space stations to employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams. The full-frequency reuse requirements were designed to ensure that satellites maximized the use of their transponder capacity to the benefit of the public.⁶ The Commission has waived these requirements where, as in the case of Star One C1 at 65° W.L., doing so would allow satellite capacity that would otherwise lay dormant to be used to provide service as long as such use does not preclude a state-of-the-art satellite from operating at this location.⁷ Grant of this waiver request is consistent with our precedent.⁸

g) Unless extended by the Commission for good cause shown, Star One C1 shall be removed from the Permitted Space Station List in the event the space station is not constructed, launched, and successfully placed into operation in accordance with the technical parameters in its Petition for Declaratory Ruling and the terms and conditions of this grant, by the following dates:

Launch: March 29, 2008

Star One S. A. must file a bond with the Commission in the amount of \$750,000 pursuant to the procedures set forth in Public Notice, DA 03-602, 18 FCC Rcd 16283 (2003), no later than April 29, 2006.⁹

h) This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon adoption. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's

⁵ Star One S.A.; Petition for Declaratory Ruling to Add The Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, Supplement to Petition for Declaratory Ruling, IBFS No. SAT-AMD-20050714-00147.

⁶ *Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions of Part 25 of the Rules and Regulations*, Report and Order, CC Docket No. 81-704, 54 RR 2d 577, 598 (para. 70) (1983) (*Two-Degree Spacing Order*). See also *Systematics General Corporation*, Memorandum Opinion and Order, 103 FCC 2d 879, 881 (para. 6) (1985) (*1985 Systematics Order*).

⁷ See, e.g., *1987 Systematics Order*, 2 FCC Rcd 7550 (authorizing the TDRS-1 and TDRS-3 satellites, which did not meeting the full frequency reuse requirement, to provide service from the 41° W.L. and 62° W.L. orbit locations until those locations were ready to be occupied by compliant satellites). See also *Columbia Communications Corporation*, Memorandum Opinion, Order, and Authorization, 7 FCC Rcd 122, 123 (para. 15) (1991) (*Columbia Full Frequency Reuse Waiver Order*).

⁸ See *Columbia Full Frequency Reuse Waiver Order*, 7 FCC Rcd at 123 (para. 15).

⁹ As part of grant of the Petition for Declaratory ruling, we find that Star One has met the milestones for Contract Execution, Critical Design Review, and Commence Construction. Accordingly, we only impose one milestone with an accordingly shortened schedule. Star One's request for waiver of the first three milestones and a partial waiver of the requirement to post a \$3 million bond pursuant to Sections 25.137, 25.164 and 25.165 of the Commission's rules is dismissed as moot.

rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

9-16. Name of Contact Representative			
Name:	Alfred Mamlet	Phone Number:	202-429-3000
Company:	Steptoe & Johnson LLP	Fax Number:	202-429-3902
Street:	1330 Connecticut Avenue, N.W.	E-Mail:	amamlet@steptoe.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 -1795
Attention:		Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the buttonnext to the classification that applies to thisfiling for both questions a. and b. Choose only one for 17a and only one for 17b. a. (N/A) a1. Earth Station ☒ a2. Space Station	b. ☐ b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive-Only Station (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) b6. Transfer of Control of License or Registration (N/A) b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite ☐ b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States ☐ b10. Replacement Satellite Application – no new frequency bands ☐ b11. Replacement Satellite Application – new frequency bands (Not eligible for streamlined processing) ☒ b12. Petition for Declaratory Ruling to be Added to the Permitted List (N/A) b13. Other (Please specify)
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17c. Is a fee submitted with this application? ☐ If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114). ☐ Governmental Entity ☐ Noncommercial educational licensee ☒ Other (please explain): No fee associated with petition for declaratory ruling	
17c. Fee Classification BNY – Space Station (Geostationary)	
18. If this filing is in reference to an existing station, enter: (a) Call sign of station: Not Applicable	
19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: Not Applicable (b) File number of pending application: Not Applicable	

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:	
☒ a. Fixed Satellite ☐ b. Mobile Satellite ☐ c. Radiodetermination Satellite ☐ d. Earth Exploration Satellite ☐ e. Direct to Home Fixed Satellite ☐ f. Digital Audio Radio Service ☐ g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose only one. ☐ Common Carrier ☒ Non-Common Carrier	22. If earth station applicant, check all that apply. Not Applicable
23. If applicant is providng INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one.Are these facilities: ☐ Connected to a Public Switched Network ☐ Not connected to a Public Switched Network ☒ N/A	
24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s). ☒ a. C-Band (4/6 GHz) ☒ b. Ku-Band (12/14 GHz) ☐ c.Other (Please specify upper and lower frequencies in MHz.) Frequency Lower: Frequency Upper: (Please specify additional frequencies in an attachment)	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

(N/A) a. Fixed Earth Station

(N/A) b. Temporary–Fixed Earth Station

(N/A) c. 12/14 GHz VSAT Network

(N/A) d. Mobile Earth Station

☐ e. Geostationary Space Station.

☐ f. Non–Geostationary Space Station

☒ g. Other (please specify)

Petition for Declaratory Ruling

26. TYPE OF EARTH STATION FACILITY: Not Applicable

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.) Not Applicable

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission’s rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.

☐ Yes ☒ No

ALIEN OWNERSHIP

Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government?	☐ Yes ☒ No
30. Is the applicant an alien or the representative of an alien?	☒ Yes ☐ No ☐ N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	☒ Yes ☐ No ☐ N/A
32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	☒ Yes ☐ No ☐ N/A
33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	☒ Yes ☐ No ☐ N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.	

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	☒ Yes ☐ No
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.	☐ Yes ☒ No
37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.	☐ Yes ☒ No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	☐ Yes ☒ No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhibit, an explanation of the circumstances.	☐ Yes ☒ No

40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.

41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. ☒ Yes ☐ No

42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43. ☒ Yes ☐ No

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? Brazil

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Star One, S.A. respectfully requests that the Commission add the Star One C1 satellite at 65 W.L., licensed by Brazil, to the Permitted Space Station List. See attached Petition for Declaratory Ruling and associated Exhibits. Confidential versions of redacted exhibits is being submitted separately with a request for confidential treatment.

Petition

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

☐ Individual

☐ Unincorporated Association

☐ Partnership

☒ Corporation

☐ Governmental Entity

☐ Other (please specify)

45. Name of Person Signing

Luiz Otavio Vasconcelos Prates

46. Title of Person Signing

Director of External Affairs

47. Please supply any need attachments.		
1:	2:	3:
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).		

Completed Schedule S
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