

S2845 SAT-LOI-20110914-00180 IB2011004273  
Star One S.A.  
STAR ONE C3



File # SAT-LOI-20110914-00180  
Call Sign S2845 Grant Date 06/29/12  
(or other identifier)  
Term Dates  
From 06/29/12 To: \_\_\_\_\_  
Approved: Stephen J. Duall

Approved by OMB  
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Stephen J. Duall  
Stephen J. Duall  
Chief, Satellite Policy Branch

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:

Letter of Intent Seeking to Access the U.S. Market in the Extended Ku-Band from the 75 W.L. orbital location.

1-8. Legal Name of Applicant			
Name:	Star One S.A.	Phone Number:	552121219126
DBA Name:		Fax Number:	552121219321
Street:	Av. Presidente Vargas 1012 —6th floor, Centro	E-Mail:	lprates@starone.com.br
City:	Rio de Janeiro	State:	
Country:	Brazil	Zipcode:	-
Attention:	Mr. Luiz Otavio Prates		

**Attachment to Grant**  
**Application of STAR ONE S.A.**  
**IBFS File No. SAT-LOI-20110914-00180**

The Letter of Intent filed by STAR ONE S.A. (Star One), IBFS File No. SAT-LOI-20110914-00180, as supplemented, to access the U.S. market via the Star One C3 space station (Call Sign S2845), licensed by Brazil, at the 75° W.L. orbital location is GRANTED. Accordingly, Star One is granted access to the U.S. market to provide Fixed-Satellite Service (FSS) via the Star One C3 space station at the 75° W.L. orbital location using the 13.75-14.0 GHz (Earth-to-space) and 10.95-11.2 GHz (space-to-Earth) frequency bands.<sup>1</sup> Communications between U.S.-licensed earth stations and the Star One C3 space station must be in accordance with the terms, conditions, and technical specifications set forth in Star One's Letter of Intent, the Federal Communications Commission's rules not waived herein, and the following conditions:

1. Star One C3 is not authorized to provide any Direct-to-Home (DTH) service, Direct Broadcast Satellite (DBS) or Digital Audio Service (DARS) to, from, or within the United States.
2. Star One C3 must be maintained with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees of the 75° W.L. orbital location.
3. Communications between U.S.-licensed earth stations and the Star One C3 space station must comply with all existing and future space station coordination agreements reached between Brazil and other Administrations.
4. Operations of Star One C3 in the 10.95-11.2 GHz frequency band (Earth-to-space) are subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.
5. Operations of Star One C3 in the 10.95-11.2 GHz band (Earth-to-space) are limited to international operations in accordance with footnote NG104 to the United States Table of Frequency Allocations, 47 § C.F.R. 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. 25.202(a)(1).
6. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, any earth station in the United States and its possessions communicating with the Star One C3 space station in the 13.75-14.0 GHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's (NTIA's) Interdepartment Radio Advisory Committee's (IRAC's) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration Tracking and Data Relay Satellite System, including manned space flight.
7. Operations of any earth station in the United States and its possessions communicating with the Star One C3 space station in the 13.75-14.0 GHz band (Earth-to-space) must comply with footnote US356 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated power (e.i.r.p.). Operations of any earth station located outside the

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<sup>1</sup> At present, the satellite has not been launched and no applications have been filed by earth station operators seeking authority to communicate with the Star One C3 space station. In the event an earth station operator files an application to communicate with the Star One C3, it must demonstrate compliance with Section 25.203(k) of the Commission's rules. 47 C.F.R. § 25.203(k).

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United States and its possessions communicating with the Star One C3 space station in the 13.75-14.0 GHz band (Earth-to-space) to provide service to the United States must be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits. In the 13.75-14.0 GHz band (Earth-to-space), receiving space stations in the fixed-satellite service must not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.

8. Operations of any earth station in the United States and its possessions communicating with the Star One C3 space station in the 13.77-13.78 GHz band (Earth-to-space) must comply with footnote US357 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US357, which specifies that the e.i.r.p. density of emissions must not exceed 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit.<sup>2</sup> Operations of any earth station located outside the United States and its possessions communicating with the Star One C3 space station in the 13.77-13.78 GHz band (Earth-to-space) to provide service to or from the United States must comply with footnote 5.503 to the ITU Radio Regulations, which specifies a required maximum e.i.r.p. density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.

9. Operators of earth stations accessing the Star One C3 space station in the 13.75-14.0 GHz band are encouraged to cooperate voluntarily with the National Aeronautics and Space Administration (NASA) in order to facilitate continued operation of NASA's Tropical Rainfall Measuring Mission (TRMM) satellite.<sup>3</sup>

10. Star One requests, to the extent necessary, waivers of the milestone and bond provisions of Sections 25.137(d), 25.165(a)(1), and 25.164(a)(1)-(3) of the Commission's rules, 47 C.F.R. §§ 25.137(d), 25.165(a)(1), and 25.164(a)(1)-(3). Star One submits evidence that it has met the first three milestones required for a geostationary satellite pursuant to Section 25.164(a)(1)-(3) (executed a binding non-contingent contract for construction, completed the critical design review, and commenced construction) and requests that the bond requirements pursuant to Sections 25.137(d) and 25.165(a)(1) be reduced accordingly. Based on the evidence provided, no waivers of the Commission's milestone and bond rules are required because the Satellite Division finds that Star One has satisfied the first three milestones (executed a binding non-contingent contract for construction, completed the critical design review, and commenced construction) required for its Star One C3 geostationary satellite. As a result, the milestone and bond requirements are reduced. This grant of U.S. market access to provide FSS in the

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<sup>2</sup> Footnote US357 places a restriction on FSS earth station operations in order to protect government operations in the band, including manned space flight. 47 C.F.R. § 2.106, US357.

<sup>3</sup> NASA's TRMM satellite system radar in the 13.793-13.805 GHz band remains operational and is a highly valuable and visible United States asset with a broad range of international users. Accordingly, NTIA has requested cooperation from the Commission and non-Federal Government entities in providing assistance in reducing interference with the TRMM radar. Specifically, NTIA requests that FSS earth stations in the 13.793 - 13.805 GHz band located south of 39° N. and east of 110° W. operate with emission levels below -150 dBW/600 kHz at the TRMM space station receiver. Letter from Frederick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, NTIA, to Don Abelson, Chief, International Bureau, FCC (February 28, 2002). Considering the secondary nature of the TRMM operation, NTIA's request is not a condition of this authorization. The Commission, however, urges all operators of earth stations accessing the Star One C3 space station in the 13.75 - 14.0 GHz band to cooperate voluntarily with NASA in order to facilitate continued operation of the TRMM satellite.


**Attachment to Grant  
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IBFS File No. SAT-LOI-20110914-00180**

13.75-14.0 GHz and 10.95-11.2 GHz frequency bands shall become NULL and VOID, with no further action on the Commission's part if Star One does not meet the following conditions:

- a. Star One must file a bond with the Commission in the amount of \$750,000, pursuant to the procedures set forth in Public Notice, DA 03-2602, 18 FCC Rcd 16283 (2003), within 30 days of this grant of U.S. market access (July 29, 2012); and
- b. Star One's space station at the 75° W.L. orbital location must be launched and placed into operation in the 13.75-14.0 GHz and 10.95-11.2 GHz frequency bands in accordance with the technical parameters and terms and conditions of this grant of U.S. market access within two years following the date of this grant (June 29, 2014).

11. Star One is afforded thirty days from the date of release of this action to decline this grant of market access as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

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

 <b>GRANTED*</b> International Bureau *with conditions	<b>File #</b> <u>SAT-LOI-20110914-00180</u>
	<b>Call Sign</b> <u>52845</u> <b>Grant Date</b> <u>06/29/12</u> (or other identifier)
	<b>Term Dates</b> <b>From</b> <u>06/29/12</u> <b>To:</b> _____
	<b>Approved:</b> <u>Stephany J. Duall</u> Stephany J. Duall Chief, Satellite Policy Branch

9-16. Name of Contact Representative			
Name:	Alfred Mamlet	Phone Number:	202-429-6205
Company:	Step toe & Johnson LLP	Fax Number:	202-429-3902
Street:	1330 Connecticut Ave. NW	E-Mail:	amamlet@steptoe.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 -
Attention:		Relationship:	Legal Counsel

**CLASSIFICATION OF FILING**

<p>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.</p> <p>a.</p> <p>(N/A) a1. Earth Station</p> <p><input checked="" type="radio"/> a2. Space Station</p>	<p>b.</p> <p><input checked="" type="radio"/> b1. Application for License of New Station</p> <p>(N/A) b2. Application for Registration of New Domestic Receive-Only Station</p> <p>(N/A) b3. Amendment to a Pending Application</p> <p>(N/A) b4. Modification of License or Registration</p> <p>(N/A) b5. Assignment of License or Registration</p> <p>(N/A) b6. Transfer of Control of License or Registration</p> <p>(N/A) b7. Notification of Minor Modification</p> <p>(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite</p> <p><input checked="" type="radio"/> b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States</p> <p><input type="radio"/> b10. Replacement Satellite Application – no new frequency bands</p> <p><input type="radio"/> b11. Replacement Satellite Application – new frequency bands (Not eligible for streamlined processing)</p> <p><input type="radio"/> b12. Petition for Declaratory Ruling to be Added to the Permitted List</p> <p>(N/A) b13. Other (Please specify)</p>
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<p>17c. Is a fee submitted with this application?</p> <p><input type="radio"/> If Yes, complete and attach FCC Form 159.</p> <p>If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).</p> <p><input type="radio"/> Governmental Entity    <input type="radio"/> Noncommercial educational licensee</p> <p><input checked="" type="radio"/> Other (please explain): Letter of Intent – No Fee Required</p>		
<p>17c. Fee Classification</p>		
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: Not Applicable</p>		
<p>19. If this filing is an amendment to a pending application enter:</p> <table><tr><td>(a) Date pending application was filed: Not Applicable</td><td>(b) File number of pending application: Not Applicable</td></tr></table>	(a) Date pending application was filed: Not Applicable	(b) File number of pending application: Not Applicable
(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 providing 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: 10950.0000    Frequency Upper: 14000.0000    (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)

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?	<input type="radio"/> Yes <input checked="" type="radio"/> No
30. Is the applicant an alien or the representative of an alien?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> 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

<p>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.</p>	<input checked="" type="radio"/> Yes <input type="radio"/> No
<p>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.</p>	<input checked="" type="radio"/> Yes <input type="radio"/> No Questions 36, 42
<p>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.</p>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<p>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</p>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<p>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.</p>	<input type="radio"/> Yes <input checked="" type="radio"/> 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.)

Letter of Intent seeking to use a satellite authorized by Brazil to access the United States market using the extended Ku band at the 75 degrees W.L. orbital location. See attachments.

Letter of Intent

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

GXT

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.



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**THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.**